

BUSINESS SOLUTION

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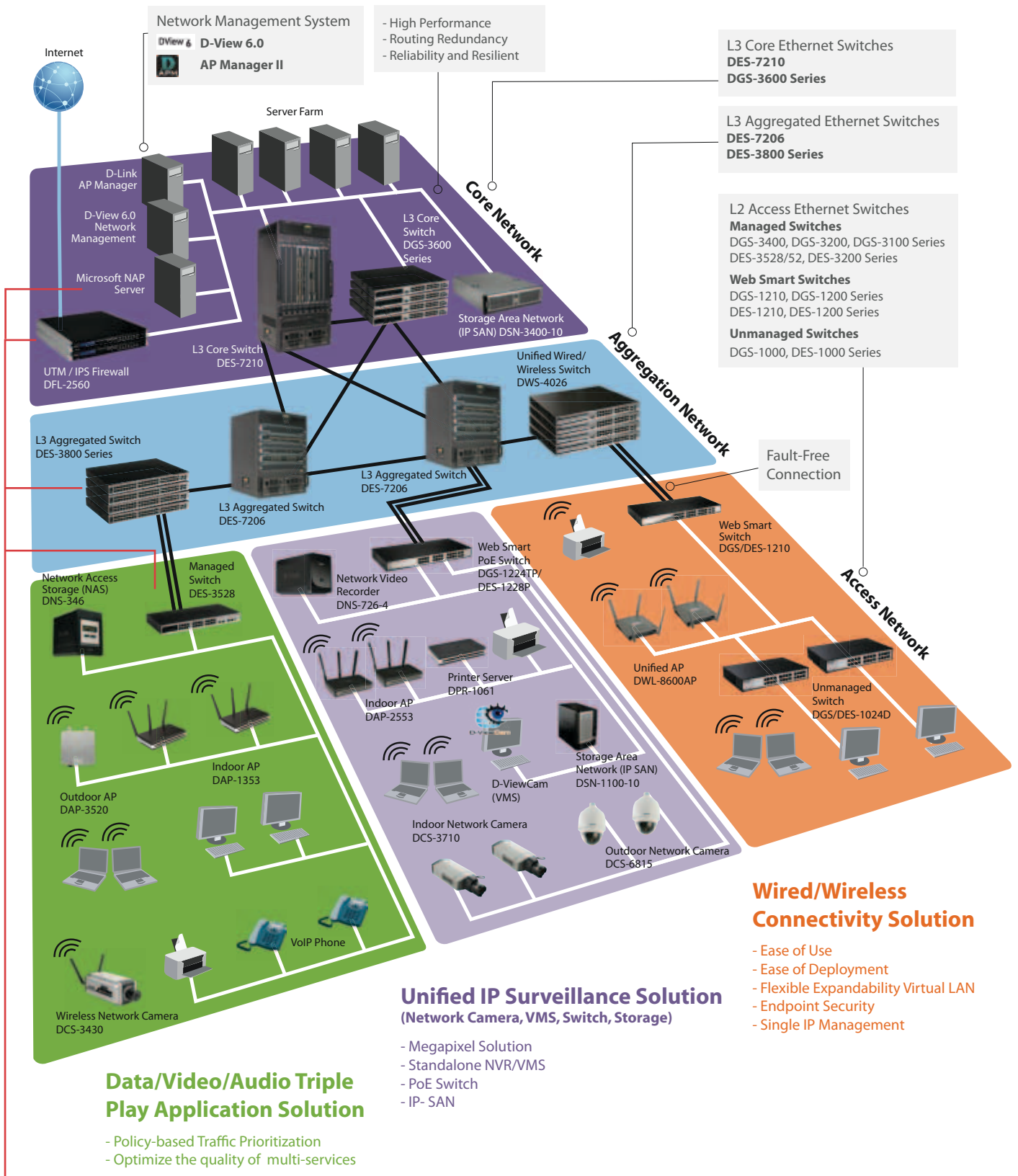
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BUSINESS SOLUTION

Complete end-to-end network solution for any type of business, including switches, business wireless, security, surveillance, network storage and network peripherals.



Key Solution



Key Solution

D-Link Business Solution provides end-to-end network solution to achieve secure, reliable, easy to manage and high performance network for small, medium to large enterprises.

Access Network

Over the past few years, enterprise access network has seen one of the fastest areas of growth. As technology evolves and user demand increases, enterprise access network is fast turning from a 'traditional' data network to a more complex network with integrated data, voice and multimedia services. D-Link, in meeting the needs of enterprises to have more productive business processes, is therefore providing the following solutions for their access network:

- **Wired/Wireless Connectivity Solution**

D-Link provides wired and wireless solutions for access network infrastructure as the foundation for data communication and other IP-based services in the enterprise network. Core functionalities of these solutions include consistent wireless connectivity, comprehensive network control and secure user authentication. With these solutions, businesses and organizations will be able to have greater flexibility and investment protection through scalable network expansion for future technologies through Gigabit connectivity, such as the 10-Gigabit fiber link connection.

D-Link offers a Unified Wired/Wireless Switching solution which consists of D-Link access point and unified switch. This solution offers premium wireless connectivity options with flexible and easy-to-deploy central management system.

D-Link unified switch is the managing device for lightweight access point. It provides centralized AP management and features L2/L3 roaming, automatic wireless channel assignment, and automatic power output adjustment. It offers Wireless Intrusion Detection System (WIDS) which empowers network administrators to detect rogue access points and rogue client. On the wired side, D-Link unified switch utilized Dynamic ARP Inspection (DAI) and DHCP Snooping to ensure maximum security.

D-Link unified access points provide features such as Power-over-Ethernet (PoE), choices of operating modes, user authentication, and wireless security. Its high speed dual band wireless IEEE802.11n standard offers Multiple In Multiple Out (MIMO) and wider bandwidth channels that increases the physical transfer rates.

- **Unified IP Surveillance Solution**

D-Link provides a complete IP Surveillance solution which consists of network cameras, video management

software (VMS), storage and Power-over-Ethernet (PoE) switches for network connectivity.

D-Link has a wide range of network cameras and network video recorders (NVR) for this solution. D-Link network cameras consist of fixed, pan-tilt-zoom (PTZ), fixed dome, and PTZ dome cameras with capability for indoor/outdoor, day/night usage. D-Link network cameras support megapixel resolution, 2-way audio, wired or wireless connection, PoE, choices of video format, digital and optical zoom. D-Link network cameras and NVR, together with D-ViewCam software, offers functionalities such as video recording, live viewing, playback, and event management.

D-Link IP Storage Area Network (SAN) arrays provide a reliable network data storage solution using powerful System-on-a-Chip (SoC) design to handle over 80,000 I/Os per second and support terabytes of raw capacity using multiple 1TB hard drives. It can also be used as a backup and recovery device in the network. Large amount of videos and images captured from the network cameras can be stored in such storage devices securely.

D-Link Power-over-Ethernet (PoE) switches are equipped to inject up to 15.4 watts of power per port to network cameras. This eliminates the need to place the cameras within close proximity to a power outlet and minimizes cable clutter in ceilings and walls.

- **Data/Video/Audio Triple Play Application Solution**

D-Link Web Smart III switches are ideal for deployment in a Voice over IP (VoIP) environment. They support Auto Voice VLAN and Differentiated Services Code Point (DSCP) Quality of Service (QoS) for VoIP application. Auto Voice VLAN will automatically place voice traffic from an IP phone to an assigned VLAN and enhance the VoIP service. This feature can guarantee the quality and security of VoIP traffic.

Aggregation Network

Aggregation network is where each connection from the access network is gathered and terminated. Enterprise network needs reliable redundant, and high performance devices to perform the necessary traffic policing and intermediate routing. D-Link therefore offers a robust solution for the aggregation network with its Layer-3 managed switch and Layer-3 chassis switch. With these devices, D-Link provides fundamental functions for enterprise aggregation network, which include:

- **Intermediate Routing**

This feature is needed for interconnection between segments in the access network, and between the access network and core network. In order to perform this function, D-Link solution provides support for static route, RIP I/II, OSPF and RIPng for IPv6 implementation.

- **Bandwidth Management**

This feature allows the network administrator to allocate different amounts of bandwidth for each service and user, which will lead to more efficient bandwidth usage.

- **Traffic Policing - ACL**

Network traffic passing through the aggregation network will be filtered against defined access control list to eliminate unnecessary and malicious traffic.

- **High Availability**

D-Link provides high availability of aggregation network with redundancy power supply, stacking configuration and Virtual Router Redundancy Protocol (VRRP).

Core Network

As its name implies, core network is where enterprises place their critical information technology resources. Core network makes up the enterprise network backbone. Network connection from the enterprise network (access and aggregation network), server farm, Internet and network management system culminate in core network. Because of its critical role, enterprise needs high performance and reliable infrastructure for the core network. In meeting this challenge, D-Link offers its xStack Layer-3 switches and Layer-3 chassis switches.

D-Link core network solution provides high switching capacity with 10 Gigabit connections to ensure high speed and excellent core network performance. In addition, to provide an ideal core network infrastructure, D-Link also enrich this high performance infrastructure with features such as high availability (stacking configuration, VRRP), and routing for IPv4, IPv6 and multicast traffic. Besides providing excellent core network infrastructure, D-Link also provides network management and storage solution for comprehensive core network solution.

D-Link offers two solutions for Centralized Network Management, namely, the AP Manager II and D-View 6.0.

- **Centralized Network Management**

For large scale centralized network management, D-Link provides D-View 6.0 Simple Network Management Protocol (SNMP) software. D-View 6.0 is a centralized management system that covers a wide range of network devices such as access points, managed switches and SNMP capable routers. It allows the network administrator to manage and monitor critical network characteristic such as device configuration, network performance, security and fault tolerance.

- **Centralized Access Point Management**

AP Manager II provides centralized management for up to recommended 20 fat wireless access points. Features supported by AP Manager II include mass configuration, mass firmware upgrade, fault management, real-time monitoring and real-time reporting. This software

provides network administrators with the means of verifying and conducting regular maintenance checks without the need of physical travel.

End-to-End Security (E2ES)

E2ES is a unique security solution from D-Link that covers the entire enterprise network from the access network to core network. This solution consists of three elements:

- **Gateway Security**

This carries out the security function for enterprise network at the gateway, the boundary between enterprise network and the Internet. It protects enterprise network from external security threats to ensure the secure operation of internal network. For this element of E2ES, D-Link present the NetDefend UTM/IPS firewall. This firewall is equipped with various advanced security features such as illegal traffic detection, intrusion detection prevention, anti-spam, anti-virus, web content filtering, high availability, VPN and more.

- **Endpoint Security**

This is the first line of defense within enterprise internal network. It protects enterprise network from security threats coming from inside the network. D-Link provides this solution by pushing intelligence to its xStack switch as an evolutionary endpoint security that performs authentication, authorization, traffic control, node address control and attack mitigation. Some of the endpoint security functions supported by the D-Link xStack switch are access control (802.1X, MAC-based, web-based), dynamic VLAN assignment, loopback detection, IP-MAC-Port binding, rogue DHCP server detection, Safeguard Engine, and broadcast storm control.

- **Joint Security**

Joint Security is a security solution formed with D-Link ZoneDefense and Microsoft Network Access Protection (NAP) to provide user access control and comprehensive security mechanism for enterprise network. D-Link ZoneDefense is a unique security technology that enables D-Link NetDefend firewall to work together with D-Link xStack switch to carry out an advanced defense mechanism. With this defense mechanism, the firewall will block any malicious traffic or security threat and inform the xStack switch within the enterprise network to block the suspected host. ZoneDefense, in this way, effectively stops security threats and virus/worm infections and outbreaks. D-Link Joint Security offers two important functions for user access control in enterprise network:

- **User Authentication**

Only users with valid access credential allowed accessing the network.

- **Policy Enforcement and Remediation**

NAP will check and ensure system compliance of each user that has passed authentication process against enterprise security requirements such as updated anti-virus definition of network host, updated operating system patch of network host or personal firewall in active status. Only network hosts that meet the security requirements specified will be allowed to access the network.

SWITCHES

Wired networks offer quick communication channels between users, computers and network devices through switch connection within local area network. Products under this category include chassis, core, edge, secure switches, managed, Web Smart and unmanaged switches, transceivers, converters and adapters.



Gigabit Ethernet Layer 3 Chassis Switches

DES-7200 Series



XSTACK



DES-7200 series chassis-based switch is an intelligent and high performance multi-layer LAN device designed for enterprise, campus, and metropolitan area networks (MAN). The switch is ideal for deployment in environments where uninterrupted running of network applications and high level of performance, security and control are required. It provides the flexibility of deploying Gigabit and/or 10-Gigabit packet switching and routing.

- Internet Group Management Protocol (IGMP) Snooping
- Rapid Ether Ring Protection (RERP)
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- Private VLAN
- Virtual Router Redundancy Protocol (VRRP)
- IPv6 Ready Phase 2
- Open Shortest Path First (OSPF)
- Border Gateway Protocol (BGP)
- Protocol Independent Protocol-Dense Mode (PIM-DM)
- Protocol Independent Protocol-Sparse Mode (PIM-SM)
- Quality of Service (QoS)
- Multi Protocol Label Switching (MPLS)
- Virtual Routing & Forwarding (VRF)
- IP Flow Information Export (IPFIX)
- Global MAC-IP Binding
- CPU Protection Policy (CPP)
- 802.1X Port-based Access Control
- 802.1X MAC-based Access Control
- Simple Network Management Protocol (SNMP)

DES-7206-BASE

- I/O Module Slot x 4
- CPU Module Slot x 2
- Built in Fan Tray
- Built in Dust Filter
- AC/DC Power Supply Option
- Redundant Power Supply

DES-7210-BASE

- I/O Module Slot x 8
- CPU Module Slot x 2
- Built in Fan Tray
- Built in Dust Filter
- AC/DC Power Supply Option
- Redundant Power Supply

Optional Accessories

I/O Modules

7200-24	12-Port 10/100/1000BASE-T + 12-Port Combo 1000BASE-T or SFP
7200-24G	12-Port SFP + 12-Port Combo 10/100/1000BASE-T or SFP
7200-24P	12-Port 10/100/1000BASE-T PoE + 12-Port Combo 1000BASE-T PoE or SFP
7200-48	44-Port 10/100/1000BASE-T + 4-Port Combo 1000BASE-T or SFP
7200-48P	44-Port 10/100/1000BASE-T PoE + 4-Port Combo 1000BASE-T PoE or SFP
7200-2XG	2-Port 10-Gigabit XFP
7200-4XG	4-Port 10-Gigabit XFP

Enhanced I/O Modules

7200-24G2XGE	12-Port SFP + 12-Port Combo 1000BASE-T or SFP + 2-Port 10-Gigabit XFP
7200-24GE	24-Port SFP
7200-48E	44-Port 10/100/1000BASE-T + 4-Port Combo 1000BASE-T or SFP

Extension Memory

7200-512RAM	512MB Additional RAM Module (for 7200-CM3/7200-CM4)
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CPU Modules

7200-CM1	CPU Module with 96G Switching Capacity (for DES-7206-BASE)
7200-CM3	CPU Module with 96G Switch Capacity & Supports Advanced Service Engine (for DES-7206-BASE)
7200-CM2	CPU Module with 192G Switching Capacity for (DES-7210-BASE)
7200-CM4	CPU Module with 192G Switching Capacity & Supports Advanced Service Engine for (DES-7210-BASE)

Advanced Service Engines

7200-ASE2	ASE II for IPFIX Support
7200-ASE3	ASE III for MPLS Support

Redundant Power Supplies

7200-1200AC	1200W AC Redundant Power Supply
7200-1200DC	1200W DC Redundant Power Supply
7200-2000AC	2000W AC Redundant Power Supply

Fans

7206-FAN	Fan Tray (for DES-7206-BASE)
7210-FAN	Fan Tray (for DES-7210-BASE)

10-Gigabit Ethernet XFP Transceivers

DEM-421XT	10GBASE-SR, MMF, 300m
DEM-422XT	10GBASE-LR, SMF, 10km
DEM-423XT	10GBASE-ER, SMF, 40km

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-7200 Series

Model	DES-7206-BASE		DES-7210-BASE	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3ab; IEEE 802.3z; IEEE 802.3ae; IEEE 802.3af			
General Features	Max. Switching Capacity	192Gbps (with 2 Control Modules)		384Gbps (With 2 Control Modules)
	Passive Backplane Capacity	0.8TBytes		1.6TBytes
	Maximum Forwarding Rate	142Mpps (with 2 Control Modules)		286Mpps (with 2 Control Modules)
	Packet Buffer Memory	2MBytes		
	SDRAM for CPU	256MBytes (With 7200-CM1/7200-CM2) / 512MBytes (With 7200-CM3/7200-CM4) - Expandable to 1GBytes		
	Flash Memory	32MBytes (With 7200-CM1/7200-CM2) / 512MBytes (With 7200-CM3/7200-CM4)		
	Console Port	RJ-45 Ethernet-based; Out-of-Band Configuration		
Extension Flash Storage Media	Type-A Female USB Port			
Base Unit	Expansion Module Slot	Total 6 Slots: 2 for Control Modules + 4 for Port Modules		Total 10 Slots: 2 for Control Modules + 8 for Port Modules
	Max. 10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	192		384
	Max. 10BASE-T/100BASE-TX/1000BASE-T PoE Port (RJ-45)	192		384
	Max. SFP Port	96		192
	Max. 10GE XFP Slot	16		32
	Fan Tray	Yes (Built-in); 7206-FAN for DES-7206-BASE		Yes (Built-in); 7210-FAN for DES-7210-BASE
	Dust Filter	Yes (Built-in)		
	Power Supply	No (Need to Select the Suitable Power Supply Module)		
Control Module	2			
CPU & Management Module	7200-CM1	CPU Module with 96G Switching Capacity CPU		7200-CM2
	7200-CM3	Module with 96G Switching Capacity & Support Advanced Service Engine (ASE)		7200-CM4
Port Module	Standard Module	7200-24	12-Port 10/100/1000BASE-T; 12-Port Combo 10/100/1000BASE-T or SFP	
		7200-24G	12-Port SFP; 12-Port Combo 10/100/1000BASE-T or SFP	
		7200-24P	12-Port 10/100/1000BASE-T PoE; 12-Port Combo 10/100/1000BASE-T PoE or SFP	
		7200-48	44-Port 10/100/1000BASE-T; 4-Port Combo 10/100/1000BASE-T or SFP	
		7200-48P	44-Port 10/100/1000BASE-T PoE; 4-Port Combo 10/100/1000BASE-T PoE or SFP	
	Enhanced I/O Module	7200-2XG	2-Port 10-Gigabit XFP	
		7200-4XG	4-Port 10-Gigabit XFP	
		7200-24G2XGE	12-Port SFP; 12-Port Combo 10/100/1000BASE-T or SFP; 2-Port XFP	
		7200-24GE	24-Port SFP	
		7200-48E	44-Port 10/100/1000BASE-T; 4-Port Combo 10/100/1000BASE-T or SFP	
Advanced Service Engine (ASE) Module (Require 7200-CM3 or 7200-CM4)	7200-ASE2	ASE for IPFIX; Support 128K IPFIX Entries; 6Gbps Throughput		
	7200-ASE3	ASE for MPLS; Support 192K Shared Table for Routing and L3 Forwarding Entries; 10Gbps Throughput		
Power Supply Module	7200-1200AC	Power Output: 1,200W; AC Input: 90~264VAC, 40~60Hz		
	7200-1200DC	Power Output: 1,200W; DC Input: -36~-72VDC		
	7200-2000AC	Power Output: 1,200W@90~176VAC, 2,000W@176~264VAC; AC Input: 90Vac~264VAC, 40~60Hz		
RAM Module	7200-512RAM	512MB Extension RAM Module for 7200-CM3/7200-CM4; Support Better Performance when the Network Requires More Than 128K Routes or MPLS Applications		
Fan Module	7206-FAN	Fan Tray for DES-7206-BASE, 6 DC Fans	7210-FAN	Fan Tray for DES-7210-BASE, 6 DC Fans
L2 Features	MAC Address: 16K Per Standard I/O Card, 32K Per Enhanced I/O Card; Jumbo Frame: Max. 9.216Bytes; Address Resolution Protocol (ARP): Static ARP, Configurable ARP Aging Time; IGMP Snooping: 1K Groups, IGMP Proxy; Port Mirroring: One-to-One, Multi-to-One, Tx/Rx/Both Port Mirroring; Spanning Tree (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP; Rapid Ether Ring Protection (RERP): Max. 16 Domains, Recovering L2 Traffic in 500ms; 802.3ad Link Aggregation: 128 Trunk Groups, 8 Ports Per Group; Head of Line Blocking Prevention			
Virtual LAN (VLAN)	802.1Q Tagged VLAN, 802.1v Protocol VLAN, VLAN Group: 4K; Port-based VLAN; Super VLAN; Private VLAN; Double VLAN: Port-based Q-in-Q, Selective Q-in-Q			
L3 Features	Max. 2K IP Interface; Secondary IP; Virtual Router Redundancy Protocol (VRRP); IPv6 Tunneling: Manual Tunnel, ISATAP, 6to4; IPv6 Ready Phase 2			
L3 Routing	Routing Entries: 12K, 192K (With 7200-ASE3); Static Routes: Max. 1K; Policy Based Route; Routing Information Protocol (RIP) v1/v2; RIPng (IPv6)*; Multi Path Route: ECMP/WCMP; BGP+ v4 (IPv6); Open Shortest Path First (OSPF) v2/v3 (IPv6); Stub/NSSA Area; Border Gateway Protocol (BGP) v4			
L3 Multicasting	Protocol Independent Protocol-Dense Mode (PIM-DM)*; PIM-DMv6*; Protocol Independent Protocol-Sparse Mode (PIM-SM)*; PIM-SMv6*; Protocol Independent Protocol-Source Specific Mode (PIM-SSM)*; PIM-SSMv6*; PIM Snooping			
Quality of Service	Internet Group Management Protocol (IGMP) v1/v2/v3 802.1p Class of Service (CoS); 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; CoS based on: VLAN ID, 802.1p Priority, MAC Address			
Multi Protocol Label Switching (MPLS) & Virtual Private LAN Service (VPLS)	Virtual Routing & Forwarding (VRF) (Require Enhanced I/O module or 7200-ASE3); VPLS* (Require 7200-ASE4); MPLS Label Management (Require 7200-ASE3); Label Distribution Protocol (LDP) (Require 7200-ASE3); MPLS L3 VPN (Require 7200-ASE3); Virtual Private Wire Service (VPWS)* (Require 7200-ASE3)			
IP Flow Information Export (IPFIX)	Require 7200-ASE2			
Security	CPU Protection Policy (CPP); Secure Shell (SSH) v1.5/v2; Port Security: Max. 16 Max Addresses Per Port; Global MAC-IP Binding; Defeat IP Scan; IP-MAC-Port Binding			
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, MAC-based Access Control, Dynamic VLAN Assignment; Accounting: Period Accounting, Multiple Accounting; Remote Authentication Dial In User Service (RADIUS) Command Line Interface (CLI); Telnet Server; TFTP; DHCP Server; DHCP Relay; DHCP Relay Option 82; XModem;			
Management	Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; System Log; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; System Status LED; System Alert; DNS Client; Debug; Network Time Protocol (NTP) / Simple Network Time Protocol (SNTP); File System: Flash Storage Media, Multiple Firmware, Multiple Configuration			
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1901, 1907); SNMP (RFC1157, 2571-2576); RIPv2 (RFC1724) RMON (RFC1271, 2819); PIM-SSM (RFC3569); IP FDB (RFC2096); IGMPv3 (RFC2933); D-Link Private MIB			
Standard Compliance	PIM-SM (RFC2362); VRRP (RFC2338, 2787); DVMRP (RFC1075); DiffServ (RFC2474-2475); 802.1p (RFC2674); IGMPv3 (RFC2933); RADIUS (RFC2138-2139, 2865-2866); Super VLAN (RFC3069); OSPF (RFC1370, 1587, 1765, 1850, 2328, 2370); DHCP (RFC1542, 2131, 3046); (RFC791); BGP (RFC1771, 1997, 2439, 2796, 2842, 2918); SNMP (RFC3411-3417); UDP (RFC768); IP (RFC791); TCP (RFC793); Telnet (RFC854); NTP (RFC1305); TFTP (RFC1350); SNMP (RFC1769)			
	Dimension (W x D x H)	436.8 x 508 x 647.4 mm		436.8 x 448 x 956 mm
Physical & Environment	Operation Temperature	0 to 40 °C		
	Storage Temperature	-40 to 70 °C		
	Humidity	90% Non-Condensing		
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A		
	Safety Compliance	cUL; CB		

Gigabit Ethernet Layer 3 Chassis Switches

DES-6500 Series



DES-6500

- Built-in CPU Module x 1
- Optional Slots x 8
- Power Supply x 1

DES-6500 Layer 3 chassis switch brings configuration flexibility and unrivaled price/performance necessary for deploying a cost-effective enterprise, backbone and campus network. This chassis switch provides high density Gigabit ports, 10-Gigabit support, high switch fabric capacity, fault tolerance, Quality of Service (QoS), and network security critical for enterprise applications.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Management Protocol (IGMP) Snooping
- STP Loopback Detection
- Trunking Across Stack
- Mirroring Across Stack
- 802.1v Protocol VLAN
- GARP VLAN Registration Protocol (GVRP)
- Virtual Router Redundancy Protocol (VRRP)
- Quality of Service (QoS)
- Access Control List (ACL)
- Broadcast/Multicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Simple Network Management Protocol (SNMP)

Optional Accessories

I/O Modules

DES-6504	12-Port 100BASE-FX Multi-Mode Fiber (LC)
DES-6505	8-Port 1000BASE-SX Multi-Mode Fiber (SC)
DES-6506	24-Port RJ-21 to RJ-45 Patch Panel
DES-6507	12-Port 10/100/1000BASE-T + 2-Port Combo 1000BASE-T or SFP
DES-6508	16-Port 10/100BASE-TX
DES-6509	12-Port Gigabit SFP
DES-6510	24-Port 10/100BASE-TX RJ-21 Telco 50
DES-6512	2-Port 10-Gigabit XFP

CPU Module

DES-6502	CPU/Fabric Switching Module
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Redundant Power Supply

DES-6511	AC Redundant Power Supply
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Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-6500 Series

Model	DES-6500	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3ab; IEEE 802.3z; IEEE 802.3ae	
General Features	Max. Switching Capacity	160Gbps
	Maximum Forwarding Rate	142Mpps
	Forwarding Mode	Store and Forward
	Packet Buffer Memory	Internal
	SDRAM for CPU	256MBytes
	Flash Memory	16MBytes
	Mean Time Before Failure (MTBF)	95,107 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration; On CPU Module	
Base Unit	Expansion Module Slot	Total 9 Slots: 1 Slot for CPU Module + 8 Slots for Port Modules
	Max. 10BASE-T/100BASE-TX Port (RJ-45)	128 (192 with DES-6506 & DES-6510)
	Max. 10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	50
	Max. 100BASE-FX Port (LC)	96
	Max. 1000BASE-SX Port (SC)	64
	Max. SFP Port	96
	Max. 10GE XFP Slot	16
	Fan Tray	Yes
Power Supply	Yes (One Unit)	
CPU Module	DES-6502: CPU Module (Included in Chassis Base)	
Port Module	DES-6504: 12-Port 100BASE-FX LC Fiber	
	DES-6505: 8-Port 1000BASE-SX SC Fiber	
	DES-6506: 24-Port RJ-45 Patch Panel for DES-6510	
	DES-6507: 10-Port 10/100/1000BASE-T; 2-Port Combo 10/100/1000BASE-T or SFP (Max. Four DES-6507 Per Chassis)	
	DES-6508: 16-Port 10/100BASE-TX	
	DES-6509: 12-Port Gigabit SFP	
	DES-6510: 24-Port 10/100BASE-T RJ-21 Connected with DES-6506	
DES-6511: 2-Port 10-Gigabit XFP		
Power Supply Module	DES-6511: Power Supply Module (Included One Unit in Chassis Base; Optional Unit for Redundancy Purpose) Input: 90~264 VAC, 47~63Hz; Output: 3.3V: 4A~80A; 12V: 0.1A~2A	
Stackability	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices	
L2 Feature	IGMP Snooping; 802.3ad Link Aggregation: Max. 32 Groups; Back Pressure Flow Control; Spanning Tree (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP; STP Loopback Detection; Port Mirroring: One-to-One, Multiple-to-One; Trunking / Mirroring Across Stack	
Virtual LAN (VLAN)	802.1Q, Total VLAN Groups: 4K (4K Static VLANs, 255 Dynamic VLANs); GARP VLAN Registration Protocol (GVRP); 802.1v Protocol VLAN	
L3 Features	IPv4 Static Route: 128; Routing Information Protocol v1/v2; Open Shortest Path First; Virtual Router Redundancy Protocol (VRRP); Floating Static Route; IP Interfaces: 256 Per System; Multiple IP Per VLAN: Max. 2; IPv4 Routing Table: Max. 2K Entries; Internet Group Management Protocol (IGMP) v1/v2/v3	
Quality of Service (QoS)	Bandwidth Control: Per Port Granularity of 64kpps; 802.1p; 8 Queues Per Port; Queue Handling Methods: Strict, Weighted Round Robin (WRR); CoS based on: Switch Port, MAC Address, 802.1p Priority, VLAN, Protocol Type, TOS, DSCP, IPv4/IPv6 Address, IPv6 Traffic Class, IPv6 Flow Label, TCP/UDP Port	
Access Control List (ACL)	Max. 9,600 Rules based on: Switch Port, MAC Address, 802.1p Priority, VLAN, Protocol Type, TOS, DSCP, IP Address, IPv4/IPv6 Address, IPv6 Traffic Class, IPv6 Flow Label, TCP/UDP Port, TCP/UDP Payload; CPU Interface Filtering	
Security	RADIUS / TACACS / TACACS+; Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1; Port Security; 802.1X Port-based Access Control; 802.1X Host-based Access Control; Broadcast Storm Control; Multicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine	
Management	Web-based GUI; Command Line Interface (CLI); Web GUI Traffic Monitoring; Web MAC Address Browsing; Telnet Server; TFTP Client; BootP/DHCP Client; Simple Network Management Protocol v1/v2c/v3; SNMP Trap on MAC Notification; Remote Monitoring (RMON) v1; DHCP Auto-Configuration; DHCP Relay Option 82; System Log; Trap/Alarm/Log Severity Control; Dual Images; Dual Configurations; CPU Monitoring	
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); RMON (RFC1757); 802.1p Priority Queues (RFC2674); 802.1Q VLAN (RFC2674); IGMP (RFC2833); IF (RFC2233); Ethernet-Like (RFC1643); RIP (RFC1724); OSPF (RFC1850); CIDR (RFC2096); IPv4 Multicast Routing (RFC2932); PIM from IPv4 (RFC2934); VRRP (RFC2787); D-Link Enterprise MIB	
Physical & Environment	Dimension (W x D x H)	19-inch, Rack-Mount; 440 x 294 x 356mm
	Operation Temperature	0 to 40 °C
	Storage Temperature	-25 to 55 °C
Certification	Humidity	5% to 95% Non-Condensing
	EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick Class A; VCCI Class A
	Safety Compliance	CSA International

Gigabit Ethernet xStack Layer 3 Core Switches

DGS-3600 Series



XSTACK



DGS-3600 series consists of Layer 3 Gigabit switches that deliver performance, flexibility, security, multi-layer QoS and access, with redundant power option for SMB and enterprises. It is easy to deploy, simple to manage, and it can be virtually stacked with any switches supporting D-Link Single IP Management (SIM). It also supports 10-Gigabit physical stacking.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- L2 Protocol Tunneling
- 802.1v Protocol VLAN
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- Virtual Router Redundancy Protocol (VRRP)
- Ethernet-Ring Protection Switching (E-RPS)*
- IPv6 Tunnel*
- Gratuitous ARP
- Routing Information Protocol (RIP)
- Routing Information Protocol Next Generation (RIPng)*
- Open Shortest Path First (OSPF)
- Border Gateway Protocol (BGP)*
- Protocol Independent Protocol-Dense Mode (PIM-DM)
- Protocol Independent Protocol-Sparse Mode (PIM-SM)
- Distance Vector Multicast Routing Protocol (DVMRP)
- Quality of Service (QoS)
- D-Link Unidirectional Link Detection (DULD)*
- Access Control List (ACL)
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine
- IP-MAC-Port Binding
- 802.1X Access Control
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- Microsoft® Network Access Protection (NAP)
- Three-Level User Account
- sFlow
- Link Layer Discover Protocol (LLDP)
- LLDP-Media Endpoint Discovery (LLDP-MED)

DGS-3612

- 10/100/1000BASE-T x 8
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply

DGS-3612G

- SFP Slot x 8
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply

DGS-3627

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 3
- Redundant Power Supply
- Physical Stack

DGS-3627G

- SFP Slot x 20
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 3
- Redundant Power Supply
- Physical Stack

DGS-3650

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 2
- Redundant Power Supply
- Physical Stack

Optional Accessories

Modules

DEM-410X	1-Port 10G XFP Module (for DGS-3627, DGS-3627G & DGS-3650)
DEM-410CX	1-Port 10G CX4 Module (for DGS-3627, DGS-3627G & DGS-3650)

10-Gigabit Ethernet XFP Transceivers

DEM-421XT	10GBASE-SR, MMF, 300m (for DGS-3627, DGS-3627G & DGS-3650)
DEM-422XT	10GBASE-LR, SMF, 10km (for DGS-3627, DGS-3627G & DGS-3650)
DEM-423XT	10GBASE-ER, SMF, 40km (for DGS-3627, DGS-3627G & DGS-3650)

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km (for DGS-3612 & DGS-3612G)
DEM-211	100BASE-FX, MMF, 2km (for DGS-3612 & DGS-3612G)

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km (for DGS-3612 & DGS-3612G)
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Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DGS-3612)
DPS-500	140-Watt AC Redundant Power Supply (for DGS-3612G, DGS-3627, DGS-3627G & DGS-3650)
DPS-500DC	140-Watt AC Redundant Power Supply (for DGS-3627, DGS-3627G & DGS-3650)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DGS-3600 Series

Model	DGS-3612	DGS-3612G	DGS-3627	DGS-3627G	DGS-3650	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3ae					
Port Interface	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	8	-	20	-	44
	SFP Port	-	8	-	20	-
	Combo 1000BASE-T/SFP	-	-	4	-	-
	10 GE Expansion Slot	-	-	3	3	2
Stackability	XFP Expansion Module	-	-	-	DEM-410X	-
	CX4 Expansion Module	-	-	-	DEM-410CX	-
Stackability	Virtual Stack	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices				
	Physical Stack	-	Via Optional CX4/XFP Module; Bi-Directional Redundant Stacking Topology; Duplex Chain / Ring Topology; Bandwidth up to 40Gbps (Full Duplex); Up to 12 Units Per Stack; Backup Master; Trunking or Mirroring across Stack			
General Features	Switching Capacity	24Gbps		108Gbps		136Gbps
	Max. Forwarding Rate	17.86Mpps		80.36Mpps		101.19Mpps
	Forwarding Mode	Store and Forward				
	Packet Buffer Memory	2MBytes				
	SDRAM for CPU	256MBytes				
	Flash Memory	PROM 512KBytes x 1; Runtime 16MBytes x 1				
	Mean Time Before Failure	402,111 hours	342,645 hours	287,631 hours	289,946 hours	246,838 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration					
L2 Features	MAC Address Table: 16K; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2/v3: 1K Groups, IGMP Snooping Fast Leave, Host-based IGMP Fast Leave*; MLD Snooping v1: 1K Groups, MLD Snooping Fast Leave; Jumbo Frame: Max. 9,216Bytes; Spanning Tree (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP, Per Port/Device BPDU Filtering, Root Restriction*; Loopback Detection; 802.3ad Link Aggregation: Max. 32 Groups Per Device, 8 Gigabit Ports or 2 10GE Ports Per Group; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring, RSPAN; L2 Protocol Tunneling					
Virtual LAN (VLAN)	VLAN Group: Max. 4K Static VLAN Groups, Max. 255 Dynamic VLAN Groups; 802.1Q Tagged VLAN; 802.1v Protocol VLAN; GARP VLAN Registration Protocol (GVRP); Double VLAN (Q-in-Q); Port-based VLAN (Q-in-Q); Selective Q-in-Q; MAC-based VLAN*; Super VLAN*					
L3 Features	256 Interfaces; Virtual Router Redundancy Protocol (VRRP); Ethernet-Ring Protection Switching (E-RPS)*; IPv6 Tunneling*: Static, ISATAP, GRE, 6to4; IPv6 Ready Phase 1/2; Proxy ARP; Gratuitous ARP					
L3 Routing	12K Hardware Routing Entries Shared by IPv4/IPv6: Max. 12K IPv4 Routes, Max. 6K IPv6 Routes; 8K Hardware L3 Forwarding Entries Shared by IPv4/IPv6: Max. 8K IPv4 Entries, Max. 4K IPv6 Entries; Static Route Entries: 256 for IPv4, 128 for IPv6, ECMP/WCMP; Policy-based Route; Routing Information Protocol (RIP) v1/v2; RIPvng (IPv6)*; Border Gateway Protocol (BGP) v4* Open Shortest Path First (OSPF) v2/v3 (IPv6); OSPF Passive Interface, Stub/NSSA Area, OSPF Equal Cost Route					
Multicasting	1K Hardware Multicast Groups; Internet Group Management Protocol (IGMP) v1/v2/v3 Protocol Independent Protocol-Dense Mode (PIM-DM); Protocol Independent Protocol-Sparse Mode (PIM-SM); PIM Sparse-Dense Mode; Distance Vector Multicast Routing Protocol (DVMRP) v3					
Quality of Service (QoS)	802.1p Class of Service (CoS); 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, IPv4/IPv6 Address, DSCP, Protocol Type, IPv6 Traffic Class, IPv6 Flow Label, TCP/UDP Port, User-Defined Packet Content Actions for Flows: Remark 802.1p Priority Tag, Remark TOS/DSCP Tag, Bandwidth Control, Flow Statistics, Committed Information Rate (CIR): Min. Granularity 1kbps; Time-based QoS					
Access Control List (ACL)	Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity) Max. 1,792 Access Rules; ACL Statistics; Time-based ACL; ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IPv4/IPv6 Address, DSCP, Protocol Type, TCP/UDP Port Number, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content					
Security	Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v1/v2/v3; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; CPU Interface Filtering; IP-MAC-Port Binding: ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, DHCPv6 & NDP Snooping*, Max. 500 Address Binding Entries Per Device; DHCP Server Screening; ARP Spoofing Prevention*; BPDU Attack Protection*					
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Web-based Access Control (WAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; MAC-based Access Control (MAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Microsoft Network Access Protection (NAP): 802.1X NAP, DHCP NAP; Guest VLAN; RADIUS & TACACS+ Authentication for Switch Access; Three-Level User Account					
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server; Telnet Client*; TFTP Client; ZModem; System Log; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; Link Layer Discovery Protocol (LLDP); Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 60/61*/82; DHCP Server; Flash File System; Multiple Images; Multiple Configurations; CPU Monitoring; Simple Network Time Protocol (SNTP); Internet Control Message Protocol (ICMP) v6; IPv6 Neighbor Discovery (ND); DHCPv6 Client*; DHCPv6 Relay*; DHCPv6 Server*; Cable Diagnostics*; sFlow; BootP/DHCP Client; Debug Command; D-Link Unidirectional Link Detection (DULD)*					
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); SNMP (RFC2571-2576); RMON (RFC1271, 2819); RMONv2 (RFC2021); Ether-Like (RFC2665); MAU (RFC2668); 802.1p (RFC2674); IF (RFC2233, 2863); RADIUS Authentication Client (RFC2618); RIPv2 (RFC1724); OSPFv2 (RFC1850); VRRP (RFC2787); IP Forwarding Table CIDR (RFC2096); IPv4 Multicast Routing (RFC2932); PIM for IPv4 (RFC2934); RADIUS Accounting Client (RFC2620); IGMP (RFC2933); Ping*; Traceroute*; D-Link Private MIB					
Standard Compliance	UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); BootP (RFC951, 1542); HTTP (RFC2068); VRRP (RFC2338); IPv6 Tunnel (RFC2529, 3053, 3056); RADIUS (RFC2138); RADIUS Accounting (RFC2139); TACACS (RFC1492); sFlow (RFC3176); DiffServ Expedited Forwarding (RFC2598)					
Physical & Environment	Dimension (W x D x H)	19" 1U Rack-Mount; 441 x 309 x 44mm		19" 1U Rack-Mount; 441 x 389 x 44mm		
	Weight (W/O Modules)	3.7kg		5.7kg		
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply				
	Max. Power Consumption	42.2W	43.7W	94.3W	75.6W	137.5W
	Redundant Power Supply	DPS-200	DPS-500	DPS-500 / DPS-500DC		
	Operation Temperature	0 to 40 °C				
	Storage Temperature	-40 to 70 °C				
Operation Humidity	10% to 90% RH					
Storage Humidity	5% to 90% RH					
Acoustic	< 52.1 dB	< 51.1 dB	< 51.6 dB	< 51.3 dB	< 48.1 dB	
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick Class A; VCCI Class A				
	Safety Compliance	cUL; CB				
	Metro Ethernet Forum	MEF 9, 14				

* Available in Future Firmware Upgrade

Fast Ethernet xStack Layer 3 Core Switches

DES-3800 Series



XSTACK

The xStack DES-3800 series consists of Layer 3 10/100Mbps switches that deliver performance, flexible expansion, robust security, multi-layer QoS, Power over Ethernet and redundant power option.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Loopback Detection (LBD)
- 802.1v Protocol VLAN
- Double VLAN (Q-in-Q)
- Open Shortest Path First (OSPF)
- Virtual Router Redundancy Protocol (VRRP)
- Protocol Independent Multicast-Dense Mode (PIM-DM)
- Protocol Independent Multicast-Sparse Mode (PIM-SM)
- Distance Vector Multicast Routing Protocol (DVMRP)
- Quality of Service (QoS)
- Access Control List (ACL)
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- D-Link ZoneDefense™
- IP-MAC-Port Binding
- 802.1X Port/Host-based Access Control
- Web-based Access Control
- MAC-based Access Control
- Microsoft® Network Access Protection (NAP)
- Guest VLAN

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DES-3828 & DES-3852)
DPS-600	500-Watt AC Redundant Power Supply (for DES-3828P)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3828

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- AC Power Supply
- Redundant Power Supply

DES-3828DC

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- DC Power Supply

DES-3828P

- 10/100BASE-TX x 24 (PoE)
- 10/100/1000BASE-T x 2
- 1000BASE-T/SFP Combo Slot x 2
- AC Power Supply
- Redundant Power Supply

DES-3852

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- 1000BASE-T/SFP Combo Slot x 2
- AC Power Supply
- Redundant Power Supply

DES-3800 Series

Model		DES-3828	DES-3828DC	DES-3828P	DES-3852
LAN Standard		IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DES-3828P)			
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	24		24 (PoE)	48
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2			
	Combo 1000BASE-T/SFP Port	2			
Stackability	Virtual Stack	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices			
General Features	Switching Capacity	12.8Gbps			15.7Gbps
	Max. Forwarding Rate	9.5Mpps			11.7Mpps
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	32MBytes			
	SDRAM for CPU	128MBytes			
	Flash Memory	PROM 512KBytes x 1; Runtime 16MBytes x 1			
	Mean Time Before Failure (MTBF)	123,027 hours	133,105 hours	168,110 hours	102,737 hours
	Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration			
L2 Features	MAC Address Table: 16K; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2/v3: 256 Groups, Static Multicast Addresses: 64, Host-based IGMP Snooping Fast Leave; Spanning Tree (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP; Per Port / Device BPDU Filtering; 802.3ad Link Aggregation: Max. 32 Groups Per Device, Max. 8 Ports Per Group; MLD Snooping v1/v2; Port Mirroring: One-to-One, Many-to-One, Flow-based; Jumbo Frame: Up to 9KBytes; Loopback Detection				
Virtual LAN	VLAN Group: Max. 4K Static VLAN Group, Max. 4K Dynamic VLAN Group; 802.1Q Tagged VLAN; GARP VLAN Registration Protocol (GVRP); Double VLAN (Q-in-Q); 802.1v Protocol VLAN				
L3 Features	128 Static Routing Entries; 2K Hardware Routing Entries; 4K Hardware L3 Forwarding Entries; 64 IP Interfaces; Open Shortest Path First (OSPF) v2: OSPF Passive Interface, OSPF Equal Cost Route; Routing Information Protocol (RIP) v1/v2; Virtual Router Redundancy Protocol (VRRP); ARP Proxy				
Multicast	Internet Group Management Protocol (IGMP) v1/v2/v3; Distance Vector Multicast Routing Protocol (DVMRP) v3; Protocol Independent Multicast-Dense Mode (PIM-DM); Protocol Independent Multicast-Sparse Mode (PIM-SM)				
Quality of Service (QoS)	Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity 64kbps); 802.1p Class of Service; 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; CoS based on: Switch Port, MAC Address, TOS, DSCP, IP Address, TCP/UDP Port				
Access Control List (ACL)	Max. 800 Access Rules; CPU Interface Filtering; ACL based on: Port, MAC Address, 802.1p Priority, VLAN ID, DSCP, IPv4/IPv6 Address, Protocol Type, TCP/UDP Port Number, User Defined Packet Content, IPv6 Traffic Class, IPv6 Flow Label				
Security	Secure Shell (SSH) v1.5/v2; Secure Sockets Layer (SSL) v2/v3; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; D-Link ZoneDefense; DHCP Snooping; IP-MAC-Port Binding: 500 Address Binding Entries Per Device, ARP Packet Inspection; IP Packet Inspection				
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Web-based Access Control (WAC): Port-based Access Control, Dynamic VLAN Assignment; MAC-based Access Control (MAC): Port-based Access Control, Dynamic VLAN Assignment; Microsoft Network Access Protection (NAP); Guest VLAN; RADIUS Accounting; RADIUS and TACACS+ Authentication for Switch Access; Three-Level User Account				
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server/Client; TFTP Client; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Server; System Log; Simple Network Time Protocol (SNTP); CPU Monitoring; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; DHCP Relay Option 82; Dual Image; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; Dual Configuration				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757, 2819); Ether-Like (RFC1643, 2358, 2665); 802.1p (RFC2674); Bridge (RFC4363); IF (RFC2233, 2863); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); RIPv2 (RFC1724); OSPFv2 (RFC1850); IP Forwarding Table (RFC2096); VRRP (RFC2787); IPv4 Multicast Routing (RFC2932); PIM for IPv4 (RFC2934); D-Link Private MIB				
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount 441 x 310 x 44mm		19-inch, 1U Rack-Mount 441 x 369 x 44mm	19-inch, 1U Rack-Mount 441 x 310 x 44mm
	Weight	4.24kg		6.02kg	4.23kg
	Power Input	AC Input: 100-240VAC, 50/60Hz; Internal Universal Power Supply	DC 60W, 48VDC Internal Universal Power Supply	AC Input: 90-264VAC, 50/60Hz; Internal Universal Power Supply	AC Input: 100-240VAC, 50/60Hz; Internal Universal Power Supply
	Max. Power Consumption	36.2W	32.7W	507.2W	47W
	Power over Ethernet	-		Power Budget: 370W; Per Port: 1-16.8W (Default: 15.4W) Time-based PoE	-
	Redundant Power Supply	DPS-200	-	DPS-600	DPS-200
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-40 to 70 °C			
	Humidity	5% to 95% Non-Condensing			
	Acoustic	< 51 dB	< 52 dB	< 51 dB	< 53 dB
Certification	EMI-EMC Compliance	FCC Class A; CE; C-Tick			
	Safety Compliance	CSA International; CB			

Gigabit Ethernet xStack Layer 2 Edge Switches

DGS-3400 Series



XSTACK



The xStack DGS-3400 Series consists of L2 Gigabit switches that deliver performance, flexibility, security, multi-layer QoS and redundant power supply option for SMB and enterprises.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Loopback Detection (LBD)
- 802.1v Protocol VLAN
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- Routing Information Protocol (RIP)
- RIP Next Generation (RIPng)
- IGMP Snooping Multicast (ISM) VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- CPU Interface Filtering
- IP-MAC-Port Binding
- IPv6 Tunnel
- D-Link Unidirectional Link Detection (DULD)
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- Compound Authentication
- Microsoft® Network Access Protection (NAP)
- Three-Level User Account
- sFlow
- Link Layer Discovery Protocol (LLDP)
- LLDP-Media Endpoint Discovery (LLDP-MED)

DGS-3426

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slots x 2
- Redundant Power Supply
- Physical Stack

DGS-3426P

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slots x 2
- Redundant Power Supply
- Physical Stack

DGS-3427

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slots x 3
- Redundant Power Supply
- Physical Stack

DGS-3450

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slots x 2
- Redundant Power Supply
- Physical Stack

Optional Accessories

Modules

DEM-410X	1-Port 10G XFP Module
DEM-410CX	1-Port 10G CX4 Module

10-Gigabit Ethernet XFP Transceivers

DEM-421XT	10GBASE-SR, MMF, 300m
DEM-422XT	10GBASE-LR, SMF, 10km
DEM-423XT	10GBASE-ER, SMF, 40km

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Redundant Power Supplies

DPS-500	140-Watt AC Redundant Power Supply (for DGS-3426, DGS-3427 & DGS-3450)
DPS-500DC	140-Watt DC Redundant Power Supply (for DGS-3426, DGS-3427 & DGS-3450)
DPS-600	500-Watt AC Redundant Power Supply (for DGS-3426P)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DGS-3400 Series

Model	DGS-3426	DGS-3426P	DGS-3427	DGS-3450
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3ae; IEEE 802.3af (DGS-3426P)			
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	24	24 (PoE)	24
	Combo 1000BASE-T/ SFP	4		
	10 Gigabit Uplink XFP Expansion Module CX4 Expansion Module Virtual Stack	2	3	2
Stackability	Physical Stack	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices		
	Stackability	Via Optional CX4 or XFP Module; Bi-Directional Redundant Stacking Topology; Linear/Ring Topology; Up to 40Gbps (Full Duplex); Up to 12 Units Per Stack; Backup Master; Trunking or Mirroring across Stack		
General Features	Switching Capacity	88Gbps	108Gbps	136Gbps
	Max. Forwarding Rate	65.47Mpps	80.36Mpps	101.19Mpps
	Forwarding Mode	Store and Forward		
	Packet Buffer Memory	750KBytes		
	SDRAM for CPU	256MBytes		
	Flash Memory	PROM 512KBytes x 1; Runtime 16MBytes x 1		
	Mean Time Before Failure (MTBF)	342,419 hours	170,148 hours	341,075 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration			
L2 Features	MAC Address Table: 8K; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2/v3: 1K Groups, Host-based IGMP Snooping Fast Leave; Limited IP Multicast (IGMP Filtering); MLD Snooping v1/v2: 511 Groups, Host-based MLD Snooping Fast Leave; Multiple VLAN Replication; Spanning Tree Protocol (STP): 802.1D-2004 Edition STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering, STP Root Restriction; Jumbo Frame: Max. 9,216Bytes; Loopback Detection; 802.3ad Link Aggregation: Max. 32 Groups Per Device, 8 Ports Per Group, Cross Stack/Module Trunk; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring, RSPAN; L2 Protocol Tunneling			
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 4094 VLAN; GARP VLAN Registration Protocol (GVRP); Double VLAN (Q-in-Q): Port-based Q-in-Q, Selective Q-in-Q; VLAN Translation; ISM VLAN; 802.1v Protocol VLAN; MAC-based VLAN; Voice VLAN*; Private VLAN*			
L3 Routing	64 IP Interfaces; 126 Static Routes Shared by IPv4/IPv6; Gratuitous ARP; 2K Hardware Routing Entries Shared by IPv4/IPv6: Max. 2K IPv4 Routes, Max. 1K IPv6 Routes; Routing Information Protocol (RIP) v1/v2*; RIPng; IPv6 Tunneling*: Static, ISATAP, GRE, 6to4			
Quality of Service (QoS)	802.1p QoS; 8 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; Time-based QoS CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, IPv4/IPv6 Address, DSCP, TCP/UDP Port Number, Protocol Type, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content			
Access Control List (ACL)	QoS Flow Actions: Remarks 802.1p Priority Tag, Remark TOS/DSCP Tag, Bandwidth Control, Flow Statistics, Committed Information Rate (CIR); Three Color Marker: trTCM, srTCM; Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 1kbps), Flow-based (Ingress, Min. Granularity 64kbps) Max. 768 Access Rules; Time-based ACL; ACL Statistics;			
Security	ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IPv4/IPv6 Address, DSCP, Protocol Type, TCP/UDP Port Number, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content			
Authentication, Authorization & Accounting (AAA)	Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v1/v2/v3; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; CPU Interface Filtering; IP-MAC-Port Binding: ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, DHCPv6 & NDP Snooping*, Max. 500 Address Binding Entries Per Device; DHCP Server Screening; ARP Spoofing Prevention*; BPDU Attack Protection*			
Management	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Web-based Access Control (WAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; MAC-based Access Control (MAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Compound Authentication; Guest VLAN; Microsoft Network Access Protection (NAP): 802.1X NAP, DHCP NAP; RADIUS Accounting; RADIUS and TACACS+ Authentication for Switch Access; Three-Level User Account			
Operations, Administration & Management (OAM)	Web-based GUI (IPv4/IPv6); Command Line Interface (CLI); Telnet (IPv4/IPv6); TFTP Client (IPv4/IPv6); Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; System Log; Link Layer Discovery Protocol (LLDP); Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; sFlow; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 60/61/82; DHCP Server; Flash File System; CPU Monitoring; Multiple Images/Configurations; Simple Network Time Protocol (SNTP); Password Encryption; LLDP-MED*; Internet Control Message Protocol (ICMP) v6; IPv6 Neighbor Discovery (ND); DHCPv6 Client*; DHCPv6 Relay*			
Management Information Base (MIB)	Cable Diagnostics			
Standard Compliance	Concise MIB (RFC1212); MIB-II (RFC1213); MIB Traps (RFC1516); Bridge (RFC1493, 4188); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); IP Forwarding Table (RFC2096); Ether-Like (RFC1398, 1643, 2358, 2665); 802.1p (RFC2674, 4363); Interfaces Group (RFC2233, 2863); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); Entity (RFC2737); Ping & Traceroute (RFC2925); D-Link Private MIB (RFC2768); IP (RFC791); ICMPv4 (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); ICMPv6 (RFC2463, 4443); CIDR (RFC1338, 1519); HTTP (RFC2068, 2616); IPv6 (RFC2460); SNMPv1/v2c/v3 (RFC1157, 1901, 1908, 2273, 2570-2575); DiffServ Expedited Forwarding (RFC2598); IPv6 Neighbor Discovery (ND) (RFC4861); IPv6 Stateless Address Auto-configuration (RFC4862); Path MTU Discover (RFC1981)*			
Physical & Environment	Dimension (W x D x H)	19-inch; 1U Rack-Mount; 440 x 389 x 44mm		
	Weight	5.42kg	5.82kg	5.51kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply		
	Max. Power Consumption	70.8W	525.0W	71.6W
	Power over Ethernet	-	Power Budget: 370W; Per Port: 15.4W Time-based PoE	-
	Redundant Power Supply	DPS-500 / DPS-500DC	DPS-600	DPS-500 / DPS-500DC
	Operation Temperature	0 to 40 °C		
Storage Temperature	-40 to 70 °C			
Operation Humidity	10% to 90% RH			
Storage Humidity	5% to 90% RH			
Acoustic	< 52.4 dB	< 52.4 dB	< 52.3 dB	< 48.7 dB
Fan	2 DC Fans (40 x 40mm)			
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick Class A		
	Safety Compliance	CSA International; CB		

* Available in Future Firmware Upgrade

Gigabit Ethernet xStack Layer 2 Secure Switches

DGS-3200 Series



XSTACK



DGS-3200 series consists of Security Gigabit switches that deliver high performance, flexible expansion and robust security. It executes firm network security and provides ACL functionalities to secure the internal IT network against external virus from invading the LAN.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- 802.1v Protocol VLAN
- IGMP Snooping Multicast (ISM) VLAN
- VLAN Trunking
- Private VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- IP-MAC-Port Binding
- Microsoft® Network Access Protection (NAP)
- ARP Spoofing Prevention
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- Compound Authentication
- Guest VLAN
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DGS-3200-24)
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Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DGS-3200-10

- 10/100/1000BASE-T x 8
- Combo 1000BASE-T/SFP x 2
- Fanless
- 11-inch, 1U Desktop

DGS-3200-16

- 10/100/1000BASE-T x 14
- Combo 1000BASE-T/SFP x 2
- Smart Fan x 1
- 11-inch, 1U Desktop

DGS-3200-24

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- Smart Fan x 2
- Redundant Power Supply
- 19-inch, 1U Rack-Mount

DGS-3200 Series

Model	DGS-3200-10	DGS-3200-16	DGS-3200-24	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab			
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	8	14	
	Combo 1000BASE-T/SFP	2		
Stackability	Virtual Stack D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices			
General Features	Switching Capacity	20Gbps	32Gbps	
	Max. Forwarding Rate	14.88Mpps	23.81Mpps	
	Forwarding Mode	Store and Forward		
	Packet Buffer Memory	128KBytes	768KBytes	
	SDRAM for CPU	128MBytes		
	Flash Memory	16MBytes		
	Mean Time Before Failure	726,077 hours	258,724 hours	502,576 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration (for DGS-3200-10 & DGS-3200-16) Combo Female RS-232 DB-9 / RJ-45 Console Port for Out-of-Band Configuration (for DGS-3200-24)			
L2 Features	MAC Address Table: 8K (DGS-3200-10) 16K (DGS-3200-16/24); Jumbo Frame: Max. 10,240Bytes; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Authentication; IGMP Snooping v1/v2/v3: 256 Groups, Host-based IGMP Snooping Fast Leave, Data Driven Multicast; MLD Snooping v1/v2: 256 Groups; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring Spanning Tree Protocol (STP): 802.1D-2004 Edition STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering, Root Restriction; Loopback Detection; 802.3ad Link Aggregation: Max. 8 Ports Per Group, Max. 5 Groups Per Device (DGS-3200-10), Max. 8 Groups Per Device (DGS-3200-16), Max. 12 Groups Per Device (DGS-3200-24)			
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 4094 VLAN; 802.1v Protocol VLAN; ISM VLAN; GARP VLAN Registration Protocol (GVRP): Max. 255 Dynamic VLANs; VLAN Trunking; Private VLAN			
Quality of Service (QoS)	802.1p Quality of Service; 8 Queues Per Port; Queue Handling: Strict, Weighted Round Robin (WRR); CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, IPv4/IPv6 Address, DSCP, TCP/UDP Port No., Protocol Type, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps, Flow-based (Ingress, Min. Granularity 64kbps); MAC-based VLAN; Private VLAN			
Access Control List (ACL)	Max. 200 Access Rules; Time-based ACL; CPU Interface Filtering; ACL Statistics; ACL based on: 802.1p Priority, VLAN ID, MAC Address, IPv4/IPv6 Address, DSCP, Protocol Type, TCP/UDP Port Number, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content			
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1/v2/v3; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; IP-MAC-Port Binding: ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, 512 Address Binding Entries Per Device; Port Security: Max. 64 MAC Address Per Port; Microsoft Network Access Protection (NAP): 802.1X NAP (IPv4/IPv6), DHCP NAP (IPv4); DHCP Server Screening; DHCP Client Filtering; ARP Spoofing Prevention			
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Web-based Access Control (WAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; MAC-based Access Control (MAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Compound Authentication; Guest VLAN; RADIUS and TACACS+ Authentication for Management Access; RADIUS Accounting			
Management	Web-based GUI (IPv4/IPv6); Command Line Interface (CLI); Telnet (IPv4/IPv6); XModem; ZModem; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; BootP/DHCP Client; TFTP Client (IPv4/IPv6); DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 82; Simple Network Time Protocol (SNTP); Internet Control Message Protocol (ICMP) v6; IPv6 Neighbor Discovery; System Log; CPU Monitoring; Dual Image; Dual Configuration			
Operations, Administration & Management (OAM)	Cable Diagnostics			
D-Link Green	Power Savings Mode: Link Down Status, Cable Length Detection; Compliant with RoHS 6			
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1488); SNMPv2 (RFC1907); RMONv2 (RFC2021); 802.1p (RFC2674); Ether-Like (RFC1643, 2358, 2665); IF (RFC2233, 2863); Ping & Traceroute (RFC2925); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); D-Link Private MIB			
Standard Compliance	UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); BootP (RFC951, 1542); HTTP (RFC2068); RADIUS (RFC2138); ICMPv6 (RFC4443); RADIUS Accounting (RFC2139, 2866); TACACS (RFC1492); SNMPv1 (RFC1157); SNMPv2c (RFC1901, 1908); SNMPv3 (RFC2570, 2575); 31-Bit Prefixed (RFC3021); IPv6 (RFC2460); IPv6 Neighbor Discovery (RFC4861); Stateless Address Auto-configuration (RFC4862); IPv6 Path MTU Discovery (RFC1981); Deprecation of Type 0 Routing Headers in IPv6 (RFC5095)			
Physical & Environment	Dimension (W x D x H)	11-inch, 1U Height; 280 x 180 x 43mm	19-inch, 1U Rack-Mount; 440 x 210 x 44mm	
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply		
	Max. Power Consumption	20.9W	28.9W	41.9W
	Redundant Power Supply	-		DPS-200
	Operation Temperature	0 to 40 °C	0 to 50 °C	
	Storage Temperature	-40 to 70 °C		
	Humidity	5% to 95% Non-Condensing		
Fan	Fanless	1 Smart Fan (Default Off)	2 Smart Fan (Default Low Speed)	
SD Card Reader	-		Yes	
Certification	EMI-EMC Compliance Safety Compliance FCC; CE; C-Tick; VCCI Class A UL; CB Report			

Fast Ethernet xStack Layer 2 Edge Switches

DES-3528/52 Series



X S T A C K



The xStack DES-3528/52 series consists of L2 10/100Mbps switches that deliver performance, flexible expansion, robust security, multi-layer QoS and redundant power supply option.

- D-Link Single IP Management (Virtual Stack)
- Loopback Detection (LBD)
- Internet Group Management Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Policy-based Routing
- 802.1v Protocol VLAN
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- IGMP Snooping Multicast (ISM) VLAN
- Asymmetric VLAN
- Voice VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- Traffic Segmentation
- Broadcast/Multicast/Unicast Storm Control
- ARP Spoofing Prevention
- BPDU Attack Protection
- 802.1X Port/Host-based Access Control
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- Multiple Authentication
- Guest VLAN
- Microsoft® Network Access Protection (NAP)
- Three-Level User Accounts

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DES-3528 & DES-3552)
DPS-600	500-Watt AC Redundant Power Supply (for DES-3528P & DES-3552P)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)



DES-3528

- 10/100BASE-TX x 24
- Combo 1000BASE-T/SFP x 2
- 1000BASE-T/Stacking Port x 2
- AC Power Supply
- Redundant Power Supply
- Physical Stack

DES-3528DC

- 10/100BASE-TX x 24
- Combo 1000BASE-T/SFP x 2
- 1000BASE-T/Stacking Port x 2
- DC Power Supply
- Physical Stack

DES-3528P

- 10/100BASE-TX x 24 (PoE)
- Combo 1000BASE-T/SFP x 2
- 1000BASE-T/Stacking Port x 2
- AC Power Supply
- Redundant Power Supply
- Physical Stack

DES-3552

- 10/100BASE-TX x 48
- Combo 1000BASE-T/SFP x 2
- 1000BASE-T/Stacking Port x 2
- AC Power Supply
- Redundant Power Supply
- Physical Stack

DES-3552P

- 10/100BASE-TX x 48 (PoE)
- Combo 1000BASE-T/SFP x 2
- 1000BASE-T/Stacking Port x 2
- AC Power Supply
- Redundant Power Supply
- Physical Stack

DES-3528/52 Series

Model	DES-3528	DES-3528DC	DES-3528P	DES-3552	DES-3552P	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DES-3528P & DES-3552P)					
Port	10BASE-T/100BASE-TX Port (RJ-45)					
Interface	24		24 (PoE)		48	
			2		48 (PoE)	
Stackability	Virtual Stack					
	Physical Stack					
General Features	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices					
	Via GE Port 27 & 28 (for DES-3528/28DC/28P); Via GE Port 51 & 52 (for DES-3552/52P);					
	Bi-Directional Redundant Stacking Topology; Linear/Ring Topology; Bandwidth up to 2Gbps Bi-Directional Per Port, Up to 4Gbps Per Device; Up to 8 Units Per Stack; Backup Master; Inter Trunking or Mirroring					
	Switching Capacity	12.8Gbps		17.6Gbps		
	Max. Forwarding Rate	9.5Mpps		13.1Mpps		
	Forwarding Mode	Store and Forward				
	Packet Buffer Memory	1MBytes				
SDRAM for CPU	128MBytes					
Flash Memory	16MBytes					
Mean Time Before Failure	203,785 hours	419,736 hours	345,226 hours	380,412 hours	200,486 hours	
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration					
L2 Features	MAC Address Table: 16K; Flow Control: IEEE 802.3x Flow Control, HOL Blocking Prevention; Jumbo Frame: Max. 9,216Bytes; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering; Loopback Detection; 802.3ad Link Aggregation: Max. 8 Groups Per Device, Max. 8 Ports Per Group; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring, RSPAN					
L2 Multicasting	IGMP Snooping v1/v2/v3: 256 Groups, Host-based IGMP Snooping Fast Leave, Report Suppression; Limited IP Multicasting (IGMP Filtering): Max. 24 IGMP Filtering Profiles, 128 Ranges Per Profile; MLD Snooping v1/v2: 256 Groups; MLD Snooping Fast Leave					
L3 Features	ARP Proxy; Policy-based Routing					
Virtual LAN	VLAN Groups: Max. 4K VLAN; GARP VLAN Registration Protocol (GVRP): Max. 256 Dynamic VLAN; 802.1Q Tagged VLAN; 802.1v Protocol VLAN; Double VLAN (Q-in-Q); Port-based Q-in-Q; Selective Q-in-Q; VLAN Translation; Port-based VLAN; MAC-based VLAN; ISM VLAN; Asymmetric VLAN; VLAN Trunking; Voice VLAN; Subnet-based VLAN					
Quality of Service (QoS)	802.1p Quality of Service; 8 Queues Per Port; Queue Handling: Strict Priority, Weighted Round Robin (WRR), Strict + WRR; CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, DSCP, Protocol Type, IPv6 Traffic Class, IPv6 Flow Label; TCP/UDP Port, User-Defined Packet Content; Time-based QoS; Actions for Flow: Remark 802.1p Priority Tag, Remark TOS/DSCP Tag, Bandwidth Control, Flow Statistics, Committed Information Rate (CIR): Min. Granularity 64kbps; Stabilized Random Early Detection (SRED) Congestion Control; Bandwidth Control: Port-based (Ingress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity 64kbps), Per Egress Queue Bandwidth Control, Per Egress Queue Bandwidth Guarantee					
Access Control List (ACL)	Max. 1,792 Access Rules; ACL Statistics; Time-based ACL; VLAN-based ACL; CPU Interface Filtering; ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IPv4/IPv6 Address, DSCP, Protocol Type, TCP/UDP Port Number, IPv6 Traffic Class, IPv6 Flow Label, User-Defined Packet Content					
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1/v2/v3; Port Security: Max. 64 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; D-Link Safeguard Engine; NetBIOS/NetBEUI Filtering; IP-MAC-Port Binding (IMPB): ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, 500 Address Binding Entries Per Device; Traffic Segmentation; DHCP Server Screening; DHCP Client Filtering; ARP Spoofing Prevention; BPDU Attack Protection					
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment, Authentication Database Failover; Web-based Access Control (WAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment, Authentication Database Failover; MAC-based Access Control (MAC): Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment, Authentication Database Failover; Multiple Authentication; Japanese Web-based Access Control (JWAC); Microsoft Network Access Protection (NAP): 802.1X NAP, DHCP NAP; Guest VLAN; RADIUS & TACACS+ Authentication for Switch Access; RADIUS Accounting; Three-Level User Accounts					
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server; Telnet Client; TFTP Client; ZModem; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Traps; Link Layer Discovery Protocol (LLDP); Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; CPU Monitoring; PPPoE Circuit-ID Tag Insertion; Dual Image; Dual Configuration; DHCP Auto-Configuration; sFlow; BootP/DHCP Client; DHCP Server; DHCP Relay; DHCP Relay Option 60/61/82; System Log; Network Time Protocol (NTP) / Simple NTP (SNTP); Password Recovery; Password Encryption; DHS Relay					
Operations, Admin & Management (OAM)	Cable Diagnostics; 802.3ah Ethernet Link OAM; 802.1ag Connectivity Fault Management (CFM); Loopback Diagnostics					
D-Link Green	Compliant with RoHS 6; Time-based PoE					
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1409); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); Ether-Like (RFC1643, 2358, 2665); 802.1p (RFC2674); IF (RFC2233, 2863); Ping & Traceroute (RFC2925); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); D-Link Private MIB					
Standard Compliance	UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); BootP (RFC951, 1542); HTTP (RFC2068); RADIUS (RFC2138); RADIUS Accounting (RFC2139, 2866); DiffServ (RFC2474); DSCP AF (RFC2597); DSCP EF (RFC2598); TACACS (RFC1492); SNMPv1 (RFC1157); SNMPv2c (RFC1901, 1908); SNMPv3 (RFC2570, 2575); Syslog (RFC3164, 3295); DHCP Relay Option (RFC3046)					
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount 441 x 210 x 44mm		19-inch, 1U Rack-Mount 441 x 310 x 44mm		
	Weight	2.51kg	2.52kg	5.42kg	4.09kg	
	Power Input	AC Input: 100-240VAC, 50/60Hz; Universal Power Supply		DC Power Input: 48VDC, 0.6A Universal Power Supply		
	Max. Power Consumption	20.5W	18.38W	505.1W	33.1W	
	Power over Ethernet	-		Power Budget: 370W; Port 1-8: 30W Port 9-24: 15.4W Time-based PoE		
	Redundant Power Supply	DPS-200	-	DPS-600	DPS-200	
	Operation Temperature	0 to 50 °C		0 to 50 °C		
	Storage Temperature	-40 to 70 °C				
	Operation Humidity	5% to 95% Non-Condensing				
	Acoustic	0 dB	0 dB	48.2 dB at Max Speed	35.1 dB at Max Speed	TBD
Fan	Fanless		4 DC Fans	2 DC Fans	4 DC Fans	
Real Time Clock (RTC)	Maintain the Timing Setting when the Device Power is Off					
EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick; VCCI					
Safety Compliance	CB; UL/cUL					
Metro Ethernet Forum	MEF 9, 14		-			

Fast Ethernet Metro Ethernet Edge Switches

DES-3200 Series



XSTACK



The DES-3200 series Layer 2 xStack Managed Switch is designed for the Metro ETTX and FTTX market. This series provides 8/16/24 100Mbps Fast Ethernet connections plus 2/4 combo Gigabit/SFP ports. DES-3200-28F provides Fast Ethernet fiber connections which is an advantage in Metro Ethernet applications.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Ethernet Ring Protection Switching (ERPS)*
- Gratuitous Address Resolution Protocol (ARP)
- 802.3ah Ethernet Link OAM*
- 802.1v Protocol VLAN
- VLAN Trunking
- Asymmetric VLAN
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- IGMP Snooping Multicast (ISM) VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- CPU Interface Filtering
- 802.1ag Connectivity Fault Management (CFM)*
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- IP-MAC-Port Binding (IMPB)
- ARP Spoofing Prevention*
- BPDU Attack Protection*
- DHCP Server Screening*
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Per Queue Bandwidth Control*

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3200-10

- 10/100BASE-TX x 8
- Combo 1000BASE-T/SFP x 2
- Fanless
- 9-inch, 1U Desktop

DES-3200-18

- 10/100BASE-TX x 16
- Combo 1000BASE-T/SFP x 2
- Fanless
- 9-inch, 1U Desktop

DES-3200-28

- 10/100BASE-TX x 24
- Combo 1000BASE-T/SFP x 4
- Fanless
- 19-inch, 1U Rack-Mount

DES-3200-28F

- 100BASE-X SFP x 24
- Combo 1000BASE-T/SFP x 4
- DC Fan x 1
- 19-Inch, 1U Rack-Mount

DES-3200 Series

Model	DES-3200-10	DES-3200-18	DES-3200-28	DES-3200-28F	
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab				
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	8	16	24	
	100BASE-X SFP Port	-	-	24	
	Combo 1000BASE-T/SFP Port	2		4	
Stackability	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices				
General Features	Switching Capacity	5.6Gbps	7.2Gbps	12.8Gbps	
	Maximum Forwarding Rate	4.2Mpps	5.4Mpps	9.5Mpps	
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	384KBytes			
	DDR1 SDRAM for CPU	128MBytes			
	Flash Memory	16MBytes			
	Mean Time Before Failure (MTBF)	873,750 hours	743,115 hours	639,525 hours	447,268 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration				
L2 Features	MAC Address Table: 8K; Jumbo Frame: Max. 2048Bytes; Spanning Tree Protocol: 802.1D-2004 Edition STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering, Root Restriction; L2 Protocol Tunneling; Loopback Detection (LBD); 802.3ad Link Aggregation: Max. 5 Groups (DES-3200-10), Max. 9 Groups (DES-3200-18), Max. 14 Groups (DES-3200-28/28F), Max. 8 Ports Per Group; Port Mirroring: 1 Mirroring Group, One-to-One, Many-to-One, Flow-based (ACL) Mirroring; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; Ethernet-Ring Protection Switching (E-RPS)*				
L2 Multicast	IGMP Snooping v1/v2, v3 Awareness: 1K Groups, Port-based IGMP Snooping Fast Leave; Limited IP Multicasting: Max. 24 IGMP Filtering Profiles, 128 Groups Per Profile MLD Snooping v1/v2, v2 Awareness: 1K Groups; IGMP Authentication				
L3 Features	Gratuitous ARP				
Virtual VLAN (VLAN)	802.1Q Tagged VLAN; 802.1v Protocol VLAN; VLAN Group: Max. 4K VLAN; Port-based VLAN; MAC-based VLAN; GARP VLAN Registration Protocol (GVRP): Max. 255 Dynamic VLAN; VLAN Trunking; Asymmetric VLAN; ISM VLAN; VLAN Translation Double VLAN (Q-in-Q): Port-based Q-in-Q, Selective Q-in-Q				
Quality of Service (QoS)	802.1p, 4 Queues Per Port; Queue Handling: Strict Priority, Weighted Round Robin (WRR); CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, Ether Type, IP Address, TOS, DSCP, Protocol Type, TCP/UDP Port, User-Defined Packet Content Actions for Flows: Remark 802.1p Priority Tag; Time-based QoS; Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 62.5kbps), Flow-based (Ingress, Min. Granularity 62.5kbps)				
Access Control List (ACL)	Max. 512 Access Rules; Time-based ACL; ACL Statistics; CPU Interface Filtering; ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IP Address, DSCP, Protocol Type, TCP/UDP Port Number, User-Defined Packet Content, Switch Port				
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1/v2/v3; Broadcast/Multicast/Unicast Storm Control; Traffic Segmentation; D-Link Safeguard Engine; IP-MAC-Port Binding (IMPB); IP Packet Inspection, ARP Packet Inspection, DHCP Snooping, 500 Address Binding Entries Per Device; Port Security: Max. 64 MAC Addresses Per Port; DoS Attack Prevention; ARP Spoofing Prevention*; BPDU Attack Protection*				
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control; Two-Level User Account; Guest VLAN; RADIUS & TACACS+ Authentication for Switch Access; RADIUS Accounting				
Management	Web-based GUI (IPv4/IPv6); Command Line Interface (CLI); Telnet Server/Client (IPv4/IPv6); TFTP Client (IPv4/IPv6); XModem; ZModem; System Log; Dual Image; CPU Monitoring; Simple Network Management Protocol (SNMP) v1/v2c/v3: SNMP over IPv6; SNMP Traps; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 82; Simple Network Time Protocol (SNTP); Link Layer Discovery Protocol (LLDP); Password Encryption; Simple Mail Transfer Protocol (SMTP); Debug Command; Network Load Balancing (NLB)*; IPv6 Management				
Operations, Administration & Management (OAM)	Loopback Diagnostics*; Cable Diagnostics*; 802.3ah Link OAM; 802.1ag Connectivity Fault Management (CFM)*				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1409); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); Ether-Like (RFC1643, 2358, 2665); 802.1p (RFC2674); IF (RFC2233, 2866); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); Ping & Traceroute (RFC2925); D-Link Private MIB				
Physical & Environment	Dimension (W x D x H)	9-inch, 1U Desktop; 228.5 x 180 x 44mm		19-inch, 1U Rack-Mount; 441 x 207 x 44mm	
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Power Consumption	12.7W	13.2W	18.4W	46.7W
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-40 to 70 °C			
	Operation Humidity	5% to 95% Non-Condensing			
Certification	Fan	Fanless		1 DC Fan	
	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; IC			
	Safety Compliance	UL/cUL; CB			

Gigabit Ethernet Entry-Level Managed Switches

DGS-3100 Series



DGS-3100 series consists of managed Layer 2 Gigabit stackable switches designed to provide feature-rich, low-cost switching in the entry-level network management category.

- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Loopback Detection (LBD)
- GARP VLAN Registration Protocol (GVRP)
- Quality of Service (QoS)
- Access Control List (ACL)
- ARP Spoofing Prevention
- Broadcast/Multicast/Unicast Storm Control
- D-Link Safeguard Engine™
- Microsoft® Network Access Protection (NAP)
- Guest VLAN
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- MAC-based Access Control (MAC)
- Link Layer Discovery Protocol (LLDP)

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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Redundant Power Supplies

DPS-200	60-Watt AC Redundant Power Supply (for DGS-3100-24 & DGS-3100-24TG)
DPS-500	140-Watt AC Redundant Power Supply (for DGS-3100-48)
DPS-600	500-Watt AC Redundant Power Supply (for DGS-3100-24P & DGS-3100-48P)

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DGS-3100-24

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Physical Stack

DGS-3100-24P

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Physical Stack

DGS-3100-24TG

- 10/100/1000BASE-T x 8
- SFP Slots x 16
- Redundant Power Supply
- Physical Stack

DGS-3100-48

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Physical Stack

DGS-3100-48P

- 10/100/1000BASE-T x 44 (PoE)
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Physical Stack

DGS-3100 Series

Model	DGS-3100-24	DGS-3100-24P	DGS-3100-24TG	DGS-3100-48	DGS-3100-48P	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DGS-3100-24P & DGS-3100-48P)					
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	20	20 (PoE)	8	44	44 (PoE)
	SFP Port	-	-	16	-	-
	Combo 1000BASE-T/SFP Port	4	-	-	-	4
Stackability	Physical Stack	Via HDMI Stacking Ports; Up to 20Gbps with Bi-Directional Redundant Stacking Topology; Up to 10Gbps with Linear Topology; Up to 6 Units Per Stack; Backup Master; Inter Trunking or Mirroring; HDMI Cable Length: 1 meter				
General Features	Switching Capacity	68Gbps		116Gbps		
	Maximum Forwarding Rate	50.60Mpps		86.31Mpps		
	Forwarding Mode	Store and Forward				
	Packet Buffer Memory	768KBytes		1.5MBytes		
	SDRAM for CPU	64MBytes				
	Flash Memory	16MBytes				
	Mean Time Before Failure (MTBF)	212,377 hours	117,136 hours	195,655 hours	103,924 hours	96,648 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration					
L2 Features	MAC Address Table: 8K; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; Jumbo Frame: Max. 10,240Bytes; IGMP Snooping v1/v2: 256 Group, IGMP Snooping Fast Leave; MLD Snooping v1/v2: 128 Groups; Port Mirroring: One-to-One, Many-to-One; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP, 802.1s Multiple STP, Per Port / Per Device BPDU Filtering; Loopback Detection; 802.3ad Link Aggregation: Max. 32 Groups Per Device, 8 Ports Per Group					
Virtual VLAN (VLAN)	VLAN Group: Max. 256 Static VLAN Groups; 802.1Q Tagged VLAN; GARP VLAN Registration Protocol (GVRP)					
Quality of Service	802.1p Class of Service: 4 Queues; Queue Handling: Strict, Weighted Round Robin (WRR), Strict + WRR; CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, Ether Type, IPv4 Address, DSCP, TCP/UDP Port					
Access Control List (ACL)	Bandwidth Control: Port-based (Ingress, Min. Granularity 3500kbps; Egress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity 64kbps)					
Security	Max. 15 Profiles; Max. 240 Rules Shared by All Profiles; Time-based ACL; ACL based on: 802.1p Priority, VLAN ID, Ether Type, MAC Address, IPv4 Address, DSCP, Protocol Type, TCP/UDP Port Number					
Authentication, Authorization & Accounting (AAA)	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v3; ARP Spoofing Prevention; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; D-Link Safeguard Engine					
Management	Microsoft Network Access Protection (NAP): DHCP NAP; Guest VLAN; 802.1X: Port-based Access Control, Host-based Access Control; MAC-based Access Control (MAC); RADIUS and TACACS+ Authentication for Management Access					
Management Information Base (MIB)	Web-based GUI; Command Line Interface (CLI); Telnet Server/Client; TFTP Client; Link Layer Discovery Protocol (LLDP); DHCP Relay Option 82; System Log; BootP/DHCP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Trap; DHCP Auto-Configuration; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; Dual Image; Dual Configuration; CPU Monitoring; Simple Network Time Protocol (SNTP)					
Standard Compliance	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1901, 1908, 3418); RMON (RFC1757, 2819); 802.1p (RFC2674); Ether-Like (RFC1643); IF (RFC2863); RADIUS Authentication Client (RFC2618); Ping & Traceroute (RFC2925); D-Link Private MIB					
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount 440x210x44mm	19-inch, 1U Rack-Mount 440x310x44mm	19-inch, 1U Rack-Mount 440x210x44mm	19-inch, 1U Rack-Mount 440x310x44mm	19-inch, 1U Rack-Mount 440x430x44mm
	Weight	3.04kg	5.58kg	2.95kg	5.50kg	7.43kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply				
	Maximum Power Consumption	41.8W	482.0W	37.1W	90.5W	539.0W
	Standby Power Consumption	19.58W	49.3W	22.4W	48.2W	70.3W
	Power over Ethernet	-	Power Budget: 370W; Per Port: 15.4W	-	-	Power Budget: 370W; Per Port: 15.4W
	Redundant Power Supply	DPS-200	DPS-600	DPS-200	DPS-500	DPS-600
	Operation Temperature	0 to 45 °C	0 to 40 °C	0 to 45 °C	0 to 45 °C	0 to 40 °C
	Storage Temperature	-10 to 70 °C				
	Operation Humidity	10% to 90% RH				
Storage Humidity	5% to 90% RH					
Acoustic	45.9 dB	48 dB	44.1 dB	47.4 dB	50.4dB	
Certification	EMI-EMC Compliance	FCC Class A; ICES-003 Class A; CE; C-Tick; VCCI Class A				
	Safety Compliance	cUL; CB				

Fast Ethernet Entry-Level Managed Switches

DES-3028/52 Series



DES-3028 / DES-3052 series provides flexible choices of 24 or 48 Fast Ethernet ports, with or without Power over Ethernet. Each switch is equipped with four Gigabit Ethernet ports including two combo SFP which are capable of both Gigabit and Fast Ethernet (100BASE-FX) fiber connections for user-specific applications.

- D-Link Single IP Management (Virtual Stack)
- Internet Group Multicast Protocol (IGMP) Snooping
- Multicast Listener Discovery (MLD) Snooping
- Asymmetric VLAN
- IGMP Snooping Multicast (ISM) VLAN
- Double VLAN (Q-in-Q)
- Quality of Service (QoS)
- Access Control List (ACL)
- CPU Interface Filtering
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- D-Link Safeguard Engine™
- IP-MAC-Port Binding (IMPB)
- Microsoft® Network Access Protection
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Guest VLAN
- Simple Network Management Protocol (SNMP)
- Cable Diagnostics

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3028

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless

DES-3028P

- 10/100BASE-TX x 24 (PoE)
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- DC Fan x 2

DES-3052

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless

DES-3052P

- 10/100BASE-TX x 48 (PoE)
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- DC Fan x 3

DES-3028/52 Series

Model	DES-3028	DES-3028P	DES-3052	DES-3052P	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DES-3028P & DES-3052P)				
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	24	24 (PoE)	48	
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2			
	Combo 1000BASE-T/SFP	2			
Stackability	Virtual Stack D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices				
General Features	Switching Capacity	12.8Gbps		17.6Gbps	
	Maximum Forwarding Rate	9.5Mpps		13.1Mpps	
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	512KBytes			
	SDRAM for CPU	64MBytes			
	Flash Memory	8MBytes			
	Mean Time Before Failure (MTBF)	248,271 hours	196,033 hours	292,133 hours	169,182 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration				
L2 Features	MAC Address Table: 8K; Jumbo Frames: Max. 2,048Bytes; IGMP Snooping v1/v2: 256 Groups, Port-based IGMP Snooping Fast Leave; IGMP Authentication; Limited IP Multicast: Max. 24 IGMP Filtering Profiles, 128 Ranges Per Profile; MLD Snooping v1/v2: 256 Group, MLD Snooping Fast Leave Spanning Tree Protocol (STP): 802.1D-2004 Edition STP, 802.1w Rapid STP, 802.1s Multiple STP, BPDU Filtering, Root Restriction; Loopback Detection (LBD); 802.3ad Link Aggregation: Max. 6 Groups Per Device, Max. 8 Ports Per Group; Port Mirroring: One-to-One, Many-to-One, Flow-based Mirroring; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention				
Virtual LAN (VLAN)	802.1Q Tagged VLAN, VLAN Group: Max. 4K VLAN; Port-based VLAN; Asymmetric VLAN; ISM VLAN; GARP VLAN Registration Protocol (GVRP): Max. 255 Dynamic VLAN; Double VLAN (Q-in-Q): Port-based Q-in-Q				
Quality of Service (QoS)	802.1p Quality of Service; 4 Queues Per Port; Queue Handling: Strict, Weighted Round Robin; CoS based on: Switch Port, VLAN ID, 802.1p Priority Queues, MAC Address, IP Address, DSCP, Protocol Type, TCP/UDP Port, User-Defined Packet Content Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps), Flow-based (Ingress, Min. Granularity 64kbps); Time-based QoS				
Access Control List (ACL)	Max. 256 Access Rules; Time-based ACL; CPU Interface Filtering; Traffic Segmentation; ACL based on: 802.1p Priority, VLAN ID, MAC Address, Ether Type, IP Address, DSCP, Protocol Type, TCP/UDP Port Number, User-Defined Packet Content				
Security	Secure Shell (SSH) v2; Secure Sockets Layer (SSL) v1/v2/v3; Port Security: Max. 16 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; IP-MAC-Port Binding (IMPB): ARP Packet Inspection, IP Packet Inspection, DHCP Snooping, 500 Address Binding Entries Per Device; Microsoft Network Access Protection (NAP): 802.1X NAP, DHCP NAP; D-Link Safeguard Engine				
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Guest VLAN, RADIUS Accounting; RADIUS & TACACS+ Authentication for Switch Access				
Management	Web-based GUI; Command Line Interface (CLI); Telnet Server/Client; TFTP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Traps; XModem; ZModem; Remote Monitoring (RMON) v1: 1, 2, 3, 9 Groups; RMON v2: ProbeConfig Group; BootP/DHCP Client; DHCP Auto-Configuration; DHCP Relay; DHCP Relay Option 82; Dual Image; CPU Monitoring; Simple Network Time Protocol (SNTP); System Log; Link Layer Discovery Protocol (LLDP); Debug Command; Cable Diagnostics				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); RMON (RFC1757, 2819); RMONv2 (RFC2021); Ether-Like (RFC1643, 2358, 2665); 802.1p (RFC2674); IF (RFC2233, 2863); Ping & Traceroute (RFC2925); RADIUS Authentication Client (RFC2618); RADIUS Accounting Client (RFC2620); D-Link Private MIB				
Standard Compliance	RADIUS Accounting (RFC2866); RADIUS Authentication For Management Access (RFC2138, 2139); TACACS+ Authentication for Management Access (RFC1492); HTTP (RFC2068); UDP (RFC768); TFTP (RFC783); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet (RFC854); SNMP (RFC1157, 1901, 1908, 2570, 2575); RMONv1 (RFC2819); BootP/DHCP (RFC951, 1542); DHCP Relay (RFC3046); System Log (RFC3164, 3195)				
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount; 441 x 207 x 44mm		19-inch, 1U Rack-Mount; 441 x 309 x 44mm	
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Power Consumption	18.8W	217W	25.5W	395W
	Power over Ethernet	-	Power Budget: 185W; Per Port up to 15.4W	-	Power Budget: 370W; Per Port up to 15.4W
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-10 to 70 °C			
	Humidity	5% to 95% Non-Condensing			
Fan	Fanless	2 DC Fans	Fanless	3 DC Fans	
Certification	EMI-EMC Compliance	FCC Class A; CE; C-Tick; VCCI Class A			
	Safety Compliance	cUL; LVD			

Fast Ethernet Entry-Level Managed Switches

DES-3000 Series



DES-3000 Series consists of high-performance managed Layer 2 switches. Ideal as a solution for small and medium-size business (SMB) and enterprise markets. Designed as an entry-level management solution for SMB, these switches come included with various enriched advanced features. The DES-3000 Series is a cost-effective solution suitable for business applications that require superior performance with options for expansion. The switches in addition offer fiber uplinks for long distance connections to different group users, such as classrooms, departments spread across campus, or buildings.

- D-Link Single IP Management (Virtual Stack)
- Loopback Detection (LBD)
- Internet Group Management Protocol (IGMP) Snooping
- 802.1Q Virtual LAN (VLAN)
- Quality of Service (QoS)
- Traffic Segmentation
- CPU interface Filtering
- IP-MAC-Port Binding (IMPB)
- Broadcast/Multicast/Unicast Storm Control
- 802.1X Port-based Access Control
- 802.1X Host-based Access Control
- Microsoft® Network Access Protection
- Simple Network Management Protocol (SNMP)
- Cable Diagnostics

Optional Accessories

Modules (for DES-3018 & DES-3026)

DEM-201F	1-Port 100BASE-FX Multi-Mode Fiber Module
DEM-201FL	1-Port 100BASE-FX Single-Mode Fiber Module
DEM-301G	1-Port SFP Module
DEM-301T	1-Port 1000BASE-T Module

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

DES-3010F

- 10/100BASE-TX x 8
- 10/100/1000BASE-T x 1
- 100BASE-FX x 1 (Multi-Mode Fiber)
- Fanless
- 11-inch, 1U Desktop

DES-3010G

- 10/100BASE-TX x 8
- 10/100/1000BASE-T x 1
- SFP x 1
- Fanless
- 11-inch, 1U Desktop

DES-3018

- 10/100BASE-TX x 16
- Expansion Slots x 2
- Fanless
- 19-inch, 1U Rack-Mount

DES-3026

- 10/100BASE-TX x 24
- Expansion Slots x 2
- Fanless
- 19-inch, 1U Rack-Mount

DES-3000 Series

Model	DES-3010F	DES-3010G	DES-3018	DES-3026	
LAN Standard	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab				
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	8	8	16	24
	100BASE-FX (MMF)	1	-	Via DEM-201F Module	
	100BASE-FX (SMF)	-	-	Via DEM-201FL Module	
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	1	1	Via DEM-301T Module	
	SFP Port	-	1	Via DEM-301G Module	
Expansion Slot	-	-	2		
Stackability	D-Link Single IP Management (SIM); Virtual Stack up to 32 Devices				
General Features	Switching Capacity	3.8Gbps	5.6Gbps	7.2Gbps	8.8Gbps
	Maximum Forwarding Rate	2.8Mpps	4.2Mpps	5.4Mpps	6.6Mpps
	Forwarding Mode	Store and Forward			
	Packet Buffer Memory	256KBytes			
	SDRAM for CPU	32MBytes			
	Flash Memory	4MBytes			
	Mean Time Before Failure (MTBF)	239,160 hours	247,500 hours	130,465 hours	123,925 hours
Console Port	Female RS-232 DB-9 Console Port for Out-of-Band Configuration				
L2 Features	MAC Address Table: 8K; Loopback Detection; IGMP Snooping v1/v2: 256 Groups, Port-based IGMP Snooping Fast Leave; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP, BPDU Filtering; 802.3ad Link Aggregation: Max. 3 Groups Per Device, Max. 4 Ports Per Group, (2 Groups for Fast Ethernet Ports, 1 Group for Gigabit Ethernet Ports) Port Mirroring: One-to-One, Many-to-One				
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 255 VLAN; Static VLAN				
Quality of Service (QoS)	802.1p Quality of Service; 4 Queues; CoS based on: MAC Destination Address, Switch Port, TOS, DSCP Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps)				
Security	Port Security: Max. 10 MAC Addresses Per Port; Traffic Segmentation; CPU Interface Filtering; IP-MAC-Port Binding (IMPB): ARP Inspection, 500 Address Binding Entries Per Device; Broadcast/Multicast/Unicast Storm Control; Secure Shell (SSH) v2				
Authentication, Authorization & Accounting (AAA)	802.1X: Port-based Access Control, Host-based Access Control, Dynamic VLAN Assignment; Guest VLAN; Microsoft Network Access Protection (NAP): DHCP NAP				
Management	D-Link Single IP Management (SIM); Web-based GUI; Command Line Interface (CLI); Telnet Server; TFTP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; SNMP Traps; DHCP Relay; DHCP Relay Option 60/61; DHCP Auto-Configuration; BootP/DHCP Client				
Operations, Administration & Management (OAM)	Cable Diagnostics				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); RMON (1757); Ether-Like (RFC1643, 2358); 802.1p (RFC2674); IF (RFC1213, 2233); RADIUS Extension Standard (RFC2869); D-Link Private MIB				
Physical & Environment	Dimension (W x D x H)	11-inch, 1U Desktop; 280 x 180 x 44mm		19-inch, 1U Rack-Mount; 441 x 207 x 44mm	
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Power Consumption	15W	14.8W	15.2W	17W
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-40 to 70 °C			
Certification	Humidity	5% to 95% Non-Condensing			
	EMI-EMC Compliance	FCC Class A; CE; C-Tick VCCI			
	Safety Compliance	CSA International			

Gigabit Ethernet Web Smart Switches

DGS-1210 Series



D-Link DGS-1210 Series is the latest generation of Web Smart Switches that feature D-Link Green technology. This series integrates advanced management and security functions that provide performance and scalability. DGS-1210 Series is designed for SMBs/enterprises seeking to upgrade from unmanaged switches to Web Smart switches, which gives customers easy access and simplifies operation at affordable price.

- Internet Group Management Protocol (IGMP) Snooping
- Loopback Detection (LBD)
- Cable Diagnostics
- 802.1Q Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- 802.1X Access Control
- Port Security
- Broadcast/Multicast/Unicast Storm Control
- D-Link Safeguard Engine™
- DHCP Server Screening*
- ARP Spoofing Prevention*
- Web-based GUI
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet WDM SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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DGS-1210-10P

- 10/100/1000BASE-T x 8 (PoE)
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 13-inch, 1U Desktop
- Power Savings

DGS-1210-16

- 10/100/1000BASE-T x 12
- Combo 1000BASE-T/SFP x 4
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1210-24

- 10/100/1000BASE-T x 20
- Combo 1000BASE-T/SFP x 4
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1210-48

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- DC Fan x 2
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1210 Series

Model	DGS-1210-10P	DGS-1210-16	DGS-1210-24	DGS-1210-48	
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DGS-1210-10P); Pre-Standard IEEE 802.3at (DGS-1210-10P)				
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	8 (PoE)	12	20	
	Combo 1000BASE-T/SFP Port	2	4	4	
	Switching Capacity	20Gbps	32Gbps	48Gbps	
	Maximum Forwarding Rate	14.88Mpps	23.8Mpps	35.7Mpps	
	Forwarding Mode	Store and Forward			
General Features	Packet Buffer Memory	512KBytes		1MBytes	
	DDR2 for CPU	64MBytes			
	Flash Memory	16MBytes			
	Mean Time Before Failure (MTBF)	202,249 hours	799,491 hours	410,948 hours	
			322,402 hours		
L2 Features	MAC Address: 8K Entries Per Device, Static MAC Address: 256 Entries; Flow Control: IEEE 802.3x Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2: 256 Groups, Static Multicast Address: 64, IGMP Per VLAN; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP; Loopback Detection; 802.3ad Link Aggregation: Max. 5 Groups Per Device, 8 Ports Per Group (DGS-1210-10P); Max. 8 Groups Per Device, 8 Ports Per Group (DGS-1210-16/24/48); Port Mirroring: One-to-One, Many-to-One, Mirroring for Tx/Rx/Both; Cable Diagnostics; Configurable Auto MDI/MDIX; Multicast Filtering*				
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 256 Static VLAN Groups, Max. 4094 VIDs; Management VLAN; Asymmetric VLAN; Auto Voice VLAN: Max. 10 User Defined OUI, Max. 8 Default OUI				
Quality of Service (QoS)	802.1p Quality of Service; 4 Queues Per Port; Queue Handling: Strict, Weighted Round Robin (WRR); CoS based on: 802.1p Priority Queues, DSCP; Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps)				
Access Control List (ACL)	Max. 50 Profiles; Max. 240 Rules Shared by Profiles; ACL Actions: Permit, Deny; ACL based on: MAC Address, IPv4 Address (ICMP/IGMP/TCP/UDP), VLAN ID, 802.1p Priority, DSCP				
Security	802.1X; Port Security: Max. 64 MAC Addresses Per Port; Broadcast/Multicast/Unicast Storm Control; Static MAC; D-Link Safeguard Engine; DHCP Server Screening*; ARP Spoofing Prevention*: Max. 64 Entries; Secure Sockets Layer* (SSL) v1/v2/v3 (IPv4)				
Management	Web-based GUI; Compact CLI through Telnet; Telnet Server; TFTP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3*; SNMP Trap; Trap for SmartConsole Utility; System Log: Max. 500 Log Entries, IPv4 Log Server; BootP/DHCP Client; Simple Network Time Protocol (SNTP)				
Power Savings	By Link Status and Cable Length Detection				
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); Trap Convention (RFC1215); Interface Group (RFC2233); D-Link Private MIB				
Standard Compliance	UDP (RFC768); IP (RFC791); ICMP (RFC792); TCP (RFC793); ARP (RFC826); Telnet Server (RFC854, 855, 858); Telnet Binary Transmission (RFC856); Congestion Control in TCP/IP Network (RFC896); Reverse Address Resolution Protocol (RFC903); BootP Client (RFC951); MIB (RFC1155); SNMPv1 (RFC1157); Path MTU Discovery (RFC1191); Concise MIB Definition (RFC1212); MIB-II, IF (RFC1213); Traps for Use with SNMP (RFC1215); Standard MIB (RFC1239); TFTP (RFC1350); Bridge MIB (RFC1493); CIDR (RFC1519); HTTP/1.0 (RFC1945); DHCP (RFC2131); DHCP Options and BootP Vendor Extensions (RFC2132); RADIUS Authentication (RFC2138); Interface MIB (RFC2233); 802.1p (RFC2647); Structure of Management Information Version 2 (SMIPv2) (RFC2578); SNMP (RFC3416, 3417)				
Physical & Environment	Dimension (W x D x H)	13-inch, 1U Desktop 330 x 180 x 44mm	19-inch, 1U Rack-Mount; 440 x 210 x 44mm	19-inch, 1U Rack-Mount; 440 x 250 x 44mm	
	Weight	1.84kg	2.87kg	2.97kg	
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply			
	Max. Power Consumption	PoE On: 109.3W PoE Off: 14.45W	17.4W	24.1W	59.1W
	Standby Power Consumption	7W/110V 7.8W/240V	4.9W/110V; 5W/240V	6W/110V; 6.2W/240W	19.2W/110V; 20.1W/240V
	Power over Ethernet	All Ports are Selective at 15.4W / 30W Power Budget: 78W Time-based PoE			
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-10 to 70 °C			
	Operation Humidity	10% to 95% RH			
	Storage Humidity	5% to 95% RH			
	Acoustic	0dB		46.2 dB	
	Fan	Fanless		Smart Fan x 2	
	Reset Button	One Reset Button			
Certification	EMI-EMC Compliance Safety Compliance				
	FCC Class A; CE Class A; IC Report Class A; C-Tick Class A; VCCI Class A cUL; LVD				

Gigabit Ethernet Web Smart Switches

DGS-1200 Series



D-Link Web Smart switches come with plug-and-play simplicity, designed to provide performance and reliability for small and medium-size business (SMB) network.

Switch management and configuration is through SmartConsole utility or web-based GUI. SmartConsole is an easy way to access the switch from a local computer.

- Internet Group Management Protocol (IGMP) Snooping
- Static Port Trunk
- 802.1Q Tagged Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Quality of Service (QoS)
- 802.1X Port-based Access Control
- Broadcast Storm Control
- Cable Diagnostics
- D-Link Safeguard Engine™
- Web-based GUI
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet WDM SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

DGS-1216T

- 10/100/1000BASE-T x 14
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1224T

- 10/100/1000BASE-T x 22
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1224TP

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- DC Fan x 2
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1248T

- 10/100/1000BASE-T x 44
- Combo 1000BASE-T/SFP x 4
- DC Fan x 3
- Reset Button x 1
- 19-inch, 1U Rack-Mount
- Power Savings

DGS-1200 Series

Model	DGS-1216T	DGS-1224T	DGS-1224TP	DGS-1248T
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DGS-1224TP)			
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	14	22	20 (PoE)
	Combo 1000BASE-T/SFP Port	2		4
General Features	Switching Capacity	32Gbps	48Gbps	
	Maximum Forwarding Rate	23.8Mpps	35.7Mpps	35.7Mpps
	Forwarding Mode	Store and Forward		
	Packet Buffer Memory	384KBytes	512KBytes	384KBytes
	SDRAM for CPU	8MBytes		16MBytes
	Flash Memory	2MBytes PROM		4MBytes PROM
Mean Time Before Failure (MTBF)	228,450 hours	215,976 hours	173,467 hours	186,656 hours
L2 Features	MAC Address: 8K Entries Per Device, Static MAC Address: 256 Entries; IGMP Snooping v1/v2: 64 Multicast Groups; Spanning Tree Protocol: 802.1D STP; Jumbo Frame: Max. 10,240Bytes (for DGS-1216T/24T/24TP), Max. 9,220Bytes (for DGS-1248T); Static Port Trunk: Max. 6 Groups Per Device, 8 Ports Per Group			
Green Ethernet	Power Savings Mode			
Virtual LAN (VLAN)	802.1Q Tagged VLAN; Max. 256 Static VLAN Groups; Management VLAN; Asymmetric VLAN			
Quality of Service (QoS)	802.1p Priority Queues; Max. 4 Queues Per Port; DSCP-based QoS; Queue Handling: Strict, Weighted Round Robin (WRR)			
Security	802.1X Port-based Access Control; Broadcast Storm Control; Trusted Host; D-Link Safeguard Engine: Protect CPU from Broadcast/Multicast/Unicast Flooding; Cable Diagnostics			
Power Savings	By Link Status			
Management	Web-based GUI; Simple Network Management Protocol (SNMP) v1; DHCP Client; Trap Setting for Destination IP, System Events, Fiver Port Events, Twisted-Pair Port Events; Port Access Control; SmartConsole Utility; Firmware Upgrade using SmartConsole Utility; Web-based: Configuration Backup/Restoration; Web-based: Firmware Backup/Upload; System Reboot using Web-based Interface			
Management Information Base (MIB)	MIB-II (RFC1213); D-Link Private MIB			
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount; 440 x 210 x 44mm		19-inch, 1U Rack-Mount; 440 x 309 x 44mm
	Weight	2.72kg	2.80kg	3.6kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply		
	Power Consumption	23W	31.2W	250.3W
	Power over Ethernet	-		Power Budget: 180W
	Operation Temperature	0 to 40 °C		
	Storage Temperature	-10 to 70 °C		
	Operation Humidity	10% to 90% RH		
	Storage Humidity	5% to 90% RH		
	Acoustic	0 dB	0 dB	47 dB
Fan	Fanless	Fanless	2 DC Fans	3 DC Fans
Reset Button	One Reset Button			
Certification	EMI-EMC Compliance Safety Compliance			
	FCC Class A; CE Class A; VCCI Class A cUL; LVD			

Fast Ethernet Web Smart Switches

DES-1210 Series



D-Link DES-1210 Series is the latest generation of Web Smart switches, which integrates advanced management and security functions that provide performance and scalability. While easy to use, the DES-1210 Series provides a complete and affordable solution for small and medium businesses.

- Internet Group Management Protocol (IGMP) Snooping
- Multicast Filtering*
- 802.1Q Tagged Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
- Quality of Service (QoS)
- Access Control List (ACL)
- 802.1X Access Control
- Broadcast/Multicast/Unicast Storm Control
- D-Link Safeguard Engine™
- DHCP Server Screening*
- ARP Spoofing Prevention*
- Web-based GUI
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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DES-1210-28

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1210-52

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1210 Series

Model	DES-1210-28	DES-1210-52
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab	
Port Interface	24	48
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	2
Port Interface	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2
Port Interface	Combo 1000BASE-T/SFP	2
General Features	Switching Capacity	12.8Gbps
General Features	Maximum Forwarding Rate	9.5Mpps
General Features	Forwarding Mode	Store and Forward
General Features	Packet Buffer Memory	512KBytes
General Features	DDR2 for CPU	64MBytes
General Features	Flash Memory	16MBytes
General Features	Mean Time Before Failure (MTBF)	419,467 hours
L2 Features	MAC Address Table: 8K, Static MAC: 256; Enable/Disable Auto-Learning of MAC Addresses; Flow Control: 802.3 Flow Control, Head-of-Line (HoL) Blocking Prevention; IGMP Snooping v1/v2: 256 Groups, At least 64 Multicast addresses; IGMP Per VLAN, Cable Diagnostics; Configurable Auto MDI/MDIX; Multicast Filtering*; Spanning Tree Protocol (STP): 802.1D STP, 802.1w Rapid STP; Loopback Detection; 802.3ad Link Aggregation: Max. 8 Groups Per Device, 8 Ports Per Group; Port Mirroring: One-to-One, Many-to-One, Mirroring for Tx/Rx/Both	
Virtual VLAN (VLAN)	802.1Q Tagged VLAN; VLAN Group: Max. 256 Static VLAN, Max. 4,094 VID; Management VLAN; Asymmetric VLAN; Auto Voice VLAN: Max. 10 User Defined OUI, Max. 8 Default OUI	
Quality of Service (QoS)	802.1p Quality of Service; 4 Queues Per Port; Queue Handling: Strict, Weighted Round Robin (WRR); CoS based on: 802.1p Priority Queues, DSCP; Bandwidth Control: Port-based (Ingress/Egress, Min. Granularity 64kbps)	
Access Control List (ACL)	Max. 50 Profiles; Max. 240 Rules Shared by Profiles; ACL Actions: Permit, Deny; ACL based on: MAC Address, IPv4 Address (ICMP/IGMP/TCP/UDP), VLAN ID, 802.1p Priority, DSCP	
Security	802.1X; Port Security: Max. 64 MAC Addresses Per Port; Static MAC Broadcast/Multicast/Unicast Storm Control; IP-MAC-Port Binding; DHCP Snooping*; D-Link Safeguard Engine; DHCP Server Screening*; ARP Spoofing Prevention*: Max. 64 Entries; Secure Sockets Layer (SSL) v1/v2/v3 (IPv4)	
Management	Web-based GUI; Compact CLI through Telnet; Telnet Server; TFTP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3*; SNMP Trap; Trap for SmartConsole Utility; System Log: Max. 500 Log Entries, IPv4 Log Server; BootP/DHCP Client; Simple Network Time Protocol (SNTP)	
Management Information Base (MIB)	MIB-II (RFC1213); Bridge (RFC1493); SNMPv2 (RFC1907); MIB Traps Convention; Interface Group MIB; D-Link Private MIB	
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount; 440 x 210 x 44 mm
Physical & Environment	Weight	2.6kg
Physical & Environment	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply
Physical & Environment	Max. Power Consumption	17.6W
Physical & Environment	Standby Power Consumption	7.6W/110V; 7.9W/240W
Physical & Environment	Operation Temperature	0 to 40 °C
Physical & Environment	Storage Temperature	-10 to 70 °C
Physical & Environment	Operation Humidity	10% to 95% RH
Physical & Environment	Storage Humidity	5% to 95% RH
Physical & Environment	Acoustic	0 dB
Physical & Environment	Fan	Fanless
Physical & Environment	Reset Button	One Reset Button
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; C-Tick
Certification	Safety Compliance	cUL; LVD

Fast Ethernet Web Smart Switches

DES-1200 Series



D-Link Web Smart switches come with plug-and-play simplicity, designed to provide performance and reliability for small and medium-size business (SMB) network.

Switch management and configuration is through SmartConsole utility or web-based GUI. SmartConsole is an easy way to access the switch from a local computer.

- Internet Group Management Protocol (IGMP) Snooping
- Static Port Trunk
- 802.1Q Tagged Virtual LAN (VLAN)
- Management VLAN
- Asymmetric VLAN
- Quality of Service (QoS)
- 802.1X Port-based Access Control
- Broadcast Storm Control
- Cable Diagnostics
- D-Link Safeguard Engine™
- Web-based GUI
- Simple Network Management Protocol (SNMP)

Optional Accessories

Gigabit Ethernet WDM SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMF, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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DES-1228

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1228P

- 10/100BASE-TX x 24 (PoE)
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fan x 4
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1252

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fanless
- Reset Button x 1
- 19-inch, 1U Rack-Mount

DES-1200 Series

Model	DES-1228	DES-1228P	DES-1252	
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3z; IEEE 802.3ab; IEEE 802.3af (DES-1228P)			
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	24	24 (PoE)	48
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2	2	2
	Combo 1000BASE-T/SFP	2	2	2
General Features	Switching Capacity	12.8Gbps		17.6Gbps
	Maximum Forwarding Rate	9.52Mpps		13.1Mpps
	Forwarding Mode	Store and Forward		
	Packet Buffer Memory	128KBytes		
	SDRAM for CPU	8MBytes		
	Flash Memory	2MBytes PROM		
	Mean Time Before Failure (MTBF)	326,647 hours	149,676 hours	298,917 hours
L2 Features	MAC Address Table: 8K; Static MAC: 256; Enable/Disable Auto-Learning of MAC Addresses; IGMP Snooping v1/v2: 64 Multicast Groups; Spanning Tree Protocol: 802.1D STP; Power Savings; Static Port Trunk: Max. 6 Groups Per Device, 8 Ports Per Group			
Virtual VLAN (VLAN)	802.1Q Tagged VLAN; Max. 256 Static VLAN Groups; Management VLAN; Asymmetric VLAN			
Quality of Service (QoS)	802.1p Priority Queue; Max. 4 Queues Per Port; DSCP-based QoS; Queue Handling: Strict, Weighted Round Robin (WRR)			
Security	802.1X Port-based Access Control; Broadcast Storm Control; Trusted Host; Cable Diagnostics; D-Link Safeguard Engine: Protect CPU from Broadcast/Multicast/Unicast Flooding			
Management	Web-based GUI; Simple Network Management Protocol (SNMP) v1; DHCP Client; Trap Settings for Destination IP, System Events, Fiber Port Events, Twisted-Pair Port Events; Port Access Control; Web-based Configuration Backup/Restoration; Web-based Firmware Backup/Upload; Firmware Upgrade using SmartConsole Utility; System Reboot using Web-based Interface; SmartConsole Utility			
Management Information Base (MIB)	MIB-II (RFC1213); D-Link Private MIB			
Physical & Environment	Dimension (W x D x H)	19-inch, 1U Rack-Mount; 440 x 140 x 44mm	19-inch, 1U Rack-Mount; 440 x 209 x 44mm	19-inch, 1U Rack-Mount; 440 x 310 x 44mm
	Weight	2.08kg	3.20kg	3.72kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply		
	Power Consumption	18.35W	222W	26.2W
	Power over Ethernet	-	Power Budget: 170W Per Port: 15.4W	-
	Operation Temperature	0 to 40 °C		
	Storage Temperature	-10 to 70 °C		
	Operation Humidity	10% to 90% RH		
	Storage Humidity	5% to 90% RH		
	Fan	Fanless	Four Fans	Fanless
	Reset Button	One Reset Button		
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; C-Tick		
	Safety Compliance	cUL		

Gigabit Ethernet Unmanaged Switches

DGS-1000 Series



DGS-1000 Series consists of unmanaged Gigabit switches designed for cost effective small office home office (SOHO) and workgroup connection. They support full duplex operation, provide IEEE 802.3x flow control for reliable data transfer, and auto MDI/MDIX to eliminate the need for cross-over cables to simplify installation. They make use of D-Link Green technology to reduce power consumption and provide a longer product life without sacrificing operational performance or functionality. Recyclable packaging and minimized use of harmful substances (RoHS compliant) make this switch series truly environmentally friendly.

- Power Savings by Link Status
- Power Savings by Cable Length Detection
- Jumbo Frame
- IEEE 802.3x Flow Control
- Auto MDI/MDIX
- Quality of Service (QoS)
- Cable Diagnostics



DGS-1016D

- 10/100/1000BASE-T x 16
- Internal Power Supply
- 11-inch, 1U Desktop & Rack-Mount
- Fanless
- Power Savings



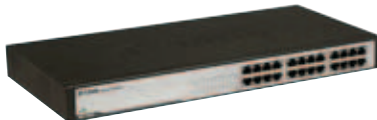
DGS-1016T

- 10/100/1000BASE-T x 16
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless
- Power Savings



DGS-1024D

- 10/100/1000BASE-T x 24
- Internal Power Supply
- 11-inch, 1U Desktop & Rack-Mount
- Fanless
- Power Savings



DGS-1024T

- 10/100/1000BASE-T x 24
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless
- Power Savings

DGS-1000 Series

Model	DGS-1016D	DGS-1016T	DGS-1024D	DGS-1024T	
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3ab				
Port Interface	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)		16	24	
General Features	Switching Capacity	32Gbps		48Gbps	
	Forwarding Mode	Store-and-Forward			
	Packet Buffer Memory	512KBytes			
	MAC Address	8K			
	Jumbo Frame	9,600Bytes			
	Mean Time Before Failure (MTBF)	859,898 hours		784,286 hours	
L2 Features	IEEE 802.3x Flow Control; Auto MDI/MDIX				
Quality of Service (QoS)	802.1p, Number of Queues: 4, Strict Mode				
Cable Diagnostics	Yes				
Power Savings	By Link Status	Yes			
	By Cable Length Detection	Yes			
Physical & Environment	Dimension (W x D x H)	11-inch 1U Desktop & Rack-Mount 280 x 180 x 44mm	19-inch 1U Rack Mount 441 x 207 x 44mm	11-inch 1U Desktop & Rack-Mount 280 x 180 x 44mm	19-inch 1U Rack Mount 441 x 207 x 44mm
	Power Input	100-240VAC, 50/60Hz, Internal Universal Power Supply			
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-10 to 70 °C			
	Operation Humidity	10% to 90% RH			
	Storage Humidity	5% to 90% RH			
	Fan	Fanless			
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; C-Tick Class A; ICES-003 Class A			
	Safety Compliance	UL/cUL; CB	None	UL/cUL; CB	None
	RoHS Compliance	Yes			

Fast Ethernet Unmanaged Switches

DES-1000 Series

DES-1000 series consists of unmanaged Ethernet switches designed for cost effective small office home office (SOHO) and workgroup connection. They use the copper twisted-pair wires as the network cable, and support full/half duplex operation for 10/100Mbps speeds. These switches provide IEEE 802.3x flow control for reliable data transfer, and auto MDI/MDI-X to eliminate the need for cross over cables to simplify installation.

- Fanless
- IEEE 802.3x Flow Control
- Auto MDI/MDIX
- Plug-and-Play Installation Filtering
- Quality of Service (QoS)
(DES-1016D & DES-1024D)



DES-1008F

- 10/100BASE-TX x 7
- 100BASE-FX x 1 (Multi-Mode, SC)
- External Power Adapter
- Desktop Size
- Wall-Mount Installation
- Fanless



DES-1008P

- 10/100BASE-TX x 4
- 10/100BASE-TX x 4 (PoE)
- External Power Supply
- Desktop Size



DES-1016D

- 10/100BASE-TX x 16
- Internal Power Supply
- 11-inch, 1U Desktop & Rack-Mount
- Fanless



DES-1016R+

- 10/100BASE-TX x 16
- Expansion Slot x 1
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless



DES-1024D

- 10/100BASE-TX x 24
- Internal Power Supply
- 11-inch, 1U Desktop & Rack-Mount
- Fanless



DES-1024R+

- 10/100BASE-TX x 24
- Expansion Slot x 1
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless

Optional Module

DES-102F 2-Port 100BASE-FX, MMF, SC, 2km

Optional Module

DES-102F 2-Port 100BASE-FX, MMF, SC, 2km



DES-1026G

- 10/100BASE-TX x 24
- 10/100/1000BASE-T x 2
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless



DES-1048

- 10/100BASE-TX x 48
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless



DES-1050G

- 10/100BASE-TX x 48
- 10/100/1000BASE-T x 2
- Internal Power Supply
- 19-inch, 1U Rack-Mount
- Fanless

DES-1000 Series

Model	DES-1008F	DES-1008P	DES-1016D	DES-1024D
LAN Interface	IEEE 802.3; IEEE 802.3u; IEEE 802.3af (DES-1008P)			
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	7	4 + 4 (PoE)	16
	100BASE-FX Port (SC) Multi-Mode Fiber	1		24
General Features	Switching Capacity	1.6Gbps		3.2Gbps
	Forwarding Mode	Store-and-Forward		
	Packet Buffer Memory	64KBytes	96KBytes	160KBytes
	MAC Address	1K		8K
	Mean Time Before Failure (MTBF)	112,544 hours	821,895 hours	47,220 hours
L2 Features	IEEE 802.3x Flow Control; Auto MDI/MDIX			
Quality of Service (QoS)	802.1p; Number of Queues: 2; Strict Mode			
Physical & Environment	Dimension (W x D x H)	Desktop; 192.5 x 118.5 x 32mm	Desktop; 171 x 98 x 29mm	11-inch Desktop & Rack-Mount; 280 x 180 x 44mm
	Power Input	External Power Adapter		
	Power over Ethernet	-	Power Budget:56W; Per Port: Up to 15.4W Port 1~4 Support PoE	-
	Operation Temperature	0 to 50 °C		0 to 40 °C
	Storage Temperature	-10 to 70 °C		
	Operation Humidity	10% to 90% RH		
	Storage Humidity	5% to 90% RH		
	Fan	Fanless		
	Certification	EMI-EMC Compliance	FCC Class B; CE Class B; VCCI Class B	
Safety Compliance		CSA International	LVD	cUL
RoHS Compliance		Yes		

Model	DES-1016R+	DES-1024R+	DES-1026G	DES-1048	DES-1050G
LAN Interface	IEEE 802.3; IEEE 802.3u		IEEE 802.3; IEEE 802.3u; IEEE 802.3ab		
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	16	24	24	48
	100BASE-FX Port (SC)	2 (Via DES-102F Module)			-
	10BASE-T/100BASE-TX/ 1000BASE-T Port (RJ-45)	-		2	-
	Module Slot	1			2
General Features	Switching Capacity	3.2Gbps	4.8Gbps	8.8Gbps	9.6Gbps
	Forwarding Mode	Store-and-Forward			
	Packet Buffer Memory	256KBytes		320KBytes	409KBytes
	MAC Address	4K			
	Mean Time Before Failure (MTBF)	137,634 hours	133,605 hours	409,781 hours	332,557 hours
L2 Features	IEEE 802.3x Flow Control; Auto MDI/MDIX				
Physical & Environment	Dimension (W x D x H)	19-inch-Rack-Mount 441 x 207 x 44mm		19-inch Rack-Mount; 440x140x44mm	19-inch Rack-Mount 440 x 309 x 44mm
	Power Input	100-240VAC, 50/60Hz, Internal Universal Power Supply			
	Operation Temperature	0 to 40 °C			
	Storage Temperature	-10 to 70 °C			-25 to 55 °C
	Operation Humidity	10% to 90% RH			
	Storage Humidity	5% to 90% RH			0% to 95% RH
	Fan	Fanless			
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; ICES-003 Class A		FCC Class A; CE Class A	
	Safety Compliance	CSA International		cUL	CSA International
	RoHS Compliance	Yes			

Network Management D-View 6.0

DV-600S & DV-600P

D-View 6.0 provides user-friendly interface with easy access to all the features and tools from a single location. D-View is easy to learn and can help ease the administrator's task of manually creating network topology because it provides robust features for quick generation of such topology within the software. The administrator can also import or export the topology as and when required.



Model	D-View 6.0 Standard (DV-600S)	D-View 6.0 Professional (DV-600P)
Hardware Requirement	CPU: 1.4GHz & above; DRAM: 1G & above; Hard Disk: 200MB; Ethernet Interface: 10/100/1000Mbps	
Software Requirement	Internet Explorer 6 SP1 & above; Microsoft XML Parser; SDK	
Operating System Requirement	Microsoft Windows 2000 Server SP4 Microsoft Windows 2000 Advanced Server SP4 Microsoft Windows 2003 SP2 Microsoft XP Home / Professional SP2	Microsoft Windows 2000 Server SP4 Microsoft Windows 2000 Advanced Server SP4 Microsoft Windows 2003 SP2
Database Management System Requirement	-	Microsoft SQL Server 2000 SP3 Microsoft SQL Server 2005
Architecture	Standalone Architecture	Client-Server Architecture
Login	Single User Login	Multiple User Login
No. of Supported Nodes	<=1,000	>=1,000

Features	
Network Management	<ul style="list-style-type: none"> Automatically discover new devices in the network Periodically poll network devices to monitor their status Provide an intuitive view of managed devices in a topology Support multiple, concurrent administrators Integrate with all SNMP-enabled devices Manage wireless switches, access points and NetDefend products such as IPS and UTM firewalls
Fault / Event Management	<ul style="list-style-type: none"> Notify administrator when new trap events occur through email, audio or visual alerts Support customized notifications based on severity of event
Device Management	<ul style="list-style-type: none"> Central management center for D-Link's end-to-end security solutions Provide backup and restoration of configuration files Manage third-party devices using the MIB complier and MIB browser
Performance Management	<ul style="list-style-type: none"> Retrieve and monitor packet information for specific ports such as error rate, packet size and port flow statistics based on RMON protocol or RFC 1213 standard
MIB Utilities	<ul style="list-style-type: none"> Powerful, easy-to-use MIB complier and browser Support free and lost views for viewing devices in a domain
D-View Plug-ins	<ul style="list-style-type: none"> E2ES Console Plug-in NetDefend Plug-in Wireless Plug-in



Performance Report



Topology Map

D-View Plug-ins

Model	Description	Products	Configuration & Management	Monitoring	Reporting
E2ES Plug-in	D-Link innovates comprehensive security solutions aimed to provide end-to-end threat containment and security protection solutions. D-View 6.0 E2ES Console Plug-in inherits the powerful management ability of D-View 6.0 platform and provides a central management center to manage D-Link's end-to-end security solution. Customers can take the advantages to ease the effort of daily maintenance by D-View 6.0 platform and easily to apply the security rules, policies and specific security functions, such as IP-MAC-Port Binding (IMPB), ZoneDefense, etc.	<p>xStack Switches DGS-3600, DGS-3400, DGS-3200, DES-3800, DES-3528/52 Series</p> <p>Managed Switches DGS-3100, DES-3028/52 Series</p>	<p>Integrated console for switches including</p> <ul style="list-style-type: none"> • IP-MAC-Port Binding (IMPB) • Access Control List (ACL) • 802.1X Authentication • MAC-based Access Control (MAC) • Web-based Access Control (WAC) • Loopback Detection (LBD) • ZoneDefense • Port Security • Microsoft Network Access Protection (NAP) 	<ul style="list-style-type: none"> • Built-in RADIUS Service • Microsoft Network Access Protection (NAP) 	<ul style="list-style-type: none"> • System resource statistics • Reporting for passed authentication. • Reporting for failed authentication. • Reporting for logged-in users • Reporting for database backup and restore
NetDefend Plug-in	D-View 6.0 NetDefend Plug-in inherits the powerful management ability of D-Link 6.0 and provides a central management platform to manage D-Link's gateway security products. Customers can take the advantages to ease the effort of daily maintenance by D-View 6.0 platform and easily to monitor, apply the security rules, policies and specific security functions, such as VPN, UTM services, etc	<p>NetDefend IPS Firewalls DFL-210, DFL-800, DFL-1600, DFL-2500</p> <p>NetDefend UTM Firewalls DFL-260, DFL-860, DFL-1660, DFL-2560, DFL-2560G</p>	<ul style="list-style-type: none"> • Batch configuration for multiple NetDefend appliances • Built-in HTTP/HTTPS/SSH Client for Advanced Configuration 	<p>Realtime system resource status including</p> <ul style="list-style-type: none"> • CPU memory and Rule Number Utilization • Connection and Traffic Management Status • DHCP Leasing Status • IPS/AV/WCF License Status 	<p>System resource statistics including</p> <ul style="list-style-type: none"> • CPU Load • Connection Status • Physical / Virtual / Tunnel Interface Status • IR Rule Usage • DHCP Server and Leasing Status • User Authentication • Traffic Management
Wireless Plug-in	D-Link's D-View Wireless Plug-in is a platform for managing enterprise wireless and wired LAN network. In addition to D-View's LAN management functionality, Wireless Plug-in provides a unified console for managing the broad portfolio of D-Link's enterprise wireless LAN products, including Unified Switches, Unified Access Points and Standalone Access Points. With D-View Wireless Plug-in, IT managers can control, configure and monitor all D-Link Switches and Wireless Access Points from a single location, significantly reducing operation overhead and total cost of ownership (TCO).	<p>Unified Switches DWS-3000, DWS-4000 Series</p> <p>Unified Access Points DWL-3500AP, DWL-8500AP, DWL-8600AP</p> <p>Standalone Access Points DAP-2590, DWL-3200AP, DWL-8200AP</p>	<ul style="list-style-type: none"> • Multiple Unified Switch Management. • Unified Access Point Management • Batch configuration for access points of same model • Different wireless profiles are available to set AP configuration 	<ul style="list-style-type: none"> • Rogue AP Detection • Client Statistics • AP Statistics • Global Statistics 	<p>Display a variety of AP reports for easier management and troubleshooting including</p> <ul style="list-style-type: none"> • Client Association • Security • AP Utilization • AP Channel Usage

Expansion Modules

D-Link expansion modules are designed for flexible deployment of additional connections on D-Link switches.

Model	Standard	No. of Ports	Connector	Optional Accessories
DES-102F	IEEE 802.3u 100BASE-FX Multi-Mode Fiber	2	SC	-
DEM-201F	IEEE 802.3u 100BASE-FX Multi-Mode Fiber	1	SC	-
DEM-201FL	IEEE 802.3u 100BASE-FX Single-Mode Fiber	1	SC	-
DEM-301G	IEEE 802.3u SFP	1	SFP	SFP Transceivers DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT, DEM-330T/R, DEM-331T/R
DEM-301T	IEEE 802.3ab 100BASE-T	1	RJ-45	-
DEM-410CX	IEEE 802.3ak 10-Gigabit Ethernet	1	CX4	3-Meter CX4 Stacking Cable DEM-CB300CX
DEM-410X	IEEE 802.3ae 10-Gigabit Ethernet	1	XFP	XFP Transceivers DEM-421XT, DEM-422XT, DEM-423XT

Switch vs Expansion Module Compatible Matrix

Switch Model	DES-102F	DEM-201F	DEM-201FL	DEM-301G	DEM-301T	DEM-410CX	DEM-410X
DES-1000 Series							
DES-1016R+	Yes	-	-	-	-	-	-
DES-1024R+	Yes	-	-	-	-	-	-
DES-3000 Series							
DES-3018	-	Yes	Yes	Yes	Yes	-	-
DES-3026	-	Yes	Yes	Yes	Yes	-	-
DGS-3400 Series							
DGS-3426	-	-	-	-	-	Yes	Yes
DGS-3426P	-	-	-	-	-	Yes	Yes
DGS-3427	-	-	-	-	-	Yes	Yes
DGS-3450	-	-	-	-	-	Yes	Yes
DGS-3600 Series							
DGS-3627	-	-	-	-	-	Yes	Yes
DGS-3627G	-	-	-	-	-	Yes	Yes
DGS-3650	-	-	-	-	-	Yes	Yes
DWS-3000 Series							
DWS-3026	-	-	-	-	-	Yes	Yes
DWS-4000 Series							
DWS-4026	-	-	-	-	-	Yes	Yes

SFP/XFP Transceivers

D-Link Small Form-Factor Pluggable (SFP) and 10-Gigabit Small Form-Factor Pluggable (XFP) Transceivers can achieve long distance data transmission and high speed communication with single-mode fiber, multi-mode fiber and copper cables. These modules can be installed into switches and media converters.

10-Gigabit Ethernet XFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-421XT	XFP (10GE)	IEEE 802.3ae 10GBASE-SR	Duplex LC	850nm	Multi-Mode Fiber 50/125µm, 62.5/125µm	300m
DEM-422XT	XFP (10GE)	IEEE 802.3ae 10GBASE-LR	Duplex LC	1310nm	Single-Mode Fiber 9/125µm	10km
DEM-423XT	XFP (10GE)	IEEE 802.3ae 10GBASE-ER	Duplex LC	1550nm	Single-Mode Fiber 9/125µm	40km

Gigabit Ethernet WDM Bi-Directional SFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-330T ¹	WDM Bi-Directional SFP (1Gbps)	IEEE 802.3z 1000BASE-BX	Simplex LC	TX: 1550nm RX: 1310nm	Single-Mode 9/125µm	10km
DEM-330R ¹	WDM Bi-Directional SFP (1Gbps)	IEEE 802.3z 1000BASE-BX	Simplex LC	TX: 1310nm RX: 1550nm	Single-Mode 9/125µm	10km
DEM-331T ²	WDM Bi-Directional SFP (1Gbps)	IEEE 802.3z 1000BASE-BX	Simplex LC	TX: 1550nm RX: 1310nm	Single-Mode 9/125µm	40km
DEM-331R ²	WDM Bi-Directional SFP (1Gbps)	IEEE 802.3z 1000BASE-BX	Simplex LC	TX: 1310nm RX: 1550nm	Single-Mode 9/125µm	40km

¹ DEM-330T & DEM-330R are used as a pair

² DEM-331T & DEM-331R are used as a pair

Gigabit Ethernet SFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-310GT	SFP (1Gbps)	IEEE 802.3z 1000BASE-LX	Duplex LC	1310nm	Single-Mode 9/125 µm Multi-Mode Fiber 50/125µm, 62.5/125µm	SMF: 10km (9/125µm) MMF: 2km (50/125µm)/ 500m (62.5/125µm)
DEM-311GT	SFP (1Gbps)	IEEE 802.3z 1000BASE-SX	Duplex LC	850nm	Multi-Mode Fiber 50/125µm, 62.5/125µm	550m
DEM-312GT2	SFP (1Gbps)	IEEE 802.3z 1000BASE-SX	Duplex LC	1310nm	Multi-Mode Fiber 50/125µm, 62.5/125µm	1km (50/125µm)/ 2km (62.5/125µm)
DEM-314GT	SFP (1Gbps)	IEEE 802.3z 1000BASE-LH	Duplex LC	1550nm	Single-Mode 9/125µm	50km
DEM-315GT	SFP (1Gbps)	IEEE 802.3z 1000BASE-ZX	Duplex LC	1550nm	Single-Mode 9/125µm	80km
DGS-712	Twisted Pair (1Gbps)	IEEE 802.3ab 1000BASE-T	RJ-45	-	-	100m

Fast Ethernet WDM Bi-Directional SFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-220T ³	WDM Bi-Directional SFP (100Mbps)	IEEE 802.3ah 100BASE-BX	Simplex LC	TX: 1550nm RX: 1310nm	Single-Mode 9/125µm	20km
DEM-220R ³	WDM Bi-Directional SFP (100Mbps)	IEEE 802.3ah 100BASE-BX	Simplex LC	TX: 1310nm RX: 1550nm	Single-Mode 9/125µm	20km

³ DEM-220T & DEM-220R are used as a pair

Fast Ethernet SFP Transceivers

Model	Type	Standard	Connector	Wavelength	Cable Type	Transmission Distance
DEM-210	SFP (100Mbps)	IEEE 802.3u 100BASE-FX	Duplex LC	1310nm	Single-Mode 9/125 µm	15km
DEM-211	SFP (100Mbps)	IEEE 802.3u 100BASE-FX	Duplex LC	1310nm	Multi-Mode Fiber 50/125µm, 62.5/125µm	2km

Switch vs SFP/XFP Transceiver Compatible Matrix

	10GE XFP			GE WDM Bi-Di SFP					GE SFP					FE WDM Bi-Di SFP		FE SFP	
	DEM-421XT	DEM-422XT	DEM-423XT	DEM-330R	DEM-330T	DEM-331R	DEM-331T	DEM-310GT	DEM-311GT	DEM-312GT2	DEM-314GT	DEM-315GT	DGS-712	DEM-220R	DEM-220T	DEM-210	DEM-211
Switches																	
DES-1200 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DES-1210 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DES-3000 Series (DES-3010G)	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-
DES-3000 Series (DES-3018/26) via Module	-	-	-	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹	-	-	-	-	-
DES-3028/52 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
DES-3200 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
DES-3528/52 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DES-3800 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-
DES-6500 Series via Modules	Yes ²	Yes ²	Yes ²	Yes ³	Yes ³	Yes ³	Yes ³	Yes ³	Yes ³	Yes ³	Yes ³	Yes ³	-	-	-	-	-
DES-7200 Series via Modules	Yes ⁴	Yes ⁴	Yes ⁴	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵
DGS-1200 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-
DGS-1210 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DGS-3100 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DGS-3200 Series	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
DGS-3400 Series	Yes ⁶	Yes ⁶	Yes ⁶	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DGS-3600 Series (DGS-3612/12G)	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DGS-3600 Series (DGS-3627/27G/50)	Yes ⁶	Yes ⁶	Yes ⁶	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-
Business Wireless																	
DWS-3000 Series (DWS-3024/24L)	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DWS-3000 Series (DWS-3026)	Yes ⁶	Yes ⁶	Yes ⁶	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-
DWS-4000 Series	Yes ⁶	Yes ⁶	Yes ⁶	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Security																	
UTM Firewall (DFL-2560G)	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Storage																	
SAN Array (DSN-3400-10)	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ Must use with DEM-301G Module
² Must use with DES-6512 Module
³ Must use with DES-6507 or DES-6509 Modules
⁴ Must use with 7200-2XG, 7200-4XG or 7200-24G2XGE Modules
⁵ Must use with 7200-24, 7200-24G, 7200-24P, 7200-48, 7200-48P, 7200-24G2XGE, 7200-24GE, 7200-48E Modules
⁶ Must use with DEM-410X Module

Redundant Power Supplies

D-Link redundant power supplies (RPS) are designed to conform to wattage requirements of D-Link switches. These external RPS are enclosed in solid metal cases with sockets to AC or DC power sources on one end and the connectors to the switch's internal power supply on the other end.

Redundant Power Supplies

Model	Output Power	Input Power	Input Frequency	Form Factor	Over Current Protection
DPS-200	60-Watt	90 to 264VAC AC Power Source	47 to 63Hz	Solid Metal Case	Yes
DPS-500	140-Watt	90 to 264VAC AC Power Source	47 to 63Hz	Solid Metal Case	Yes
DPS-500DC	140-Watt	-36 to -72VDC DC Power Source	47 to 63Hz	Solid Metal Case	Yes
DPS-600	500-Watt	90 to 264VAC AC Power Source	47 to 63Hz	Solid Metal Case 19-inch Rack-Mount, 1U Height	Yes

Redundant Power Supply Chassis

Model	No. of RPS Slots	Form Factor	Supported RPS
DPS-800	2	19-inch Rack-Mount, 1U Height	DPS-200; DPS-500; DPS-500DC
DPS-900	8	19-inch Rack-Mount, 5U Height	DPS-200; DPS-500

Redundant Power Supply Accessories

Model	Description	Supported RPS
DPS-CB400	4-Meter Extension Power Cable	DPS-200; DPS-500; DPS-500DC

Switch vs Redundant Power Supply Compatible Matrix

Switch Model	DPS-200 (60W)	DPS-500 (140W)	DPS-500DC (140W)	DPS-600 (500W)
DES-3528/52 Series				
DES-3528	Yes	-	-	-
DES-3528P	-	-	-	Yes
DES-3552	Yes	-	-	-
DES-3552P	-	-	-	Yes
DES-3800 Series				
DES-3828	Yes	-	-	-
DES-3828P	-	-	-	Yes
DES-3852	Yes	-	-	-
DGS-3100 Series				
DGS-3100-24	Yes	-	-	-
DGS-3100-24P	-	-	-	Yes
DGS-3100-24TG	Yes	-	-	-
DGS-3100-48	-	Yes	-	-
DGS-3100-48P	-	-	-	Yes
DGS-3200 Series				
DGS-3200-24	Yes	-	-	-
DGS-3400 Series				
DGS-3426	-	Yes	Yes	-
DGS-3426P	-	-	-	Yes
DGS-3427	-	Yes	Yes	-
DGS-3450	-	Yes	Yes	-
DGS-3600 Series				
DGS-3612	Yes	-	-	-
DGS-3612G	-	Yes	-	-
DGS-3627	-	Yes	Yes	-
DGS-3627G	-	Yes	Yes	-
DGS-3650	-	Yes	Yes	-
DWS Series				
DWS-3024	-	-	-	Yes
DWS-3024L	-	-	-	Yes
DWS-3026	-	-	-	Yes
DWS-4026	-	-	-	Yes

Power Supply Chassis vs RPS Compatible Matrix

Chassis Model	DPS-200 (60W)	DPS-500 (140W)	DPS-500DC (140W)	DPS-600 (500W)
DPS-800 (2-Slot)	Yes	Yes	Yes	-
DPS-900 (8-Slot)	Yes	Yes	-	-
DPS-CB400 (4-Meter Extension Power Cable)	Yes	Yes	Yes	-

Media Converters

D-Link media converter convert UTP cable to fiber optic cable in designated FTTH or optional fiber network. It is able to easily receive transmission over long distance with minimal noise influence.

Fast Ethernet Media Converters

Model	Standard	Fiber Connector	Fiber Cable*	Coverage Distance	Data Rate	Other Features
DMC-300M	10/100BASE-TX <=> 100BASE-FX	MT-RJ	2-Core MMF	2km	100Mbps	Auto MDI/MDI-X
DMC-300SC	10/100BASE-TX <=> 100BASE-FX	SC	2-Core MMF	2km	100Mbps	Auto MDI/MDI-X
DMC-515SC	10/100BASE-TX <=> 100BASE-FX	SC	2-Core SMF	15km	100Mbps	Auto MDI/MDI-X
DMC-530SC	10/100BASE-TX <=> 100BASE-FX	SC	2-Core SMF	30km	100Mbps	Auto MDI/MDI-X
DMC-560SC	10/100BASE-TX <=> 100BASE-FX	SC	2-Core SMF	60km	100Mbps	Auto MDI/MDI-X
DMC-615SC	100BASE-FX <=> 100BASE-FX	SC	2-Core MMF 2-Core SMF	15km	100Mbps	-
DMC-1530SC	10/100BASE-TX <=> 100BASE-FX	SC	2-Core SMF	30km	100Mbps	Auto MDI/MDI-X Link Pass Through
DMC-1580SC	10/100BASE-TX <=> 100BASE-FX	SC	2-Core SMF	80km	100Mbps	Auto MDI/MDI-X Link Pass Through
DMC-920 (DMC-920T/ DMC-920R)	10/100BASE-TX <=> 100BASE-FX	SC	1-Core SMF	20km	100Mbps	Auto MDI/MDI-X Link Pass Through WDM Bi-Directional

Fast Ethernet Media Converters

Model	Standard	Fiber Connector	Fiber Cable*	Coverage Distance	Data Rate	Other Features
DMC-700SC	1000BASE-T <=> 1000BASE-SX	SC	2-Core MMF	550m	1Gbps	Auto MDI/MDI-X Link Pass Through
DMC-810SC	1000BASE-T <=> 1000BASE-LX	SC	2-Core SMF	10km	1Gbps	Auto MDI/MDI-X Link Pass Through
DMC-1910 (DMC-1910T/ DMC-1910R)	1000BASE-T <=> 1000BASE-LX	LC	1-Core SMF	15km	1Gbps	Auto MDI/MDI-X Link Pass Through WDM Bi-Directional
DMC-805	1000BASE-T <=> 1000BASE-X(SFP)	SFP Slot**	SFP Dependent	SFP Dependent	1Gbps	Auto MDI/MDI-X Link Pass Through

* MMF: Multi-Mode Fiber; SMF: Single-Mode Fiber

** Supported SFP Transceivers: DEM-310GT, DEM-311GT, DEM-312GT2, DEM-314GT, DEM-315GT
Supported WDM Bi-Directional SFP Transceivers: DEM-330T, DEM-330R, DEM-3301T, DEM-331R

Media Converter Chassis & Accessories

Model	Description
DMC-1000	16-Slot Media Converter Chassis with Internal Power Supply
DMC-1001	Redundant Power Supply for DMC-1000
DMC-1002	SNMP Management Module for DMC-1000

Web Smart Switch Selection Matrix

Models	DGS-1210 Series	DGS-1200 Series	DES-1210 Series	DES-1200 Series
General				
Maximum Switching Capacity	10-Port: 20Gbps 16-Port: 32Gbps 24-Port: 48Gbps 48-Port: 96Gbps	16-Port: 32Gbps 24-Port: 48Gbps 48-Port: 96Gbps	28-Port: 12.8Gbps 52-Port: 17.6Gbps	28-Port: 12.8Gbps 52-Port: 17.6Gbps
Form Factor	10-Port: 13-inch 1U Rack-Mount 16/24/48-Port: 19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount
Fixed 10/100BASE-TX Port	No	No	28-Port: 24 52-Port: 48	28-Port: 24 52-Port: 48
Fixed 10/100/1000BASE-T Port	10-Port: 8 16-Port: 14 24-Port: 22 48-Port: 44	16-Port: 14 24-Port: 22 24-Port TP: 20 48-Port: 44	All Models: 2	All Models: 2
Fixed Combo 1000BASE-T or SFP Port	10-Port: 2 16/24/48-Port: 4	16/24-Port: 2 24-Port TP: 4 48-Port: 4	All Models: 2	All Models: 2
Layer 2 Features				
Flow Control IEEE 802.3x	Yes	Yes	Yes	No
Jumbo Frame (Size)	Yes (10,000Bytes)	Yes (10,240Bytes)	No	No
Internet Group Management Protocol (IGMP) Snooping	Yes (v1,v2)	Yes (v1,v2)	Yes (v1,v2)	Yes (v1,v2)
803.1D Spanning Tree Protocol (STP)	Yes	Yes	Yes	Yes
802.1w Rapid Spanning Tree Protocol (RSTP)	Yes	No	Yes	No
Loopback Detection (LBD)	No	No	Yes	No
802.3ad Link Aggregation	Yes	Yes (Port Trunking)	Yes	Yes (Port Trunking)
Port Mirroring	Yes	Yes	Yes	Yes
Cable Diagnostics	Yes	Yes	Yes	Yes
Power Savings (Link Status / Cable Length Detection)	Yes	Yes (Link Status only)	Yes	Yes (Link Status only)
Virtual LAN (VLAN)				
VLAN Groups	256	256	256	256
Port-based VLAN	Yes	Yes	Yes	Yes
802.1Q VLAN Tagging	Yes	Yes	Yes	Yes
Asymmetric VLAN	Yes	Yes	Yes	Yes
Voice VLAN	Yes	No	Yes	No
Quality of Service (QoS)				
802.1p Support	Yes	Yes	Yes	Yes
Port-based QoS	Yes	Yes	Yes	Yes
DSCP QoS	Yes	Yes	Yes	Yes
Strict Priority	Yes	Yes	Yes	Yes
Weighted Round Robin (WRR)	Yes	Yes	Yes	Yes
Bandwidth Control (min. granularity)	Yes (64kbps)	No	Yes (64kbps)	No
Access Control List (ACL)				
Access Control List	Yes	No	Yes	No
ACL Max Profiles / Rules	50 / 240	No	50 / 240	No
Security				
Secure Sockets Layer (SSL)	Yes* (v1/v2/v3)	No	Yes* (v1/v2/v3)	No
Port Security (Entries)	Yes (64)	No	Yes (64)	No
802.1X Port-based Access Control	Yes	Yes	Yes	Yes
Storm Control (min. granularity)	Yes (64kbps)	Yes (Broadcast Storm Control only) (8kbps*2 ⁿ , n=0~9)	Yes (64kbps)	Yes (Broadcast Storm Control only) (8kbps*2 ⁿ , n=0~9)
D-Link Safeguard Engine	Yes	Yes	Yes	Yes
ARP Spoofing Prevention	Yes*	No	Yes*	No
DHCP Server Screening	Yes*	No	Yes*	No
Management VLAN	Yes	Yes	Yes	Yes
Management				
Web Based Management	Yes	Yes	Yes	Yes
Command Line Interface	Yes (via Telnet)	No	Yes (via Telnet)	No
Telnet Server	Yes	No	Yes	No
TFTP client	Yes	No	Yes	No
Simple Network Management Protocol (SNMP)	Yes (v1/v2c) Yes* (v3)	Yes (v1)	Yes (v1/v2c) Yes* (v3)	Yes (v1)
Configurable Auto MDI/MDIX	Yes	No	Yes	No
System Log	Yes	Yes	Yes	Yes
BootP/DHCP Client	Yes	No	Yes	No
Simple Network Time Protocol (SNTP)	Yes	No	Yes	No
Trusted Host	Yes	Yes	Yes	Yes
DHCP Auto-configuration	Yes*	No	Yes*	No
Power over Ethernet (PoE)				
802.3af PoE	No	Yes (DGS-1224TP)	No	Yes (DES-1228P)
802.3af and Pre-Standard of 802.3at PoE	Yes (DGS-1210-10P)	No	Yes (DES-1210-28P)	No

* Function will be ready in future firmware

Chassis Switch Selection Matrix

Models	DES-7200 Series	DES-6500
General		
Maximum Switching Capacity	6-Slot: 192Gbps; 10-Slot: 384Gbps	160Gbps
Passive Backplane Capacity	6-Slot: 800Gbps; 10-Slot: 1600Gbps	160Gbps
Form Factor	6-Slot: 19-inch 15U Rack-Mount 10-Slot: 19-inch 22U Rack-Mount	19-inch 8U Rack-Mount
CPU Engine Slots	6/10-Slot: 2	1
I/O Module Slots	6-Slot: 4, 10-Slot: 8 (Vertical)	8
Power Module Slots	2	2
Max. 10/100BASE-TX Port	0	128 (192 with DES-6505 & DES-6510)
Max. 10/100BASE-FX Fiber Port	0	96 (With DES-6504)
Max. 10/100/1000BASE-T Port	6-Slot: 192; 10-Slot: 384 (With 7200-48 or 7200-48P)	50 (With DES-6507) 96 (With DES-6509 via SFP)
Max. SFP Port	6-Slot: 96; 10-Slot: 192 (With 7200-24G or 7200-24G2XGE)	96 (With DES-6509)
Max. 10-Gigabit XFP Port	6-Slot: 16; 10-Slot: 32 (With 7200-4XG)	16 (With DES-6512)
Power over Ethernet (PoE)	24-Port: 7200-24P; 48-Port: 7200-48P	No
Layer 2 Features		
Jumbo Frame (Size)	Yes (9,216Bytes)	Yes (9,000Bytes)
802.1D/802.1w/802.1s Spanning Tree Protocol (STP)	Yes	Yes
Ethernet Ring Protection Switching (E-RPS)	Yes (RERP)	No
Loopback Detection (LBD)	No	Yes
802.3ad Link Aggregation	Yes	Yes
Port Mirroring	Yes	Yes
Layer 2 Multicast		
Internet Group Management Protocol (IGMP) Snooping	Yes (v1/v2/v3)	Yes (v1/v2)
Multicast Listener Discover (MLD) Snooping	No	No
Virtual LAN (VLAN)		
802.1Q VLAN Tagging	Yes	Yes
802.1v Protocol VLAN Classification	Yes	Yes
Double VLAN (Q-in-Q)	Yes	No
IGMP Snooping Multicast (ISM) VLAN	Yes (IVGL/SVGL)	No
Voice VLAN	No	No
GARP VLAN Registration Protocol (GVRP)	Yes	Yes
Layer 3 Features		
Virtual Router Redundancy Protocol (VRRP)	Yes	Yes
IPv6 Tunneling	Yes	No
Layer 3 Routing		
Static Route	Yes	Yes
Policy-based Route	Yes	No
Routing Information Protocol (RIP)	Yes (v1/v2)	Yes (v1/v2)
Routing Information Protocol Next Generation (RIPng)	Yes	No
Open Shortest Path First (OSPF)	Yes (v1/v2/v3)	Yes (v1/v2)
Border Gateway Protocol (BGP)	Yes	No
Layer 3 Multicasting		
Protocol Information Multicast - Dense Mode (PIM-DM)	Yes	Yes
Protocol Information Multicast - Sparse Mode (PIM-SM)	Yes	Yes
PIM Sparse-Dense Mode	No	No
Distance-Vector Multicast Routing Protocol (DVMRP) v3	No	Yes
Internet Group Management Protocol (IGMP)	Yes (v1/v2/v3)	Yes (v1/v2/v3)
Multi-Protocol Label Switching (MPLS)		
VPN Routing and Forwarding (VRF)	Yes* (Enhanced I/O module or 7200-ASE3)	No
MPLS L3 VPN (MPLS / BGP VPN)	Yes* (With 7200-ASE3)	No
MPLS L2 VPN (VPWS / VPLS)	Yes* (With 7200-ASE3)	No
Quality of Service (QoS)		
Strict Priority	Yes	Yes
Weighted Round Robin (WRR)	Yes	Yes
Strict + WRR	Yes	Yes
Bandwidth Control (min. granularity)	Yes (64kbps)	Yes (1MB)
Time-Based QoS	Yes	No
Access Control List (ACL)		
Access Control List	Yes (Ingress / VLAN-Based) (Egress ACL with Enhanced I/O Module)	Yes
Time-based ACL	Yes	No
Security		
Secure Shell (SSH)	Yes (v1.5/v2)	Yes (v2)
Secure Sockets Layer (SSL)	No	Yes (v3)
Port Security (Entries Per Port)	Yes (16)	Yes (16)
Traffic Segmentation	Yes (Private VLAN)	Yes
IP-MAC-Port Binding (IMPB)	Yes (ARP Inspection, IP Source Guard, DHCP Snooping)	No
D-Link Safeguard Engine	Yes (CPP)	Yes
Authentication, Authorization & Accounting (AAA)		
802.1X Access Control	Yes	Yes
Web-based Access Control (WAC)	No	No
MAC-based Access Control (MAC)	No	No
Microsoft Network Access Protection (NAP)	Yes*	No
Guest VLAN	Yes	No
Dynamic VLAN Assignment	Yes	No
RADIUS & TACACS+ Authentication for Management Access	Yes	Yes
Management		
Web GUI, CLI & SNMP	Yes*	Yes
Remote Monitoring (RMON)	Yes (v1)	Yes (v1)
sFlow	Yes*	No
Link Layer Discovery Protocol (LLDP)	Yes	No
Operations, Administration & Management (OAM)		
802.3ah Ethernet Link OAM	No	No
802.1ag Connectivity Fault Management (CFM)	No	No
Certification		
IPv6 Ready Logo	Yes (Phase II)	No

* Available in Future Firmware Upgrade

Managed Switch Selection Matrix

Models	Layer 3 xStack Switches		Layer 2 xStack Switches			Layer 2 Managed Switches					
	DGS-3600 Series	DES-3800 Series	DGS-3400 Series	DGS-3200 Series	DES-3528/52 Series	DGS-3700 Series	DGS-3100 Series	DES-3200 Series	DES-3028/52 Series	DES-3000 Series	
Maximum Switching Capacity	12-Port: 24Gbps 27-Port: 108Gbps 50-Port: 136Gbps	28-Port: 12.8Gbps 52-Port: 15.7Gbps	26-Port: 88Gbps 27-Port: 108Gbps 50-Port: 136Gbps	10-Port: 20Gbps 16-Port: 32Gbps 24-Port: 48Gbps	General 28-Port: 12.8Gbps 52-Port: 17.6Gbps		24Gbps	24-Port: 68Gbps 48-Port: 116Gbps	10-Port: 5.6Gbps 18-Port: 7.2Gbps 28-Port: 12.8Gbps	28-Port: 12.8Gbps 52-Port: 17.6Gbps	10-Port F: 3.8Gbps 10-Port G: 5.6Gbps 18-Port: 7.2Gbps; 26-Port: 8.8Gbps
Form Factor	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	10/16-Port: 11-inch 1U Desktop 24-Port: 19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	19-inch 1U Rack-Mount	10/18-Port: 9-inch 1U Desktop 28-Port: 19-inch 1U Rack-Mount 10-Port: 8; 18-Port: 16; 28-Port: 24	19-inch 1U Rack-Mount	10-Port: 11-inch 1U Desktop 18/24-Port: 19-inch 1U Rack-Mount	
Fixed 10/100BASE-TX Port	No	28-Port: 24; 52-Port: 48	No	No	28-Port: 24; 52-Port: 48	No	No	No	28-Port: 24; 52-Port: 48	10-Port: 8 18-Port: 16; 26-Port: 24 10-Port: 1 18/26-Port: 2 (DEM-301T) 10-Port G: 1 18/26-Port: 2 (DEM-301G)	
Fixed 10/100/1000BASE-T Port	12-Port: 8; 27-Port: 20; 50-Port: 44	All Models: 2	26/27-Port: 24; 50-Port: 48	10-Port: 8; 16-Port: 14; 24-Port: 20	All Models: 2	12-Port: 8	24-Port: 20; 24-Port TG: 8; 48-Port: 44	No	All Models: 2		
Fixed Small Form-Factor Pluggable (SFP) Port	12-Port G: 8; 27-Port G: 20	No	No	No	No	12-Port G: 8	24-Port TG: 16	28-Port F: 24	No		
Fixed Combo 1000BASE-T or SFP Port	All Models: 4	All Models: 2	All Models: 4	10/16-Port: 2 24-Port: 4	All Models: 2	All Models: 4	24/48-Port: 4 24-Port TG: 0	10/18-Port: 2 28-Port: 4	All Models: 2	No	
Optional 10G XFP Uplink Capability	12-Port: No 27/50-Port: Yes (2)	No	26/50-Port: Yes (2) 27-Port: Yes (3) Yes (2)	No	No	No	No	No	No	No	
Optional Module Slot	12-Port: Yes (DPS-200) 27/50-Port: Yes (DPS-500)	28/52-Port: Yes (DPS-200) 28-Port DC: No 28-Port P: Yes (DPS-600)	26/27/50-Port: Yes (DPS-500) 26-Port P: Yes (DPS-600)	10/16-Port: No 24-Port: Yes (DPS-200)	28/52-Port: Yes (DPS-200) 28-Port DC: No 28-Port P: Yes (DPS-600)	No	24-Port: Yes (DPS-200) 24/48-Port P: Yes (DPS-600) 48-Port: Yes (DPS-500) Yes (DGS-3100-24P; DGS-3100-48P)	No	No	18/26-Port: Yes (2)	
Redundant Power Supply	No	Yes (DES-3828P)	Yes (DGS-3426P)	No	Yes (DES-3528P; DES-3552P)	No	No	No	Yes (DES-3028P; DES-3052P)	No	
Power over Ethernet (PoE)	No	Yes (DES-3828P)	Yes (DGS-3426P)	No	Yes (DES-3528P; DES-3552P)	No	No	No	Yes (DES-3028P; DES-3052P)	No	
Stackability											
Physical Stacking (device) / Max. Bandwidth	12-Port: No 27/50-Port: Yes (12) / 40Gbps Yes (32)	No	Yes (12) / 40Gbps	No	Yes (8) / 4Gbps	No	Yes (6) / 20Gbps	No	No	No	
Virtual Stacking Single IP Management (device)	Yes (32)	Yes (32)	Yes (32)	Yes (32)	Yes (32)	Yes (32)	No	Yes (32)	Yes (32)	Yes (32)	
Layer 2 Features											
Jumbo Frame (Size)	Yes (9,216Bytes)	Yes (9KBytes)	Yes (9,216Bytes)	Yes (10,240Bytes)	Yes (9,216Bytes)	Yes (13,312Bytes)	Yes (10,240Bytes)	Yes (2,048Bytes)	Yes (2,048Bytes)	No	
802.1D/802.1w/802.1s Spanning Tree Protocol (STP)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (802.1D/802.1w only)	
Ethernet Ring Protection Switching (E-RPS)	Yes	No	Yes*	No	Yes*	Yes	No	Yes	Yes*	No	
Loopback Detection (LBD)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
802.3ad Link Aggregation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Port Mirroring	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Layer 2 Multicast											
Internet Group Management Protocol (IGMP) Snooping	Yes (v1/v2/v3)	Yes (v1/v2/v3 awareness)	Yes (v1/v2/v3)	Yes (v1/v2/v3)	Yes (v1/v2/v3)	Yes (v1/v2/v3)	Yes (v1/v2)	Yes (v1/v2/v3 awareness)	Yes (v1/v2)	Yes (v1/v2/v3 awareness)	
Multicast Listener Discover (MLD) Snooping	Yes (v1/v2)	Yes (v1/v2 awareness)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2 awareness)	Yes (v1/v2 awareness)	No	
Virtual LAN (VLAN)											
802.1Q VLAN Tagging	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
802.1v Protocol VLAN Classification	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	
Double VLAN (Q-in-Q)	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	
Selective Q-in-Q	Yes	No	Yes	No	Yes	Yes	No	Yes	No	No	
Voice VLAN	No	No	No	No	Yes*	Yes	No	No	No	No	
IGMP Snooping Multicast (ISM) VLAN	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	
Asymmetric VLAN	No	No	No	No	Yes	No	Yes	Yes	Yes	No	
Layer 3 Features											
Virtual Router Redundancy Protocol (VRRP)	Yes	Yes	No	No	No	No	No	No	No	No	
IPv6 Tunneling	Yes	No	Yes*	No	No	No	No	No	No	No	
Layer 3 Routing											
Static Route	Yes	Yes	Yes	No	Yes*	Yes	No	No	No	No	
Routing Information Protocol (RIP)	Yes (v1/v2)	Yes (v1/v2)	Yes* (v1/v2)	No	No	No	No	No	No	No	
Routing Information Protocol Next Generation (RIPng)	Yes*	No	Yes*	No	No	No	No	No	No	No	
Open Shortest Path First (OSPF)	Yes (v2/v3*)	Yes (v2)	No	No	No	No	No	No	No	No	
Border Gateway Protocol (BGP)	Yes	No	No	No	No	No	No	No	No	No	
Layer 3 Multicasting											
Protocol Information Multicast - Dense Mode (PIM-DM)	Yes	Yes	No	No	No	No	No	No	No	No	
Protocol Information Multicast - Sparse Mode (PIM-SM)	Yes	Yes	No	No	No	No	No	No	No	No	
Distance-Vector Multicast Routing Protocol (DVMRP) v3	Yes	Yes	No	No	No	No	No	No	No	No	
Internet Group Management Protocol (IGMP)	Yes (v1/v2/v3)	Yes	No	No	No	No	No	No	No	No	
Quality of Service (QoS)											
Number of Queues Per Port	8	8	8	8	8	8	4	4	4	4	
Strict Priority	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Highest queue)	Yes	
Weighted Round Robin (WRR)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Strict + WRR	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	No	
Random Early Detection (RED)	Yes (Weighted RED)	Yes (Weighted RED)	No	No	Yes (Stabilized RED)	Yes (Stabilized RED)	No	No	No	No	
Bandwidth Control (min. granularity)	Yes (64kbps)	Yes (64kbps)	Yes (64kbps)	Yes (64kbps)	Yes (64kbps)	Yes (64kbps)	Ingress: 3500Kbps Egress: 64Kbps	Yes (62.5kbps)	Yes (64kbps)	Yes (64kbps)	
Three Color Marker	Yes	No	No	Yes	Yes	No	No	No	No	No	
Access Control List (ACL)											
Access Control List	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
Time-based ACL	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
Security											
Secure Shell (SSH)	Yes	Yes (v1.5/v2)	Yes	Yes (v2)	Yes (v2)	Yes	Yes (v2)	Yes (v2)	Yes (v2)	Yes (v2)	
Secure Sockets Layer (SSL)	Yes	Yes (v2/v3)	Yes	Yes (v1/v2/v3)	Yes (v1/v2/v3)	Yes	Yes	Yes (v1/v2/v3)	Yes (v1/v2/v3)	No	
Port Security (Entries Per Port)	Yes (64)	Yes (16)	Yes (16)	Yes (64)	Yes (64)	Yes (128)	Yes (16)	Yes (64)	Yes (16)	Yes (10)	
Broadcast/Multicast/Unicast Storm Control (min. granularity)	Yes (1pps)	Yes (128kbps)	Yes (128kbps)	Yes (512kbps)	Yes (1pps)	Yes (3500kbps)	Yes (62.5kbps)	Yes (64kbps)	Yes (64kbps)	Yes (64kbps)	
Traffic Segmentation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
IP-MAC-Port Binding (IMPB)	Yes	Yes (v3.3)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	
D-Link Safeguard Engine	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
DHCP Server Screening	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes*	No	
ARP Spoofing Prevention	No	No	No	Yes	Yes	Yes	Yes*	Yes	Yes*	No	
BPDU Attack Protection	No	No	No	No	Yes	Yes	No	Yes	No	No	
Authentication, Authorization & Accounting (AAA)											
802.1X Access Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Web-based Access Control (WAC)	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
MAC-based Access Control (MAC)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Compound Authentication	Yes	No	Yes	Yes	Yes*	No	No	No	No	No	
Microsoft Network Access Protection (NAP)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
Guest VLAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Dynamic VLAN Assignment	Yes	Yes	Yes	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	
RADIUS & TACACS+ Authentication for Management Access	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes*	
Management											
Web GUI, CLI & SNMP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Remote Monitoring (RMON)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1)	Yes (v1/v2)	Yes (v1/v2)	Yes (v1)	
sFlow	Yes	No	Yes	No	Yes	Yes	No	No	No	No	
Link Layer Discovery Protocol (LLDP)	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes*	
D-Link Unidirectional Link Detection (DULD)	Yes*	No	Yes*	No	Yes*	Yes	No	No	No	No	
Operations, Administration & Management (OAM)											
802.3ah Ethernet Link OAM	No	No	No	Yes*	Yes	Yes	No	Yes	Yes*	No	
802.Tag Connectivity Fault Management (CFM)	No	No	No	No	Yes	Yes	No	Yes	No	No	
Certification											
IPv6 Ready Logo	Yes (Phase II)	No	Yes (Phase II)	Yes (Phase II)	No	Yes (Phase II)	No	Yes (Phase II)	No	No	
Metro Ethernet Forum (MEF) Certification	Yes (MEF 9, 14)	No	No	No	Yes (MEF 9, 14)	Yes (MEF 9, 14)	No	Yes (MEF 21)	No	No	

* Available in Future Firmware Upgrade

BUSINESS WIRELESS

Networking without cables through wireless radio waves to communicate between channels offers businesses the advantages of mobility and easy connectivity. Products under this category include Indoor and Outdoor Access Points, Unified Wired/Wireless Access System, Smart Wireless Switching, Wireless Single and Dual Band Antennas and Wireless Accessories.



Indoor Access Points

D-Link Indoor Wireless Access Points are reliable, powerful, and suitable for business-class enterprise environment.

These access points provide various security options for network administrators to deploy a highly manageable and robust wireless network ideal for indoor hotspot deployment. D-Link Indoor access points offer a wide range of product options for different indoor environments and are compliant with various IEEE standards, including 802.11a, 802.11g and 802.11n.

DAP-1353

802.11n Wireless Access Point



Main Features

- Operate at 2.4GHz frequency band
- 2T3R High Speed 300Mbps
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- IEEE 802.11e (Wi-Fi Multimedia)
- MAC Filtering
- IEEE 802.1Q VLAN
- Multiple SSID

Physical Features

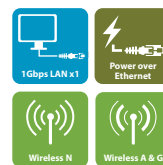
- 3dBi Dipole Antenna
- Detachable Antenna with RP-SMA Interface

Optional Accessories

- DWL-P50 (PoE Splitter)
- DWL-P200 (PoE Kit)

DAP-2553

802.11n Dual Band Wireless Access Point



Main Features

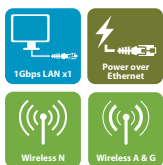
- Operate at 2.4GHz or 5GHz frequency band
- 2T3R High Speed 300Mbps
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID

Physical Features

- 3dBi Dipole Antenna for 2.4GHz
- 5dBi Dipole Antenna for 5GHz
- Detachable Antenna with RP-SMA Interface

DAP-2590

802.11n Dual Band Wireless Access Point



Main Features

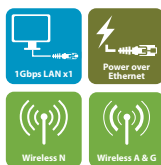
- Operate at 2.4GHz or 5GHz frequency band
- 2T3R High Speed 300Mbps
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Plenum-Rated Chassis

Physical Features

- 4dBi Dipole Antenna for 2.4GHz
- 6dBi Dipole Antenna for 5GHz
- Detachable Antenna with RP-SMA Interface

DAP-2690

802.11n Dual Band Wireless Access Point



Main Features

- Operate at 2.4GHz and 5GHz frequency band
- 2T2R High Speed 300Mbps
- Wireless Distribution System
- Internal RADIUS
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Plenum-Rated Chassis
- Advance Traffic Control

Physical Features

- 4dBi Dipole Antenna for 2.4GHz x2
- 6dBi Dipole Antenna for 5GHz x2
- Detachable Antenna with RP-SMA Interface
- RJ-45 Console Port

DWL-2100AP

802.11g Wireless Access Point



Main Features

- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- IEEE 802.11e (Wi-Fi Multimedia)
- MAC Filtering
- IEEE 802.1Q VLAN
- Multiple SSID

Physical Features

- 2dBi Dipole Antenna x 1
- Detachable Antenna with RP-SMA Interface

Optional Accessories

- DWL-P50 (PoE Splitter)
- DWL-P200 (PoE Kit)

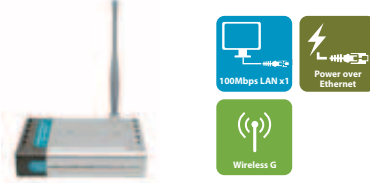
Indoor Access Points

Model	DAP-1353	DAP-2553	DAP-2590	DAP-2690	DWL-2100AP	
IEEE Wired Standard	802.3;802.3u; 802.3ab	802.3;802.3u;802.3ab;802.3af			802.3;802.3u	
Ethernet Interface	10/100/1000BASE-T	10/100/1000BASE-T (PoE)			10/100BASE-TX	
IEEE Wireless Standard	802.11b;802.11g; 802.11n	802.11a;802.11b;802.11g;802.11n			802.11b;802.11g	
Data Transfer Rate	802.11a	54, 48, 36, 24, 18, 12, 9, 6 Mbps			-	
	802.11b	11, 5.5, 2, 1 Mbps			-	
	802.11g	54, 48, 36, 24, 18, 12, 9, 6 Mbps			108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps	
	802.11n	300, 270, 240, 180, 120, 90, 60, 30 Mbps			-	
Frequency Range	5GHz	-	US & Canada: 5.15GHz to 5.35GHz & 5.4725GHz to 5.85GHz Europe & Japan: 5.15GHz to 5.35GHz & 5.47GHz to 5.725GHz		-	
	2.4GHz	-	2.4GHz to 2.4835GHz		-	
RF Channel	5GHz	-	US & Canada: 12; Europe: 19; Japan: 8 (Non-Overlapping)		-	
	2.4GHz	-	United States: 11; Europe: 13; Japan: 13		-	
Radio and Modulation Type	802.11a	-	OFDM, BPSK, QPSK, 16QAM, 64QAM		-	
	802.11b	-	DSSS, DQPSK, DBPSK, CCK		-	
	802.11g	-	OFDM, BPSK, QPSK, 16QAM, 64QAM		-	
	802.11n	-	OFDM, BPSK, QPSK, 16QAM, 64QAM		-	
Transmitter Output Power (Typical)	802.11a	-	17dBm@6~24Mbps; 16dBm@36Mbps; 15dBm@48Mbps; 12dBm@54Mbps	16dBm@6~24Mbps; 15dBm@36Mbps; 15dBm@48Mbps; 12dBm@54Mbps	-	
	802.11b	-	18dBm@1/2/5.5/11Mbps		18dBm	
	802.11g	-	17dBm@6~24Mbps; 17dBm@36Mbps; 16dBm@48Mbps; 13dBm@54Mbps		16 to 18dBm@ 6~36Mbps 14 to 16dBm@ 48Mbps 14 to 15dBm@ 54/108Mbps	
	802.11n (2.4GHz)	HT20: 11 to 17dBm HT40: 11 to 17dBm	HT20: 11 to 17dBm HT40: 11 to 17dBm	HT20: 12 to 15dBm HT40: 12 to 13dBm	HT20: 12 to 17dBm HT40: 12 to 17dBm	-
	802.11n (5GHz)	-	HT20: 9 to 15dBm HT40: 9 to 15dBm	HT20: 11 to 16dBm HT40: 11 to 16dBm	HT20: 11 to 16dBm HT40: 11 to 16dBm	-
Receiver Sensitivity	802.11a	-	-86dBm@6Mbps -84dBm@9Mbps -84dBm@12Mbps -82dBm@18Mbps -78dBm@24Mbps -75dBm@36Mbps -70dBm@48Mbps -68dBm@54Mbps	-85dBm@6Mbps -85dBm@9Mbps -85dBm@12Mbps -85dBm@18Mbps -80dBm@24Mbps -78dBm@36Mbps -74dBm@48Mbps -73dBm@54Mbps	-85dBm@6Mbps -85dBm@9Mbps -85dBm@12Mbps -85dBm@18Mbps -80dBm@24Mbps -78dBm@36Mbps -74dBm@48Mbps -73dBm@54Mbps	-
	802.11b	-89dBm@2Mbps -84dBm@11Mbps	-89dBm@2Mbps -84dBm@11Mbps	-92dBm@1Mbps -91dBm@2Mbps -90dBm@5.5Mbps -88dBm@11Mbps	-89dBm@2Mbps -84dBm@11Mbps	-89dBm@2Mbps -83dBm@11Mbps
	802.11g	-86dBm@6Mbps -84dBm@9Mbps -84dBm@12Mbps -82dBm@18Mbps -78dBm@24Mbps -75dBm@36Mbps -70dBm@48Mbps -68dBm@54Mbps	-86dBm@6Mbps -84dBm@9Mbps -84dBm@12Mbps -82dBm@18Mbps -78dBm@24Mbps -75dBm@36Mbps -70dBm@48Mbps -68dBm@54Mbps	-87dBm@6Mbps -87dBm@9Mbps -87dBm@12Mbps -87dBm@18Mbps -81dBm@24Mbps -79dBm@36Mbps -75dBm@48Mbps -74dBm@54Mbps	-87dBm@6Mbps -87dBm@9Mbps -84dBm@12Mbps -82dBm@18Mbps -79dBm@24Mbps -75dBm@36Mbps -71dBm@48Mbps -70dBm@54Mbps	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps
	802.11n (2.4GHz)	HT20: -86 to -68dBm HT40: -83 to -65dBm	HT20: -86 to -68dBm HT40: -83 to -65dBm	HT20: -85 to -70dBm HT40: -82 to -67dBm	HT20: -88 to -68dBm HT40: -85 to -65dBm	-
	802.11n (5GHz)	-	HT20: -86 to -68dBm HT40: -83 to -65dBm	HT20: -84 to -69dBm HT40: -81 to -66dBm	HT20: -84 to -69dBm HT40: -81 to -66dBm	-
	Operation Modes	Access Point; WDS; WDS with AP; Wireless Client				Access Point; WDS; WDS with AP; Wireless Client; Repeater
	Antenna	Antenna Gain	3dBi	5dBi@5GHz; 3dBi@2.4GHz	5dBi@5GHz; 3dBi@2.4GHz	6dBi@5GHz; 4dBi@2.4GHz
No. of Antennas		3	3	3	4 (2 per frequency band)	1
Antenna Type		Detachable Dipole Antenna with Reverse SMA Connector				
Physical & Environment	Dimension (mm)	198x120x32 (L x W x H)	198x120x32 (L x W x H)	165.1x35.1x187.5 (W x H x D)	190.5x36.5x198.8 (W x H x D)	142x109x31 (L x W x H)
	Weight	319 grams	400 grams	762 grams	990 grams	195 grams
	Power Input	Via External Power Adapter				
	Operating/Storage Temperature	0 to 40°C / -20 to 65°C				
Operating/Storage Humidity	10% to 90% Non-Condensing / 5% to 95% Non-Condensing					
Certification	EMI-EMC Compliance	FCC; CE; C-Tick; IC			FCC; CE; IC	FCC; CE; C-Tick
	Safety Compliance	CSA		UL	CSA	
	Wi-Fi*	Yes				

Indoor Access Points

DWL-2200AP

802.11g Wireless Access Point



Main Features

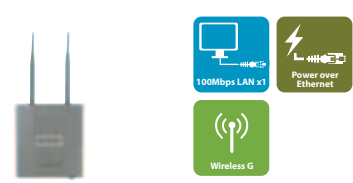
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- MAC Filtering
- IEEE 802.1Q VLAN
- AP Grouping
- IEEE 802.11e (Wi-Fi Multimedia)

Physical Features

- 5dBi Dipole Antenna x 1
- Detachable Antenna with RP-SMA Interface

DWL-3200AP

802.11g Wireless Access Point



Main Features

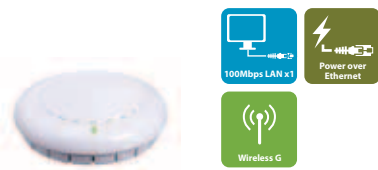
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- IEEE 802.11e (Wi-Fi Multimedia)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Plenum-Rated Chassis

Physical Features

- 5dBi Dipole Antenna x 2
- Detachable Antenna with RP-SMA Interface

DWL-3260AP

802.11g Wireless Access Point



Main Features

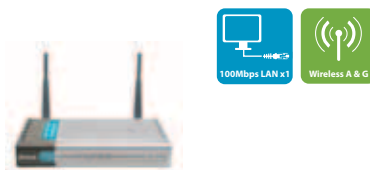
- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- IEEE 802.11e (Wi-Fi Multimedia)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID

Physical Features

- 1dBi Internal Antenna
- Smoke Detector Design for Ceiling-Mount

DWL-7100AP

802.11a/g Dual Band Wireless Access Point



Main Features

- Wi-Fi Protected Access (WPA)
- Wireless Distribution System (WDS)
- MAC Filtering

Physical Features

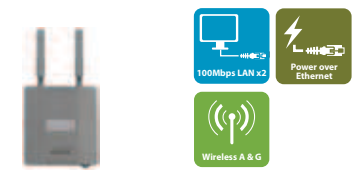
- 2dBi Dipole Antenna for 2.4GHz
- 3dBi Dipole Antenna for 5GHz
- Non-Detachable Antenna

Optional Accessories:

- DWL-P50 (PoE Splitter)
- DWL-P200 (PoE Kit)

DWL-8200AP

802.11a/g Dual Band Wireless Access Point



Main Features

- Wi-Fi Protected Access (WPA2)
- Wireless Distribution System (WDS)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Plenum-Rated Chassis

Physical Features

- 2.5dBi Dipole Antenna for 2.4GHz
- 5.5dBi Dipole Antenna for 5GHz
- Detachable Antenna with RP-SMA Interface

Indoor Access Points

Model	DWL-2200AP	DWL-3200AP	DWL-3260AP	DWL-7100AP	DWL-8200AP	
IEEE Wired Standard	802.3; 802.3u; 802.3af			802.3; 802.3u	802.3; 802.3u; 802.3af	
Ethernet Interface	10/100BASE-TX (PoE)			10/100BASE-TX	10/100BASE-TX (PoE)	
IEEE Wireless Standard	802.11b; 802.11g			802.11a; 802.11b; 802.11g		
Data Transfer Rate	802.11a	-		54, 48, 36, 24, 18, 12, 9, 6 Mbps	108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps	
	802.11b	11, 5.5, 2, 1 Mbps				
	802.11g	108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps		54, 48, 36, 24, 18, 12, 9, 6 Mbps	108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps	
Frequency Range	5GHz	-		US & Canada: 5.15GHz to 5.35GHz & 5.4725GHz to 5.85GHz Europe & Japan: 5.15GHz to 5.35GHz & 5.47GHz to 5.725GHz		
	2.4GHz	2.4GHz to 2.4835GHz				
RF Channel	5GHz	-		US & Canada: 12; Europe: 19; Japan: 8 (Non-Overlapping)		
	2.4GHz	United States: 11; Europe: 13; Japan: 13				
Radio and Modulation Type	802.11a	-		OFDM, BPSK, QPSK, 16QAM, 64QAM		
	802.11b	DSSS, DQPSK, DBPSK, CCK				
	802.11g	OFDM, BPSK, QPSK, 16QAM, 64QAM				
Transmitter Output Power (Typical)	802.11a	-	-	-	16 to 18dBm@6~36Mbps 14 to 16dBm@48Mbps 14 to 15dBm@54Mbps	
	802.11b	18dBm@1/2/5.5/11Mbps	22dBm@1/2/5.5/11Mbps	18dBm@1/2/5.5/11Mbps		
	802.11g	16 to 18dBm@6~36Mbps 14 to 16dBm@48Mbps 14 to 15dBm@54Mbps	21 to 22dBm@6~36Mbps 19 to 20dBm@48Mbps 19 to 20dBm@54/108Mbps	16 to 18dBm@6~36Mbps 14 to 16dBm@48Mbps 14 to 15dBm@54/108Mbps	16 to 18dBm@6~36Mbps 14 to 16dBm@48Mbps 14 to 15dBm@54Mbps	18dBm@6~18Mbps 16dBm@24/36Mbps 14dBm@48/54Mbps
Receiver Sensitivity	802.11a	-	-	-	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps -87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -68dBm@108Mbps	
	802.11b	-89dBm@2Mbps -83dBm@11Mbps	-89dBm@2Mbps -83dBm@11Mbps	-89dBm@2Mbps -83dBm@11Mbps	-89dBm@2Mbps -83dBm@11Mbps	-92dBm@1Mbps -89dBm@2Mbps -88dBm@5.5Mbps -83dBm@11Mbps
	802.11g	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -71dBm@54Mbps -68dBm@108Mbps
Operation Modes	Access Point; WDS; WDS with AP		Access Point; WDS; WDS with AP; Wireless Client	Access Point; WDS; WDS with AP; Wireless Client; Repeater	Access Point; WDS; WDS with AP	
Antenna	Antenna Gain	5dBi	5dBi	-	3dBi@5GHz; 2dBi@2.4GHz	
	No. of Antennas	1	2	1	2	
	Antenna Type	Detachable Dipole Antenna with Reverse SMA Connector	Detachable Dipole Antenna with Reverse SMA Connector	Internal Dipole Antenna with Reverse SMA Connector for Optional External Antenna	Non-Detachable Dipole Antenna	Detachable Dipole Antenna with Reverse SMA Connector
Physical & Environment	Dimension (mm)	142x109x31 (L x W x H)	187.5x165.81x37.06 (L x W x H)	171.97x48.16 (Diameter x H)	192x118x31 (L x W x H)	187.57x165.81x37.06 (L x W x H)
	Weight		603.28 grams	284 grams	280 grams	603.28 grams
	Power Input	Via External Power Adapter				
	Operating/Storage Temperature	0 to 40°C / -20 to 65°C			0 to 55°C / -20 to 75°C	0 to 40°C / -20 to 65°C
Operating/Storage Humidity	10% to 90% Non-Condensing / 5% to 95% Non-Condensing					
Certification	EMI-EMC Compliance	FCC; CE	FCC; CE; C-Tick	FCC; CE; C-Tick; IC	FCC; CE; C-Tick	
	Safety Compliance	UL		CSA		UL
	Wi-Fi*	Yes				

Outdoor Access Points

D-Link Outdoor Wireless Access Points are reliable, powerful, and suitable for business-class enterprise environment.

These access points provide various security options for network administrators to deploy a highly manageable and robust wireless network ideal for deployment of building to building network infrastructure.

DAP-3220

802.11g Wireless Access Point



Main Features

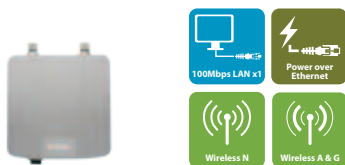
- Wi-Fi Protected Access (WPA2)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Water/Dust-Proof IP65 Standard

Physical Features

- 9dBi Embedded Directional Antenna

DAP-3520

802.11n Dual Band Wireless Access Point



Main Features

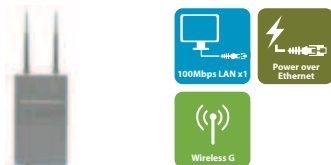
- Operate at 2.4GHz frequency band
- 2T2R High Speed 300Mbps
- Wi-Fi Protected Access (WPA2)
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Water/Dust-Proof IP65 Standard

Physical Features

- 8dBi Antenna for 2.4GHz
- 10dBi Antenna for 5GHz
- Dual Band Embedded Directional Antenna

DWL-2700AP

802.11g Wireless Access Point



Main Features

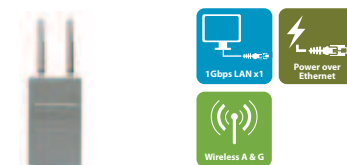
- Wi-Fi Protected Access (WPA2)
- IEEE 802.1X
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Water/Dust-Proof IP68 standard

Physical Features

- 5dBi Dipole Antenna x 2
- Detachable Antenna with RP-SMA Interface

DWL-7700AP

802.11a/g Dual Band Wireless Access Point



Main Features

- Wi-Fi Protected Access (WPA2)
- IEEE 802.1X
- MAC Filtering
- IEEE 802.1Q VLAN
- Rogue AP Detection
- Multiple SSID
- Water/Dust-Proof IP68 standard

Physical Features

- 4.5dBi Dipole Antenna for 2.4GHz
- 7dBi Dipole Antenna for 5GHz
- Detachable Antenna with RP-SMA Interface

Outdoor Access Points

Model	DAP-3220		DAP-3520		DWL-2700AP		DWL-7700AP		
IEEE Wired Standard	802.3; 802.3u; 802.3af								
Ethernet Interface	10/100BASE-TX (PoE)								
IEEE Wireless Standard	802.11b; 802.11g		802.11a; 802.11b; 802.11g; 802.11n		802.11b; 802.11g		802.11a; 802.11b; 802.11g		
Data Transfer Rate	802.11a	-	54, 48, 36, 24, 18, 12, 9, 6 Mbps		-		54, 48, 36, 24, 18, 12, 9, 6 Mbps		
	802.11b	11, 5.5, 2, 1 Mbps							
	802.11g	108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps		54, 48, 36, 24, 18, 12, 9, 6 Mbps					
	802.11n	-	300, 270, 240, 180, 120, 90, 60, 30 Mbps		-				
Frequency Range	5GHz	-	US & Canada: 5.15GHz to 5.35GHz & 5.4725GHz to 5.85GHz Europe & Japan: 5.15GHz to 5.35GHz & 5.47GHz to 5.725GHz		-		US & Canada: 5.15GHz to 5.35GHz & 5.4725GHz to 5.85GHz Europe & Japan: 5.15GHz to 5.35GHz & 5.47GHz to 5.725GHz		
	2.4GHz	2.4GHz to 2.4835GHz							
RF Channel	5GHz	-	US & Canada: 12; Europe: 19; Japan: 8 (Non-Overlapping)		-		US & Canada: 12; Europe: 19; Japan: 8 (Non-Overlapping)		
	2.4GHz	United States: 11; Europe: 13; Japan: 13							
Radio and Modulation Type	802.11a	-	OFDM, BPSK, QPSK, 16QAM, 64QAM,		-		OFDM, BPSK, QPSK, 16QAM, 64QAM,		
	802.11b	DSSS, DQPSK, DBPSK, CCK							
	802.11g	OFDM, BPSK, QPSK, 16QAM, 64QAM							
	802.11n	-	OFDM, BPSK, QPSK, 16QAM, 64QAM		-				
Transmitter Output Power (Typical)	802.11a	-	12dBm@6~54Mbps		-		16dBm@6~54Mbps		
	802.11b	17dBm@1~11Mbps		18dBm@1~11Mbps		23dBm@1~11Mbps		23dBm@1~11Mbps	
	802.11g	17dBm@6~54Mbps		13dBm@6~54Mbps		23dBm@6~54Mbps		23dBm@6~54Mbps	
Receiver Sensitivity	802.11a	-	-85dBm@6Mbps -85dBm@9Mbps -85dBm@12Mbps -85dBm@18Mbps -80dBm@24Mbps -78dBm@36Mbps -74dBm@48Mbps -73dBm@54Mbps		-		-84dBm@6Mbps -83dBm@9Mbps -81dBm@12Mbps -79dBm@18Mbps -76dBm@24Mbps -72dBm@36Mbps -68dBm@48Mbps -67dBm@54Mbps		
	802.11b	-89dBm@2Mbps -83dBm@11Mbps		-93dBm@1Mbps -91dBm@2Mbps -90dBm@5.5Mbps -87dBm@11Mbps		-91dBm@1Mbps -90dBm@2Mbps -89dBm@5.5Mbps -84dBm@11Mbps		-94dBm@1Mbps -91dBm@2Mbps -89dBm@5.5Mbps -85dBm@11Mbps	
	802.11g	-87dBm@6Mbps -86dBm@9Mbps -85dBm@12Mbps -83dBm@18Mbps -80dBm@24Mbps -76dBm@36Mbps -71dBm@48Mbps -66dBm@54Mbps		-87dBm@6Mbps -87dBm@9Mbps -87dBm@12Mbps -87dBm@18Mbps -81dBm@24Mbps -79dBm@36Mbps -75dBm@48Mbps -74dBm@54Mbps		-85dBm@6Mbps -84dBm@9Mbps -82dBm@12Mbps -80dBm@18Mbps -77dBm@24Mbps -73dBm@36Mbps -69dBm@48Mbps -68dBm@54Mbps		-90dBm@6Mbps -84dBm@9Mbps -82dBm@12Mbps -80dBm@18Mbps -77dBm@24Mbps -73dBm@36Mbps -72dBm@48Mbps -72dBm@54Mbps	
		802.11n (2.4GHz)	-		HT20: -85 to -70dBm HT40: -82 to -67dBm		-		-
		802.11n (5GHz)	-		HT20: -84 to -67dBm HT40: -81 to -66dBm		-		-
	Operation Modes	Access Point; WDS; WDS with AP; Wireless Client				Access Point; WDS; WDS with AP			
	Antenna	Antenna Gain	9dBi		10dBi@5GHz; 8dBi@2.4GHz		5dbi		7dBi@5GHz; 5dBi@2.4GHz
No. of Antennas		Embedded				2			
Antenna Type		Embedded Antenna with One RN-P N Type Connector for Optional External Antenna		Embedded Dual Band Antennas with Two RN-P N Type Connectors for Optional External Antennas		Detachable Dipole Antennas with RN-P N Type Connectors			
Physical & Environment	Dimension (mm)	190 x 160 x 55 (L x W x H)		190 x 160 x 55 (L x W x H)		277.7 x 155 x 45 (L x W x H)		279.77 x 155 x 62 (L x W x H)	
	Weight	649 grams		774 grams		1.82 kg		1.82 kg	
	Outdoor Installation	IP65 Standard; Water/Dustproof				IP68 Standard; Diecast Watertight Housing Built-in Heater with Sensor			
	Power Input	Via External Power Adapter							
	Operating/ Storage Temperature	-20 to 60°C / -20 to 65°C				-40 to 60°C / -40 to 65°C			
	Operating/ Storage Humidity	10% to 90% Non-Condensing / 5% to 95% Non-Condensing							
	Certification	EMI-EMC Compliance	FCC; CE; C-Tick; VCCI; TELEC; NCC; IC		FCC; CE; C-Tick		FCC; CE; C-Tick; NCC; IC		FCC; CE; C-Tick; NCC; IC
Safety Compliance		CSA							
Wi-Fi®		Yes							

Unified Wired/Wireless Access System

DWS-3000 Series



D-Link Unified Wired/Wireless Switching Solution offers centralized management that greatly simplifies wireless deployment and significantly enhances access security, wireless throughput and network convergence.

Unified Switches

Wireless Management

- L2/L3 Fast Roaming
- Intra-Switch/Inter-Switch Roaming
- Centralized Security Policy/AP/Client Management & Monitoring
- Adaptable Wireless
- Automatic RF Channel Adjustment
- Automatic AP Transmit Output Power Adjustment
- AP Auto-Discovery & Firmware Dispatch
- AP Load Balancing
- AP Authentication
- Remote AP Reboot
- AP Self Healing
- Client Monitoring
- Wi-Fi Multimedia (WMM)
- SpectraLink Voice Priority (SVP)
- MAC Authentication
- WPA/WPA2 Personal/Enterprise
- Captive Portal
- Rogue AP Detection
- Station Isolation
- Visualization AP Management Tool

Wired Management

- Internet Group Management Protocol (IGMP) Snooping
- Link Layer Discovery Protocol (LLDP)
- Double VLAN (Q-in-Q)
- Subnet-based VLAN
- IPv4 Static Route
- Virtual Router Redundancy Protocol (VRRP)
- Quality of Service (QoS)
- Traffic Shaping
- Access Control List
- 802.1X Port-based Access Control
- Guest VLAN
- Broadcast Storm Control

Optional Accessories

Modules

- DEM-410X 1-Port 10G XFP Module (for DWS-3026)
- DEM-410CX 1-Port 10G CX4 Module (for DWS-3026)

10-Gigabit Ethernet XFP Transceivers

- DEM-421XT 10GBASE-SR, MMF, 300m (for DWS-3026)
- DEM-422XT 10GBASE-LR, SMF, 10km (for DWS-3026)
- DEM-423XT 10GBASE-ER, SMF, 40km (for DWS-3026)

Gigabit Ethernet SFP Transceivers

- DEM-310GT 1000BASE-LX, SMF/MMF, 10km/2km
- DEM-311GT 1000BASE-SX, MMF, 550m
- DEM-312GT2 1000BASE-SX, MMF, 2km
- DEM-314GT 1000BASE-LH, SMF, 50km
- DEM-315GT 1000BASE-ZX, SMF, 80km
- DGS-712 1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

- DEM-330T/R 1000BASE-BX, SMF, 10km
- DEM-331T/R 1000BASE-BX, SMF, 40km

Unified Access Points

Managed Mode

- Centralized Management
- Centralized Firmware Dispatch
- Auto-Power Adjustment
- Dynamic Auto-Channel Selection
- L2 Fast Roaming
- L3 Fast Roaming
- Captive Portal

Standalone Mode

- Local Storage of Configuration

Managed & Standalone Mode

- WEP/WPA/WPA2 Security
- Rogue AP Detection
- Station Isolation
- MAC Address Filtering
- AP Load Balancing Setup
- Wi-Fi Multimedia (WMM)
- SpectraLink Voice Priority

Unified Switches DWS-3024

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Up to 48 APs per Switch
- Up to 192 APs per Peer Group

DWS-3024L

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- Redundant Power Supply
- Up to 24 APs per Switch
- Up to 96 APs per Peer Group

DWS-3026

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 2
- Redundant Power Supply
- Up to 48 APs per Switch
- Up to 192 APs per Peer Group

Unified Access Points DWL-3500AP

- 10/100BASE-TX x 1 (PoE)
- IEEE 802.11g Wireless LAN
- 5dBi Dipole Antenna x 2
- Detachable Antenna with RP-SMA Interface
- External Power Adapter

DWL-8500AP

- 10/100BASE-TX x 1 (PoE)
- IEEE 802.11a Wireless LAN
- IEEE 802.11g Wireless LAN
- 5dBi @ 5GHz & 2.5dBi @ 2.4GHz Dual Band Dipole Antenna x 2
- Detachable Antenna with RP-SMA Interface
- External Power Adapter

Unified Switches - DWS-3000 Series

Model	DWL-3024	DWL-3024L	DWL-3026
IEEE LAN Standard	802.3; 802.3u; 802.3z; 802.3ab; 802.3ae; 802.3af		
Port Interface	10/100/1000 BASE-T (RJ-45)		
	20 (PoE)		
	Combo 1000BASE-T/SFP		
	4		
	10 GE Slot		
Stack-ability	Physical Stack		
	Via CX4/XFP Module; Bi-Directional Redundant Stacking Topology; Duplex Chain/Ring Topology; Up to 40Gbps (Full Duplex); Up to 12 Units Per Stack		
General Features	Switching Capacity		48Gbps
	Maximum Forwarding Rate		35.71Mpps
	Forwarding Mode		Store and Forward
	Packet Buffer Memory		750Kbytes
	MTBF		174,272 hours
	Console Port		173,071 hours
WLAN Management Capability	Female RS-232 DB-9 Console Port for Out-of-Band Configuration DWL-3024L: Max. 24 APs, DWL-3024 / DWL-3026: Max. 48 APs (Directly/Indirectly Connected through LAN Switch) Max. 2048 Wireless Users (1024 Tunneled, 2048 Non-Tunneled)		
Roaming	Fast Roaming (Wireless Adapter needs to support too); Intra-Switch / Inter-Switch Roaming; Intra-Subnet / Inter-Subnet Roaming		
Access Control & Bandwidth Management	Max. 16 SSID Per AP (8 SSID Per RF Frequency Band); AP Load Balancing based on the No. of Users/Utilization Per AP		
Managed Access Point	DWL-3500AP; DWL-8500AP		
AP Management	AP Auto-Discovery; Remote AP Reboot; AP Monitoring: List Managed AP, Authentication Failed AP, Rogue AP; Auto AP RF Channel Adjustment; Client Monitoring: List Clients Associated with each Managed AP; Ad-Hoc Clients Monitoring;		
	AP Authentication with Local Database and External RADIUS Server; Centralized RF/Security Policy Management; Automatic AP Transmitted Output Power Adjustment		
WLAN Security	WPA Personal/Enterprise; WPA2 Personal/Enterprise; 64/128-bit WEP Data Encryption; MAC Authentication; Wireless Station & AP Monitoring on RF Channel, MAC Address, SSID, Time; Captive Portal; Station Isolation Rogue and Valid AP Classification based on MAC Address; Encryption Type: WEP, WPA, Dynamic WEP, TKIP, AES-CCMP, EAP-FAST, EAP-TLS, EAP-TTLS, EAP-MD5, PEAP-GTC, PEAP-MS-CHAPv2, PEAP-TLS		
L2 Features	MAC Address Table Size: 8K Entries; IGMP Snooping: 1K Multicast Groups; 802.1ab Link Layer Discovery Protocol (LLDP); 802.1D STP, 802.1w RSTP, 802.1s MSTP; 802.3ad Link Aggregation: Max. 32 Groups, Max. 8 Ports Per Group; Jumbo Frame: Max. 9Kbytes; Port Mirroring: One-to-One, Many-to-One		
Virtual LAN (VLAN)	802.1Q Tagged VLAN; VLAN Groups: Max. 3965; 802.1v Protocol VLAN; Subnet-based VLAN; MAC-based VLAN; Double VLAN; GARP VLAN Registration Protocol (GVRP)		
L3 Features	IPv4 Static Route; Routing Table Size: Max. 128 Static Routes; Floating Static Route; Proxy Address Resolution Protocol (ARP); Virtual Router Redundancy Protocol (VRRP); 802.1p Priority Queues: Max. 8 Queues Per Port; Min. Bandwidth Guarantee Per Queue; Traffic Shaping; CoS based on: Switch Port, VLAN, DSCP/TCP/UDP Port, TOS, Dest/Source MAC Address, Dest/Source IP Address		
Quality of Service (QoS)	ACL based on: Switch Port, MAC Address, 802.1p Queues, VLAN, Ether Type, DSCP, IP Address, Protocol Type, TCP/UDP Port		
Access Control List (ACL)	RADIUS & TACACS+ Authentication for Management Access; Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v3; Transport Layer Security (TLS) v1; MAC Filtering; Denial of Service Protection; DHCP Filtering; Protected Port; 802.1X Port-based Access Control & Guest VLAN; Port Security; 20 MAC Per Port, Trap Violation Notification; Broadcast Storm Control in Granularity of 1% of Link Speed		
LAN Security	Web-based GUI; Command Line Interface (CLI); System Log; Telnet Server: Max. 5 Sessions; Telnet Client; TFTP Client; Dual Images; Multiple Configuration Files; BootP/DHCP Client; Simple Network Management Protocol (SNMP) v1/v2c/v3; Remote Monitoring (RMON): 4 Groups; DHCP Server; Simple Network Time Protocol (SNTP)		
	DHCP Server; Simple Network Time Protocol (SNTP)		
Management Methods	Dimension		
	19-inch; 1U Rack-Mount; 440 x 389 x 44mm (W x D x H)		
	Weight		
	6kg		
	Power Input		
	Input: 100-240VAC, 50/60Hz; Internal Universal Power Supply		
	Max. Power Consumption		
	450W (All PoE Ports in Operation) 460W (All PoE Ports in Operation)		
Physical & Environment	PoE		
	Power Budget: 370A; Per Port: 15.4W		
	RPS		
	DPS-600		
	Temperature		
	0 to 40 °C (Operation); -10 to 70 °C (Storage)		
	Humidity		
	10%~90% (Operation); 5%~90% (Storage); Non-Condensing		
Certification	Fan		
	4 40x40mm DC Fans		
Certification	EMI-EMC		
	FCC Class A; CE; VCCI; C-Tick; ICES-003; EN 60601 1-2		
Safety	UL/cUL; CB		

Unified Access Points - DWL-3500AP & DWL-8500AP

Model	DWL-3500AP	DWL-8500AP
IEEE Wired Standard	802.3; 802.3u; 802.3af	
IEEE Wireless Standard	802.11b; 802.11g	802.11a; 802.11b; 802.11g
Data Transfer Rate	802.11a	54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11b	11, 5.5, 2, 1 Mbps
	802.11g	54, 48, 36, 24, 18, 12, 9, 6 Mbps
Wireless Frequency Range	802.11a	5.15GHz to 5.35GHz & 5.47GHz to 5.825GHz
	802.11b/g	2.4GHz to 2.4835GHz
RF Channels	802.11a	US & Canada: 12; Europe: 19; Japan: 8; China: 5
	Non-Overlapping	-
	802.11b/g	United States: 11; Europe: 13; Japan: 13
Radio and Modulation Type	802.11a/b/g (DSSS)	DBPSK@1Mbps; QPSK@2Mbps; CCK@5.5/11Mbps
	802.11a/g (OFDM)	BPSK@6/9Mbps; QPSK@12/18Mbps; 16QAM@24/36Mbps; 64QAM@48/54/108Mbps
Transmit Output Power (Typical)	802.11a	16dBm@6/9/12/18Mbps 14dBm@24/36Mbps 12dBm@48/54Mbps
	802.11b	18dBm@1/2/5.5/11Mbps
	802.11g	18dBm@6/9/12/18Mbps; 16dBm@24/36 Mbps; 14dBm@48/54Mbps
EIRP	802.11a	16 dBm Using Default Antennas
	802.11g	23 dBm Using Default Antennas
Receiver Sensitivity	802.11a	-87 dBm @ 6 Mbps
		-86 dBm @ 9 Mbps
		-85 dBm @ 12 Mbps
	802.11b	-80 dBm @ 24 Mbps
		-76 dBm @ 36 Mbps
		-71 dBm @ 48 Mbps
802.11g	-71 dBm @ 54 Mbps	
	-68dBm @ 108 Mbps	
	-92 dBm @ 1 Mbps; -89 dBm @ 2 Mbps; -88 dBm @ 5.5 Mbps; -83 dBm @ 11 Mbps	
Antennas	Description	2 Detachable Dipole Antennas with Reverse SMA Connectors
	Antenna Gain	5dBi for 2.4GHz Band
Ethernet Interface	10/100BASE-TX Port with 802.3af Power over Ethernet (PoE)	
	64/128/152-bit Wired Equivalent Privacy (WEP); Wi-Fi Protected Access (WPA)/WPA2 Extensible Authentication Protocol (EAP); WPA/WPA2 Pre-Shared Key (PSK); Advanced Encryption Standard (AES); MAC Address Filtering; 802.11i-Ready; 802.1Q Service Set Identifier (SSID) Broadcast Enable/Disable; Eight SSID Per Frequency Band; Isolated Security for Each SSID; Station Isolation; IEEE 802.1X Supplicant	
Management Methods & Protocols	Protocols Supported in DWS-3000 Series; HTTP/HTTPS; SSH; Syslog; Telnet	
	Dimension (L x W x H)	277.7 x 155 x 45 mm
Physical & Environment	Weight	603.28 grams
	Power Input	800 grams
	Power Consumption	Via 48VDC, 0.4A External Power Adapter; Operating Voltage: 48VDC +/- 10% for PoE
	Operation Temperature	7W without PoE; 8.5W with PoE
	Storage Temperature	8.5W without PoE; 9W with PoE
	Operation Humidity	0 to 40 °C
	Storage Humidity	-20 to 65 °C
	Certification	10% to 90% (Non-Condensing)
Certification	5% to 95% (Non-Condensing)	
	FCC Class B; CE; C-Tick; VCCI; TELEC; UL; Wi-Fi; ICES-003; EN60601-1-2	

Unified Wired/Wireless Access System

DWS-4000 Series



D-Link next generation L2+ Unified Wired/Wireless Switching Solution consists of Gigabit switch with an array of advanced features and 802.11u support. It is a full-featured and cost-effective mobility solution for mid to large enterprises and service providers. It enables network administrators to have control, security, redundancy and reliability needed to scale and manage the wireless networks easily and efficiently.

Unified Switch

Wireless Management

- L2/L3 Fast Roaming
- Intra-Switch/Inter-Switch Roaming
- Centralized Security Policy/AP/Client Management & Monitoring
- Adaptive Wireless
- Automatic RF Channel Adjustment
- Automatic AP Transmit Output Power Adjustment
- AP-AP Tunnel
- AP Load Balancing
- AP Auto-Discovery & Firmware Dispatch
- AP Authentication

- RF Self-Healing
- Auto-VoIP
- Wi-Fi Multimedia (WMM)
- SpectraLink Voice Priority (SVP)
- Remote AP Reboot
- Visualized AP Management Tool
- Wireless Intrusion Detection & Prevention System (WIDS/WIPS)
- Rogue AP/Client Detection & Mitigation
- WPA/WPA2 Personal/Enterprise
- Captive Portal
- Station Isolation

Wired Management

- Internet Group Management Protocol (IGMP) Snooping
- Link Layer Discovery Protocol (LLDP)
- LLDP-Media Endpoint Discovery (LLDP-MED)
- Double VLAN (Q-in-Q)
- Selective Q-in-Q
- Subnet-based VLAN
- IPv4 Static Route
- Routing Information Protocol (RIP)
- Virtual Router Redundancy Protocol (VRRP)
- Routing Information Protocol (RIP)
- Quality of Service (QoS)
- Traffic Shaping
- Bandwidth Control
- Access Control List
- 802.1X Port-based Access Control
- Guest VLAN
- Broadcast Storm Control

Unified Access Point

Managed Mode

- Centralized Management
- Centralized Firmware Dispatch
- Visualized AP Management Tool
- Auto-Power Adjustment
- Dynamic Auto-Channel Selection
- L2 Fast Roaming
- L3 Fast Roaming
- Captive Portal
- Rogue AP Mitigation
- Wireless Intrusion Detection & Prevention System (WIDS)

Standalone Mode

- Wireless Distribution System (WDS)
- AP Clustering
- Local Storage of Configuration

Managed & Standalone Mode

- WEP/WPA/WPA2 Security
- Rogue AP Detection
- Station Isolation
- MAC Address Filterin
- AP Load Balancing Setup
- Wi-Fi Multimedia
- SpectraLink Voice Priority (SVP)
- Unscheduled Automatic Power Save Delivery (U-APSD)

Unified Switch DWS-4026

- 10/100/1000BASE-T x 20 (PoE)
- Combo 1000BASE-T/SFP x 4
- 10G Expansion Slot x 2
- Redundant Power Supply
- Up to 256 APs per Cluster/Peer Group

Unified Access Point DWL-8600AP

- 10/100/1000BASE-T x 1 (PoE)
- IEEE 802.11a Wireless LAN
- IEEE 802.11g Wireless LAN
- IEEE 802.11n Wireless LAN
- 6dBi @ 5GHz & 4dBi @ 2.4GHz Dual Band Dipole Antenna x 4
- Detachable Antenna with RP-SMA Interface
- External Power Adapter

Optional Accessories

Modules

DEM-410X	1-Port 10G XFP Module
DEM-410CX	1-Port 10G CX4 Module

10-Gigabit Ethernet XFP Transceivers

DEM-421XT	10GBASE-SR, MMF, 300m
DEM-422XT	10GBASE-LR, SMF, 10km
DEM-423XT	10GBASE-ER, SMF, 40km

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-BX, SMF, 10km
DEM-331T/R	1000BASE-BX, SMF, 40km

Unified Switch - DWS-4000 Series

Model	DWS-4026	
IEEE LAN Standard	802.3; 802.3u; 802.3z; 802.3ab; 802.3ae; 802.3af	
Port Interface	10/100/1000 BASE-T (RJ-45)	20 (PoE)
	Combo 1000BASE-T/SFP	4
	10 GE Slot	2
	XFP Module	DEM-410X
	CX4 Module	DEM-410CX
Physical Stack	Via CX4/XFP Module; Duplex Chain/Ring Topology; Bi-Directional Redundant Stacking Topology; Up to 40Gbps (Full Duplex); Up to 12 Units Per Stack	
General Features	Switch Capacity	88Gbps
	Forwarding Rate	65.47Mpps (Maximum)
	Forwarding Mode	Store and Forward
	Buffer Memory	750KBytes
	MTBF	185,540 hours
Console Port	Female RS-232 DB-9 Console for Out-of-Band Configuration	
WLAN Management Capability	Max. 64 APs Per Switch; Max. 256 APs Per Cluster; Max. 2048 Wireless Users (1024 Tunneled, 2048 Non-Tunneled)	
Roaming	Fast Roaming (Wireless Adapter needs to support too); Intra-Switch / Inter-Switch Roaming; Intra-Subnet / Inter-Subnet Roaming; AP-AP-Tunnel	
Access Control & Bandwidth Management	Max. 32 SSID Per AP (16 SSID Per RF Frequency Band); AP Load Balancing based on the No. of Users or Utilization Per AP	
Managed Access Point	DWL-8600AP	
AP Management	AP Auto-Discovery; Remote AP Reboot; AP Monitoring: List Managed AP, Authentication Failed AP, Rogue AP; Ad-Hoc Clients Monitoring; Client Monitoring: List Clients Associated with Each Managed AP; AP Authentication Supporting Local Database and External RADIUS Server; Centralized RF/Security Policy Management; Visualized AP Management Tool (Support up to 16 JPG Files); Unified AP Support (DWL-8600AP): Managed/Standalone Mode	
WLAN Security	Wireless Intrusion Detection & Prevention System (WIDS); Rogue AP Mitigation; 64/128-bit WEP Data Encryption; Rogue and Valid AP Classification based on MAC Address; WPA Personal/Enterprise; WPA2 Personal/Enterprise; Wireless Station and AP Monitoring on RF Channel, MAC Address, SSID, Time; Captive Portal; Station Isolation; Encryption Type Support: WEP, WPA, Dynamic WEP, TKIP, AES-CCMP, EAP-FAST, EAP-TLS, EAP-TTLS, EAP-MD5, PEAP-GTC, PEAP-MS-CHAPv2, PEAP-TLS; MAC Authentication	
L2 Features	MAC Address Table Size: 8K Entries; IGMP Snooping: 1K Multicast Groups; MLD Snooping; 802.1D STP, 802.1s Rapid STP, 802.1w Multiple STP; 802.3ad Link Aggregation: Max. 32 Groups, Max. 8 Ports Per Group; Jumbo Frame: Max. 9KBytes; 802.1ab Link Layer Discovery Protocol (LLDP); LLDP-MED; Port Mirroring: One-to-One, Many-to-One; Flow Control: 802.3x in Full Duplex, Back Pressure in Half Duplex, Head-of-Line Blocking Prevention	
Virtual LAN (VLAN)	802.1Q Tagged VLAN; 802.1v Protocol VLAN; VLAN Groups: Max. 3,965 Entries; Subnet-based VLAN; GARP VLAN Registration Protocol (GVRP); MAC-based VLAN; Double VLAN; Voice VLAN	
L3 Features	IPv4 Static Route; Routing Table Size: Max. 128 Static Routes; Floating Static Route; Proxy Address Resolution Protocol (ARP); Virtual Router Redundancy Protocol (VRRP); Routing Information Protocol (RIP) v1/v2	
Quality of Service (QoS)	802.1p Priority Queues (Max. 8 Queues Per Port); Auto-VoIP; Minimum Bandwidth Guarantee Per Queue; Traffic Shaping Per Port; Per-Flow Bandwidth Control; CoS based on: Switch Port, VLAN, DSCP, TCP/UDP Port, TOS, Dest/Source MAC Address, Dest/Source IP Address	
Access Control List (ACL)	ACL based on: Switch Port, MAC Address, 802.1p Queues, VLAN, Ether Type, DSCP, IP Address, Protocol Type, TCP/UDP Port	
LAN Security	RADIUS & TACACS+ Authentication for Management Access; Secure Shell (SSH) v1/v2; Secure Sockets Layer (SSL) v3; Transport Layer Security (TLS) v1; MAC Filtering; Denial of Service Protection; Dynamic ARP Inspection (DAI); Port Security: 20 MAC Per Port, Port Violation Notification; 802.1X Port-based Access Control and Guest VLAN; Broadcast Storm Control in Granularity of 1% of Link Speed; DHCP Snooping; Protected Port; DHCP Filtering	
Management Methods	Web-based GUI; Switch Clustering; RADIUS Accounting; Command Line Interface (CLI); Telnet Client; TFTP Client; Telnet Server: Max. 5 Sessions; sFlow; BootP/DHCP Client; DHCP Server; DHCP Relay; Dual Images; Port Description; Multiple Configuration Files; Dual Image Services; Simple Network Management Protocol (SNMP) v1/v2c/v3; Remote Monitoring (RMON) v1; Simple Network Time Protocol (SNTP); System Log	
Physical &	Dimension	19-inch; 1U Rack-Mount; 440 x 389 x 44mm (W x D x H)
	Weight	6kg
	Power Input	Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply
	Max. Power Consumption	525W (With All PoE Ports in Operation)
	PoE	Power Budget: 370A; Per Port: 15.4W
	RPS	DPS-600
	Temperature	0 to 40 °C (Operation); -10 to 70 °C (Storage)
Humidity	10%~90% (Operation); 5%~90% (Storage) Non-Condensing	
EMI-EMC	FCC Class A; CE; VCCI; C-Tick; ICES-003; EN 60601 1-2	
Safety	UL/cUL; CB	

Unified Access Point - DWL-8600AP

Model	DWL-8600AP	
IEEE Wired Standard	802.3; 802.3u; 802.3ab; 802.3af	
IEEE Wireless Standard	802.11a; 802.11b; 802.11g; 802.11n	
Data Transfer Rate	802.11a	54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11b	11, 5.5, 2, 1 Mbps
	802.11g	54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11n	Up to 300 Mbps
Wireless Frequency Range	802.11a	5.15GHz to 5.35GHz
	802.11b/g	5.47GHz to 5.825GHz
	802.11n	2.4GHz to 2.4835GHz 4.9GHz to 5.85 GHz
RF Channel	5GHz	US & Canada: 12; Europe: 19; Japan: 8; China: 5 (Non-Overlapping)
	2.4GHz	US: 11; Europe: 13; Japan: 13
Radio and Modulation Type	802.11a/g (OFDM)	DBPSK@1Mbps; DQPSK@2Mbps; CCK@5.5/11Mbps
	802.11n	BPSK@6/9Mbps; QPSK@12/18Mbps; 16QAM@24/36Mbps; 64QAM@48/54Mbps
Transmit Output Power (Typical)	802.11a	PSK/CCK, DQPSK, DBPSK, OFDM
	802.11b	17dBm@6/9/12/18Mbps; 15dBm@24/36Mbps; 14dBm@48Mbps; 13dBm@54Mbps
	802.11g	17dBm@12/5.5/11Mbps; 17dBm@6/9/12/18Mbps; 16dBm@24/36Mbps; 15dBm@48Mbps; 14dBm@54Mbps
	802.11n	5GHz Band/HT-20: 12 to 17dBm; 5GHz Band/HT-40: 11 to 16dBm; 2.4GHz Band/HT-20: 13 to 17dBm; 2.4GHz Band/HT-40: 12 to 16dBm
Receiver Sensitivity	802.11a	-87dBm@6Mbps; -86dBm@9Mbps; -84dBm@12Mbps; -81dBm@18Mbps; -77dBm@24Mbps; -75dBm@36Mbps; -68dBm@48Mbps; -67dBm@54Mbps
	802.11b	-92dBm@1Mbps; -90dBm@2Mbps; -88dBm@5.5Mbps; -84dBm@11Mbps
	802.11g	-87dBm@6Mbps; -87dBm@9Mbps; -85dBm@12Mbps; -82dBm@18Mbps; -79dBm@24Mbps; -76dBm@36Mbps; -71dBm@48Mbps; -70dBm@54Mbps
Antennas	Antenna Gain	4 Dual Band Detachable Dipole Antennas with Reverse SMA Connectors 6dBi for 5GHz Band; 4dBi for 2.4GHz Band
	Ethernet Interface	10/100/1000BASE-T Port with 802.3af Power over Ethernet (PoE)
Configuration Operation Modes	Access Point Only; Wireless Distribution System (WDS); Access Point with WDS	
Security	64/128/152-bit Wired Equivalent Privacy; MAC Address Filtering: Local/RADIUS; Wi-Fi Protected Access (WPA)/WPA2 Extensible Authentication Protocol (EAP); WPA/WPA2 Pre-Shared Key (PSK); Temporal Key Integrity Protocol (TKIP); Advanced Encryption Standard (AES); 802.1Q SSID Broadcast Enable/Disable; 16 SSID Per Frequency Band; 32 SSID Per AP; 802.11i/WPA2; RADIUS: Max. 4 External RADIUS Servers; Isolated Security for Each SSID; Station Isolation; IEEE 802.1X Supplicant	
	Management Methods & Protocols	Protocols Supported in DWS-4026; HTTP/HTTPS; SSH; SNMP; Syslog; Telnet
Physical &	Dimension	190.5 x 198.8 x 36.8mm (L x W x H)
	Weight	1.02kg
	Power Input	Via 48VDC, 0.4A External Power Adapter Operating Voltage: 48VDC +/- 10% for PoE
	Power	11W with PoE; 12W with PoE (Maximum)
Certification	Operation	0 to 40 °C
	Storage	-20 to 65 °C
	Operation Humidity	10% to 90% (Non-Condensing)
	Storage Humidity	5% to 95% (Non-Condensing)
Certification	FCC Class B; CE; C-Tick; VCCI; TELEC; Wi-Fi; ICES-003; EN60601-1-2; NCC; CSA International	

Smart Wireless Switching

DES-1228P & DWL-3140AP



D-Link Smart Wireless Switching is an inexpensive easy-to-use solution designed for small and medium businesses to deploy company-wide wireless networks with reliable connectivity and enhanced security. This solution also offers access points management using Smart WLAN Manager software.

Web Smart Switch

Wireless Management

- Central AP Management
- D-Link Smart Console
- AP Group Management
- Central AP Firmware Upgrade
- AP Topology Monitoring
- AP Load Balancing

Wired Management

- Internet Group Management Protocol (IGMP) Snooping
- 802.1D Spanning Tree
- Port Trunk
- Port Mirroring
- 802.1Q Tagged VLAN
- Quality of Service (QoS)
- 802.1X Port-based Access Control
- Broadcast Storm Control
- D-Link Safeguard Engine™
- Simple Network Management Protocol (SNMP)
- Link Layer Discovery Protocol (LLDP)

Optional Accessories

Gigabit Ethernet SFP Transceivers

DEM-310GT	1000BASE-LX, SMF, 10km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LX, SMF, 50km
DEM-315GT	1000BASE-LX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers

DEM-330T/R	1000BASE-LX, SMF, 10km
DEM-331T/R	1000BASE-LX, SMF, 40km

Fast Ethernet SFP Transceivers

DEM-210	100BASE-FX, SMP, 15km
DEM-211	100BASE-FX, MMF, 2km

Fast Ethernet WDM SFP Transceivers

DEM-220T/R	100BASE-BX, SMF, 20km
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Web Smart Switch DES-1228P

- 10/100BASE-TX x 24 (PoE)
- 10/100/1000BASE-T x 2
- Combo 1000BASE-T/SFP x 2
- Fan x 4
- Reset Button x 1
- Support up to 24 APs

Web Smart Access Point DWL-3140AP

- 10/100BASE-TX x 1 (PoE)
- IEEE 802.11g Wireless LAN
- Internal Dipole Antenna
- Ceiling Mount Design
- External Power Adapter

Web Smart Access Point

- Thin Access Point
- Centralized Management by DES-1228P

Web Smart Switch - DES-1228P

Model	DES-1228P	
IEEE LAN Interface	802.3; 802.3u; 802.3z; 802.3ab; 802.3af	
Port Interface	10BASE-T/100BASE-TX Port (RJ-45)	24 (PoE)
	10BASE-T/100BASE-TX/1000BASE-T Port (RJ-45)	2
	Combo 1000BASE-T/SFP	2
General Features	Switching Capacity	12.8Gbps
	Maximum Forwarding Rate	9.52Mpps
	Forwarding Mode	Store and Forward
	Packet Buffer Memory	128kbyte
	SDRAM for CPU	8Mbyte
	Flash Memory	2Mbytes PROM
	MTBF	149,676 hours
L2 Features	MAC Address Table: 8K; Static MAC: 256; Enable/Disable Auto-Learning of MAC Addr; IGMP Snooping v1/v2: 64 Multicast Groups; 802.1D Spanning Tree; Asymmetric VLAN; Static Port Trunk: Max. 6 Groups Per Device, 8 Ports Per Group; Port Mirroring	
Virtual VLAN (VLAN)	802.1Q Tagged VLAN; Max. 256 Static VLAN Groups; Management VLAN; Asymmetric VLAN	
Quality of Service (QoS)	802.1p Priority Queue; Max. 4 Queues Per Port; DSCP-based QoS; Queue Handling: Strict, Weighted Round Robin (WRR)	
Security	802.1X Port-based Access Control; Broadcast Storm Control; Trusted Host; Cable Diagnostic; D-Link Safeguard Engine	
Management	Web-based GUI; SmartConsole Utility; Simple Network Management Protocol (SNMP) v1; DHCP Client; LLDP; Trap Settings for Destination IP, System Events, Fiber Port Events, Twisted-Pair Port Events; Port Access Control; Anti-Rogue AP; Web-based Configuration Backup/Restoration; Web-based Firmware Backup/Upload; Firmware Upgrade using SmartConsole Utility; System Reboot using Web-based Interface	
Smart WLAN Manager	Central AP Management; D-Link Smart WLAN Console; AP Group Management; Device Status; Log: System Log, Operator Action Log, SNMP Trap Log of AP and Switch; Zero Configuration; Email Alert; Central Firmware Upgrade for AP and Switch; Configuration Backup/Restore; Password Management; Syslog Alert; AP with Authentication Key Management; AP Topology Monitoring; AP Life Check; AP User Statistics; AP Traffic Statistics; Export Statistics Formats; AP Load Balancing	
Management Information Base (MIB)	MIB-II (RFC1213); D-Link Private MIB	
Physical &	Dimension (W x D x H)	19-inch, 1U Rack-Mount; 440 x 209 x 44mm
	Weight	3.20kg
	Power Input	AC Input: 100-240 VAC, 50/60Hz; Internal Universal Power Supply
	Power Consumption	222W
	Power over Ethernet	Power Budget: 170W Per Port: 15.4W
	Operation Temperature	0 to 40 °C
	Storage Temperature	-10 to 70 °C
	Operation Humidity	10% to 90% Non-Condensing
	Storage Humidity	5% to 90% Non-Condensing
	Fan	Four Fans
	Reset Button	One Reset Button
EMI-EMC Compliance	FCC Class A; CE Class A; VCCI Class A; C-Tick	
Safety Compliance	cUL	

Web Smart Access Point - DWL-3140AP

Model	DWL-3140AP	
IEEE Wired Standard	802.3; 802.3u; 803.af	
IEEE Wireless Standard	802.11b; 802.11g	
Data Rates	802.11b	11, 5.5, 2, 1 Mbps
	802.11g	108, 54, 48, 36, 24, 18, 12, 9, 6 Mbps
Wireless Frequency Range	802.11b	2.4 to 2.497GHz ISM Band
	802.11g	2.4 to 2.483GHz ISM Band
Modulation	802.11b	DSSS (DBPSK, DQPSK, CCK)
	802.11g	OFDM (BPSK, QPSK, 64QAM)
Frequency Channel	North America: 1 to 11 Europe: 1 to 13	
Receive Sensitivity	802.11b	-82dBm @ 11Mbps -88dBm @ 5.5Mbps -86dBm @ 2Mbps -89dBm @ 1Mbps
	802.11g	-68dBm @ 54Mbps -68dBm @ 48Mbps -75dBm @ 36Mbps -79dBm @ 24Mbps -82dBm @ 18Mbps -84dBm @ 12Mbps -86dBm @ 9Mbps -88dBm @ 6Mbps
Equivalent Isotropically Radiated Power (EIRP)	16dBm Typically	
Antenna	Internal Dipole Antenna	
Security	64/128/152-bit Wired Equivalent Privacy (WEP); Wi-Fi Protected Access (WPA) / WPA2 Pre-Shared Key (PSK)	
Management	D-Link Smart WLAN Manager	
Ethernet Interface	10/100BASE-T Port with Power over Ethernet (PoE)	
Physical & Environment	Dimension	118mm (Diameter) x 35 (Height)
	Weight	120 grams
	Power Input	Via 5VDC, 1A External Power Adapter
	Power over Ethernet	AP Connect to Switch's PoE Port 802.3af PoE Standard Input Voltage: 44 to 57VDC
	Operation Temperature	0 to 40 °C
	Storage Temperature	-20 to 55 °C
	Operation Humidity	5% to 95% Non-Condensing
Storage Humidity	5% to 95% Non-Condensing	
Certification	Emission (EMI) FCC Class B	

Single Band Antennas

ANT24-0800



ANT24-0801



ANT24-1200



ANT24-1201



Frequency	2.4GHz	2.4GHz	2.4GHz	2.4GHz
Signal Directivity	Omnid-Directional	Directional	Directional	Directional
Application Range	Indoor/Outdoor	Indoor/Outdoor	Indoor	Outdoor
Gain (Without Cable Loss)	8 dBi	8 dBi	12 dBi	12 dBi
2.4GHz Indoor Transmission Distance at 1/11/54Mbps	700 / 350 / 100m	800 / 500 / 150m	1500 / 1200 / 500m	-
2.4GHz Outdoor Transmission Distance at 1/11/54Mbps	2000 / 1000 / 400m	2500 / 1500 / 600m	-	3000 / 2500 / 1000m
Horizontal Half Power Beam Width (HPBW/H-Plane)	360°	70°	80°	50°
Vertical Half Power Beam Width (HPBW/V-Plane)	15°	65°	23°	50°
Antenna Connector	N-Jack	N-Jack	SMA Jack	N-Jack
Extension Cable Length	50cm	30cm	3-meter	50cm
Surge Protector for Outdoor Installation	Included	Included	-	Included

ANT24-1202



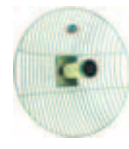
ANT24-1400



ANT24-1800



ANT24-2100



Frequency	2.4GHz	2.4GHz	2.4GHz	2.4GHz
Signal Directivity	Omnid-Directional	Directional	Directional	Directional
Application Range	Outdoor	Outdoor	Outdoor	Outdoor
Gain (Without Cable Loss)	12 dBi	14 dBi	18 dBi	21 dBi
2.4GHz Indoor Transmission Distance at 1/11/54Mbps	-	-	-	-
2.4GHz Outdoor Transmission Distance at 1/11/54Mbps	3000 / 1800 / 450m	6000 / 4500 / 1000m	8000 / 6000 / 1500m	9000 / 7000 / 2000m
Horizontal Half Power Beam Width (HPBW/H-Plane)	360°	30°	15°	10°
Vertical Half Power Beam Width (HPBW/V-Plane)	6°	30°	15°	12°
Antenna Connector	N-Jack	N-Jack	N-Jack	N-Jack
Extension Cable Length	50cm	50cm	50cm	50cm
Surge Protector for Outdoor Installation	Included	Included	Included	Included

Dual Band Antennas

ANT70-0800

ANT70-1000

ANT70-1400N

ANT70-1800



Frequency	2.4GHz & 5GHz	2.4GHz & 5GHz	2.4GHz & 5GHz	2.4GHz & 5GHz
Signal Directivity	Omni-Directional	Directional	Directional	Directional
Application Range	Indoor/Outdoor	Indoor/Outdoor	Outdoor	Outdoor
Gain (Without Cable Loss)	2.4GHz: 8 dBi 5GHz: 8 dBi	2.4GHz: 10 dBi 5GHz: 10 dBi	2.4GHz: 11 dBi 5GHz: 14 dBi	2.4GHz: 14 dBi 5GHz: 18 dBi
2.4GHz Indoor Transmission Distance at 1/11/54Mbps	700 / 350 / 100m	800 / 400 / 150m	-	-
2.4GHz Outdoor Transmission Distance at 1/11/54Mbps	800 / 450 / 150m	1000 / 500 / 200m	6000 / 5000 / 3500 / 500m*	6000 / 4500 / 1000m
5GHz Indoor Transmission Distance at 1/11/54Mbps	1000 / 500 / 200m	1200 / 600 / 250m	-	-
5GHz Outdoor Transmission Distance at 1/11/54Mbps	1000 / 500 / 200m	1500 / 700 / 300m	5000 / 4000 / 2500 / 400m*	8000 / 5000 / 1500m
Horizontal Half Power Beam Width (HPBW/H-Plane)	2.4GHz: 360° 5GHz: 360°	2.4GHz: 58° 5GHz: 45°	2.4GHz: 40°~44° 5GHz: 19°~22°	2.4GHz: 30° 5GHz: 15°
Vertical Half Power Beam Width (HPBW/V-Plane)	2.4GHz: 15° 5GHz: 15°	2.4GHz: 55° 5GHz: 45°	2.4GHz: 38°~41° 5GHz: 25°~31°	2.4GHz: 30° 5GHz: 15°
Antenna Connector	N-Jack	N-Jack	N-Jack x 3	N-Jack
Extension Cable Length	50cm	50cm	50cm	50cm
Surge Protector for Outdoor Installation	Included	Included	-	Included

* Approximate Range at 1/11/54/300Mbps

Antenna Accessories

Model

ANT24-0500CB	3-Meter Low Loss Cable with N Plug and RP-SMA Plug
ANT24-0800CB	50cm Low Loss Cable with N Plug and RP SMA Plug
ANT24-1200CB	3-Meter Low Loss Cable with SMA Plug and RP SMA Plug
ANT24-CB03N	3-Meter LMR400 Low Loss Cable with N Plug and N Jack
ANT24-CB06N	6-Meter LMR400 Low Loss Cable with N Plug and N Jack
ANT24-CB09N	9-Meter LMR400 Low Loss Cable with N Plug and N Jack
ANT24-0DU3M	3-Meter LMR400 Low Loss Cable with RP-N Plug and N Plug

Notes:

1. Transmission distance range based on two antennas of the same specifications with default cable loss.
2. Effective range based on EIRP (Effective Isotropic Radiation Power = Device Output Power + Antenna Gain – Cable Loss).
3. Actual range subject to change due to users' physical environment. All figures are for reference only.

Wireless Access Point Management

The widespread use of wireless local area networks (WLANs) has been steadily snowballing. As more and more small office/SMB/SME/enterprises launch WLANs and upgrade older, less secure Wi-Fi installations. IT managers and network administrators will need better tools to monitor networks, manage changes, configure settings, and support growing user populations more efficiently and easily. Based on these demands, D-Link provides three different solutions for different requirements.

D-Link Wireless Access Point Management Options

AP Array	AP Manager II	D-View Wireless Plug-In*
<ul style="list-style-type: none"> • Small office • Manage up to 8 fat APs • Same AP model in group • No additional PC • Integrated in firmware • AirPremier N Series APs • Free 	<ul style="list-style-type: none"> • SMB/SME • Only manage fat APs • Bundled with AP • Plug-in Module for AP Manager II • AirPremier Series APs • Free 	<ul style="list-style-type: none"> • Enterprise • Manage multiple Unified Switches • Manage unified / fat APs • Plug-in module for D-View • Chargeable


* For D-View Wireless Plug in, refer to Switches-Network Management Section for more details.

AP Array

- A purpose-built WLAN Management Tool for small office
- Built-in to AP's firmware, no extra software needed
- Self-managed APs with auto-synchronized configuration
- Easy configuration and management through web browser
- Configure once and apply to multiple APs

Auto-synchronized configurations in AP Array

- Wireless Settings
- Wireless Advanced Settings
- Multiple SSID & VLAN
- Advanced Functions
- Administration Settings



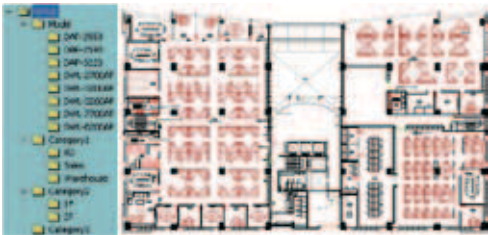
Configuration View

AP Manager II

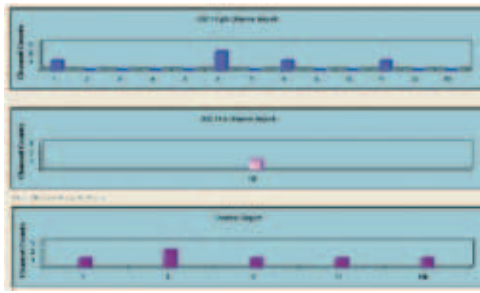
- A purpose-built WLAN Management Software for SME/SMB
- Free-bundled with D-Link Business AP with no extra cost
- Unified platform to manage and monitor D-Link APs
- Configure once and apply to multiple APs
- Real-time monitor the entire wireless network
- Rich and visualized report for future management tasks

Manage features in a unified platform, AP Manager II

- Group Management
- Multi-Configuration
- Fault Management
- Real-Time Report
- Modulized Software



Group Management



Real-Time Report

Access Point vs Wireless Management Compatible Matrix

	AP Array	AP Manager II	D-View Wireless Plug-In
Indoor Access Points			
DAP-1353	Yes*	-	-
DAP-2553	Yes	Yes	-
DAP-2590	Yes	Yes	Yes
DAP-2690	-	-	-
DWL-2100AP	-	-	-
DWL-2200AP	-	-	-
DWL-3200AP	-	Yes	Yes
DWL-3260AP	-	Yes	-
DWL-7100AP	-	-	-
DWL-8200AP	-	Yes	Yes
Outdoor Access Points			
DAP-3220	-	Yes	-
DAP-3520	Yes	Yes	-
DWL-2700AP	-	Yes	-
DWL-7700AP	-	Yes	-
Unified Access Points			
DWL-3500AP	-	-	Yes
DWL-8500AP	-	-	Yes
DWL-8600AP	-	-	Yes

* Supported on Hardware Version B only

Unified Switch Selection Matrix

Models	DWS-4000 Series	DWS-3000 Series
General		
Maximum Switching Capacity	88Gbps	24-Port: 48Gbps; 26-Port: 88Gbps
Fixed 10/100/1000BASE-T Port	24	24
Fixed Small Form-Factor Pluggable (SFP) Port	4	4
Optional 10G XFP Uplink Capability	Yes (2)	24-Port: No; 26-Port: Yes (2)
Redundant Power Supply	Yes (DPS-600)	Yes (DPS-600)
Layer 2 Features		
Jumbo Frame (Size)	Yes (9kbytes)	Yes (9kbytes)
802.1D/802.1w/802.1s Spanning Tree Protocol (STP)	Yes	Yes
802.3ad Link Aggregation	Yes	Yes
Port Mirroring	Yes	Yes
Layer 2 Multicast		
Internet Group Management Protocol (IGMP) Snooping	Yes (v1/v2/v3)	Yes (v1/v2/v3)
Multicast Listener Discover (MLD) Snooping	Yes (v1/v2)	Yes (v1/v2)
Virtual LAN (VLAN)		
802.1Q VLAN Tagging	Yes	Yes
802.1v Protocol VLAN Classification	Yes	Yes
Q-in-Q (Double VLAN)	Yes	Yes
Voice VLAN	Yes	No
Layer 3 Features		
Routing Table Size	128 Static routes	128 Static routes
Routing Information Protocol v1/v2	Yes	No
Virtual Router Redundancy Protocol (VRRP)	Yes	Yes
Wireless LAN		
Max. APs Per switch	64	DWS-3024L: 24; DWS-3024/3026: 48
Max. Users Per Switch	Up to 1024 Tunneled Users Up to 2048 Non-Tunneled Users	Up to 1024 Tunneled Users Up to 2048 Non-Tunneled Users
Switch/AP Discovery	Yes	Yes
Fast Roaming	Yes	Yes
Intra-Switch Roaming	Yes	Yes
Inter-Switch Roaming (No. of Peer Switches)	Yes (8)	Yes (4)
L2 Roaming (Intra-Subnet Roaming)	Yes	Yes
L3 Roaming (Inter-Subnet Roaming)	Yes	Yes
IP-IP Tunnel	Yes	Yes
AP-AP Tunnel	Yes	No
Path MTU	Yes	Yes
MSS Reduction	Yes	Yes
Adaptable Wireless	Yes	Yes
RF Management and Control		
Multiple ESSIDs Per AP (VAP Per Radio / VAP Per AP)	Yes (16 / 32)	Yes (8 / 16)
Automatic RF Channel Adjustment	Yes	Yes
Automatic AP Transmit Output Power Adjustment	Yes	Yes
RF Self-Healing Around Failed AP	Yes	Yes
AP Load Balancing	Yes	Yes
Access Point (AP) Management		
AP Software Version Auto-Detection & Central Firmware Dispatch	Yes	Yes
AP Auto-Discovery	Yes	Yes
AP Authentication	Yes	Yes
Remote AP Boot	Yes	Yes
AP Monitoring / Client Monitoring	Yes	Yes
Centralized RF / Security Policy Management	Yes	Yes
Visualized AP Management Tool	Yes	Yes
Unified AP Support (AP supports Managed/Standalone mode)	DWL-8600AP	DWL-3500AP / DWL-8500AP
Quality of Service (QoS)		
Number of Queues Per Port	8	8
Strict Priority	Yes	Yes
Weighted Round Robin (WRR)	Yes	Yes
Bandwidth Control (min. granularity)	Yes (64kbps)	Yes (64kbps)
Auto-VoIP	Yes	No
802.11e Wireless Multimedia (WMM)	Yes	Yes
Access Control List (ACL)		
Access Control List	Yes	Yes
ACL Max Profiles / Rules	Max 100 ACLs; Max 10 Rules Per ACL	Max 100 ACLs; Max 10 Rules Per ACL
Security		
Rogue AP Identification & Classification	Yes	Yes
Wireless Intrusion Detection System (WIDS)	Yes	No
Dynamic ARP Inspection (DAI)	Yes	No
DHCP Snooping	Yes	No
Secure Shell (SSH)	Yes (v1/v2)	Yes (v1/v2)
Secure Sockets Layer (SSL)	Yes (v3)	Yes (v3)
Port Security (Entries Per Port)	Yes (20)	Yes (20)
Broadcast/Multicast/Unicast Storm Control (min. granularity)	Yes (1% link speed)	Yes (1% link speed)
Authentication, Authorization & Accounting (AAA)		
802.1X Access Control	Yes	Yes
Captive Portal	Yes	Yes
MAC Authentication	Yes	Yes
Guest VLAN	Yes	Yes
Dynamic VLAN Assignment	Yes	Yes
RADIUS & TACACS+ Authentication for Management Access	Yes	Yes
Management		
Web GUI & CLI	Yes	Yes
Switch Clustering	Yes	No
Link Layer Discovery Protocol (LLDP)	Yes	Yes
Simple Network Management Protocol (SNMP)	Yes (v1/v2c/v3)	Yes (v1/v2c/v3)
Remote Monitoring (RMON)	Yes (v1)	Yes (v1)
DHCP Server, DHCP Relay	Yes	Yes
Multiple Image, Multiple Configuration	Yes	Yes

SECURITY

Protecting a network against attacks and unauthorized access is key to the survival of any business. D-Link security solutions offer end to end defense to ensure all areas of the network is secured. Products under this category include Intrusion Prevention System (IPS) and Unified Threat Management (UTM) Firewalls, Service Routers, VPN Routers and Load Balancing Router.



IPS Firewalls



NETDEFEND™



Being part of D-Link Gateway Security, NetDefend IPS Firewalls provide critical protection for networking infrastructure with powerful firewall/VPN features and innovative NetDefend IPS service.

- Transparent Mode
- Application Layer Gateway (ALG)
- IPSec/PPTP/L2TP VPN
- VPN Hub and Spoke
- Outbound Load Balancing
- Traffic Redirect at Fail-Over
- Policy-based Traffic Shaping
- Guaranteed Bandwidth
- WAN Failover
- Intrusion Detection & Prevention System (IDP/IPS)
- HTTP/Script/Email Type Content Filtering
- External Database Content Filtering** (DFL-210 & DFL-800)
- Real Time Anti-Virus Scanning** (DFL-210 & DFL-800)
- D-Link ZoneDefense (DFL-800, DFL-1600 & DFL-2500)
- Server Load Balancing (DFL-800, DFL-1600 & DFL-2500)
- Device & Link Failure Detection (DFL-1600 & DFL-2500)
- LCD Panel (DFL-1600 & DFL-2500)
- Anti-Virus over VPN** (DFL-210 & DFL-800)

Optional Accessories

Licenses

DFL-210-AV-12	DFL-210 Anti-Virus Signature Upgrade License (12 Months)
DFL-210-IPS-12	DFL-210 IPS Signature Upgrade License (12 Months)
DFL-210-WCF-12	DFL-210 Web Content Filtering Signature License (12 Months)
DFL-800-AV-12	DFL-800 Anti-Virus Signature Upgrade License (12 Months)
DFL-800-IPS-12	DFL-800 IPS Signature Upgrade License (12 Months)
DFL-800-WCF-12	DFL-800 Web Content Filtering Signature License (12 Months)
DFL-1600-IPS-12	DFL-1600 IPS Signature Upgrade License (12 Months)
DFL-2500-IPS-12	DFL-2500 IPS Signature Upgrade License (12 Months)

NetDefend Security Service

IPS Signature License of 90 days is shipped with the equipment.
Anti-Virus Signature and Web Content Filtering License of 90 days are shipped with DFL-210/DFL-800** firewalls.

Please register your product at <http://security.dlink.com.tw>.

DFL-210

- 10/100BASE-TX x 6
(WAN x 1 / DMZ x 1 / LAN x 4)
- External Power Supply

DFL-800

- 10/100BASE-TX x 10
(WAN x 2 / DMZ x 1 / LAN x 7)
- External Power Supply

DFL-1600

- 10/100/1000BASE-T x 6
(WAN / DMZ / LAN User Configurable)
- 19" Rackmount

DFL-2500

- 10/100/1000BASE-T x 8
(WAN / DMZ / LAN User Configurable)
- 19" Rackmount

IPS Firewalls

Model		DFL-210	DFL-800	DFL-1600	DFL-2500
Port Interface	Ethernet WAN Port	1	2	-	-
	Ethernet DMZ Port (User-Configurable)	1	1	-	-
	Ethernet LAN Port	4	7	-	-
	User-Configurable Gigabit Port	-	-	6	8
	DB-9 RS-232 Console	-	-	1	-
System Performance	Firewall Throughput	80Mbps	150Mbps	320Mbps	600Mbps
	VPN Throughput	25Mbps	45Mbps	120Mbps	300Mbps
	IPS Throughput	20Mbps	40Mbps	150Mbps	400Mbps
	Anti-Virus Throughput	10Mbps**	20Mbps**	-	-
	Concurrent Sessions	10,000**	20,000**	400,000	1,000,000
	New Sessions (per second)	2,000	4,000	10,000	15,000
	Policies	500	1,000	2,500	4,000
Firewall System	Transparent Mode; Network Address Translation (NAT), Port Address Translation (PAT); Dynamic Routing Protocol: Open Shortest Path First (OSPF) (Not applicable for DFL-210); H.323 NAT Traversal; Time-Scheduled Policies; Application Layer Gateway (ALG); Proactive Network Security: ZoneDefense (Not applicable on DFL-210)				
Networking	DHCP Server/Client; DHCP Relay; Policy-based Routing; IP Multicast: IGMPv3				
Virtual LAN (VLAN)	8	16	128	1,024	
Virtual Private Network (VPN)	Encryption Methods: DES/3DES/AES/Twofish/Blowfish/CAST-128; IPSec NAT Traversal; Dedicated VPN Tunnels: 100 (DFL-210), 200** (DFL-800), 1,200 (DFL-1600), 2,500 (DFL-2500); Point-to-Point Tunneling Protocol (PPTP) / Layer 2 Tunneling Protocol (L2TP) Server; Hub and Spoke				
System Management	RS-232 Console Interface; Web-based User Interface: HTTP, HTTPS; Command Line/Secure Shell (SSH); Firmware Upgrade; Configuration Backup/Restoration				
User Authentication	Built-in Database; Remote Authentication Dial In User Service (RADIUS); Lightweight Directory Access Protocol (LDAP): Microsoft AD 2003/2008 OpenLDAP 2.2.26; Microsoft Internet Authentication Service (IAS); XAUTH for IPSec Authentication				
Logging and Monitoring	Internal Log; External Log: Syslog Server; E-Mail Notification; Event Log and Alarm; Simple Network Management Protocol (SNMP) v1/v2c, SNMP Traps				
Traffic Load Balancing	Outbound Load Balancing; Server Load Balancing (Not applicable for DFL-210); Traffic Redirect at Fail-Over; Outbound Load Balance Algorithms: Round-Robin, Weight-based Round-Robin, Destination-based, Spill-over				
Bandwidth Management	Policy-based Traffic Shaping; Guaranteed Bandwidth; Maximum Bandwidth; Priority Bandwidth; Dynamic Bandwidth Balancing				
High Availability (HA)	WAN Fail-Over (DFL-210: When DMZ Port is Configured as WAN Port); Active/Passive Modes (Not applicable on DFL-210/800); Device Failure Detection (Not applicable on DFL-210/800); Link Failure Detection (Not applicable on DFL-210/800); Firmware / Virtual Private Network (VPN) Session Synchronization (Not applicable on DFL-210/800)				
Intrusion Detection & Prevention System (IDP/IPS)	Automatic Pattern Update; Denial of Service (DoS), Distributed DoS (DDoS) Update; Attack Alarm via Email; Advanced IDP/IPS Subscription; IP Blacklist by Threshold or IPS/IDP (Not applicable on DFL-210)				
Content Filtering	HTTP Type: URL Blacklist/Whitelist; Script Type: Java, Cookie, ActiveX, VB; Email Type: Email Blacklist/Whitelist; External Database Content Filtering** (Available on DFL-210/800 only)				
Anti-Virus** (Applicable on DFL-210 / DFL-800 only)	Real Time AV Scanning; Unlimited File Size; Scans VLAN Tunnels; Support Compressed Files; Signature Licensor: Kaspersky; Automatic Pattern Update				
Physical & Environmental	Dimension (W x D x H)	Desktop; 235 x 162 x 36mm	11-inch Desktop; 1U Height; 280 x 214 x 44mm	19-inch Rack-Mount; 1U Height; 440 x 254 x 44mm	19-inch Rack-Mount; 1U Height; 440 x 454 x 44mm
	Power Input	External Power Adapter		Internal Universal Power Supply	
	Operating Temperature	0 to 40 °C			
	Storage Temperature	-20 to 70 °C			
	Operating Humidity	5% to 95% Non-Condensing			
	Mean Time Before Failure (MTBF)	186,614 hours	140,532 hours	71,965 hours	101,819 hours
Certification	EMI-EMC Compliance	FCC Class A; CE Class A; C-Tick; VCCI			
	Safety Compliance	UL; LVD (EN60950-1)	LVD (EN60950-1)		

** Available in Firmware 2.26.00 and above; Performance based on Firmware 2.26.00 and above

UTM Firewalls



NETDEFEND™



Apart from IPS Firewall capabilities, NetDefend UTM Firewalls provide comprehensive security services, such as NetDefend IPS, Anti-Virus and Web Content Filtering.

- Transparent Mode
- Application Layer Gateway (ALG)
- IPSec/PPTP/L2TP VPN
- VPN Hub and Spoke
- Outbound Load Balancing
- Traffic Redirect at Fail-Over
- Guaranteed Bandwidth
- Intrusion Detection & Prevention System (IDP/IPS)
- HTTP Type Content Filtering
- Real Time Anti-Virus Scanning
- Anti-Virus over VPN
- Policy-based Traffic Shaping
- WAN Failover
- HTTP/Script/Email Type Content Filtering
- External Database Content Filtering
- D-Link ZoneDefense (DFL-860, DFL-1660, DFL-2560 & DFL-2560G)
- Server Load Balancing (DFL-860, DFL-1660, DFL-2560 & DFL-2560G)
- Device & Link Failure Detection (DFL-1660, DFL-2560 & DFL-2560G)

Optional Accessories

Licenses

DFL-160-UTM-12	DFL-160 UTM Firewall License (12 Months)
DFL-260-AV-12	DFL-260 Anti-Virus Signature Upgrade License (12 Months)
DFL-260-IPS-12	DFL-260 IPS Signature Upgrade License (12 Months)
DFL-260-WCF-12	DFL-260 Web Content Filtering Signature License (12 Months)
DFL-860-AV-12	DFL-860 Anti-Virus Signature Upgrade License (12 Months)
DFL-860-IPS-12	DFL-860 IPS Signature Upgrade License (12 Months)
DFL-860-WCF-12	DFL-860 Web Content Filtering Signature License (12 Months)
DFL-1660-AV-12	DFL-1660 Anti-Virus Signature Upgrade License (12 Months)
DFL-1660-IPS-12	DFL-1660 IPS Signature Upgrade License (12 Months)
DFL-1660-WCF-12	DFL-1660 Web Content Filtering Signature License (12 Months)
DFL-2560-AV-12	DFL-2560/DFL-2560G Anti-Virus Signature Upgrade License (12 Months)
DFL-2560-IPS-12	DFL-2560/DFL-2560G IPS Signature Upgrade License (12 Months)
DFL-2560-WCF-12	DFL-2560/DFL-2560G Web Content Filtering Signature License (12 Months)

Gigabit Ethernet SFP Transceivers (for DFL-2560G)

DEM-310GT	1000BASE-LX, SMF/MMF, 10km/2km
DEM-311GT	1000BASE-SX, MMF, 550m
DEM-312GT2	1000BASE-SX, MMF, 2km
DEM-314GT	1000BASE-LH, SMF, 50km
DEM-315GT	1000BASE-ZX, SMF, 80km
DGS-712	1000BASE-T, Copper, 100m

Gigabit Ethernet WDM SFP Transceivers (for DFL-2560G)

DEM-330T/R	1000BASE-BX, SMF, 15km
DEM-331T/R	1000BASE-BX, SMF, 40km

NetDefend Security Service

IPS & Anti-Virus Signature License of one year and Web Content Filtering License of 90 days are shipped with the equipment.

Please register your product at <http://security.dlink.com.tw>.

DFL-160

- 10/100BASE-TX x1 (WAN)
- 10/100/1000BASE-T x 5 (DMZ x 1 / LAN x 4)
- USB 2.0 x 1
- External Power Supply

DFL-260

- 10/100BASE-TX x 6 (WAN x 1 / DMZ x 1 / LAN x 4)
- External Power Supply

DFL-860

- 10/100BASE-TX x 10 (WAN x 2 / DMZ x 1 / LAN x 7)
- External Power Supply

DFL-1660

- 10/100/1000BASE-T x 6 (WAN / DMZ / LAN User Configurable)
- USB 2.0 x 2
- Internal Power Supply
- 19" Rackmount

DFL-2560

- 10/100/1000BASE-T x 10 (WAN / DMZ / LAN User Configurable)
- USB 2.0 x 2
- Internal Power Supply
- 19" Rackmount

DFL-2560G

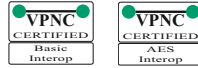
- 10/100/1000BASE-T x 6 (WAN / DMZ / LAN User Configurable)
- SFP x 4 (WAN / DMZ / LAN User Configurable)
- USB 2.0 x 2
- Internal Power Supply
- 19" Rackmount

UTM Firewalls

Model		DFL-160	DFL-260	DFL-860	DFL-1660	DFL-2560	DFL-2560G
Port Interface	Ethernet WAN Port	1	1	2		-	
	Ethernet DMZ Port (User-configurable)	1	1	1		-	
	Ethernet LAN Port	4	4	7		-	
	User-Configurable Gigabit RJ-45 Port		-		6	10	6
	User-Configurable Gigabit SFP Port			-			4
	USB 2.0	1		-		2 (Reserved)	
	DB-9 RS-232 Console			1			
System Performance	Firewall Throughput	70Mbps	80Mbps	150Mbps	1.2Gbps		2Gbps
	VPN Throughput	25Mbps	25Mbps	45Mbps	350Mbps		1Gbps
	IPS Throughput	15Mbps	20Mbps	40Mbps	400Mbps		600Mbps
	Anti-Virus Throughput	15Mbps	10Mbps	20Mbps	225Mbps		450Mbps
	Concurrent Sessions	6,000	10,000**	20,000**	600,000		1,500,000
	New Sessions (per second)	5,000	2,000	4,000	15,000		20,000
	Policies	300	500	1,000	4,000		6,000
Firewall System	Transparent Mode; Network Address Translation (NAT), Port Address Translation (PAT); Dynamic Routing Protocol: Open Shortest Path First (OSPF) (Not applicable on DFL-160/260); H.323 NAT Traversal (Not applicable on DFL-160); Time-Scheduled Policies; Application Layer Gateway (ALG); Proactive Network Security: ZoneDefense (Not applicable on DFL-160/210)						
Networking	DHCP Server/Client; DHCP Relay; Policy-based Routing; IP Multicast: IGMPv3						
Virtual LAN (VLAN)	-	8	16	1,024			2,048
Virtual Private Network (VPN)	Encryption Methods: DES/3DES/AES/TwoFish/Blowfish/CAST-128; IPsec NAT Traversal; Dedicated VPN Tunnels: 30 (DFL-160), 100 (DFL-260), 200** (DFL-860), 2,500 (DFL-1660), 5,000 (DFL-2560/2560G); Point-to-Point Tunneling Protocol (PPTP) / Layer 2 Tunneling Protocol (L2TP) Server; Hub and Spoke (Not applicable on DFL-160)						
Traffic Load Balancing (Not applicable on DFL-160)	Outbound Load Balancing; Server Load Balancing (Not applicable for DFL-260); Traffic Redirect at Fail-Over; Outbound Load Balance Algorithms: Round-Robin, Weight-based Round-Robin, Destination-based, Spill-over						
Bandwidth Management (Not applicable on DFL-160)	Policy-based Traffic Shaping; Guaranteed Bandwidth; Maximum Bandwidth; Priority Bandwidth; Dynamic Bandwidth Balancing						
High Availability (HA) (Not applicable on DFL-160)	WAN Fail-Over (DFL-210: When DMZ Port is Configured as WAN Port); Active/Passive Modes (Not applicable on DFL-260/860); Device Failure Detection (Not applicable on DFL-260/860); Link Failure Detection (Not applicable on DFL-260/860); Firmware / Virtual Private Network (VPN) Session Synchronization (Not applicable on DFL-260/860)						
Intrusion Detection & Prevention System (IDP/IPS)	Automatic Pattern Update; Denial of Service (DoS), Distributed DoS (DDoS) Update; Attack Alarm via Email; Advanced IDP/IPS Subscription; IP Blacklist by Threshold or IPS/IDP (Not applicable on DFL-160/210)						
Content Filtering	HTTP Type: URL Blacklist/Whitelist; Script Type: Java, Cookie, ActiveX, VB (Not applicable on DFL-160); Email Type: Email Blacklist/Whitelist (Not applicable on DFL-160); External Database Content Filtering						
Anti-Virus	Real Time AV Scanning; Unlimited File Size; Scans VPN Tunnels; Support Compressed Files; Signature Licensor: Kaspersky; Automatic Pattern Update						
Physical & Environmental	Dimension (WxDxH)	Desktop; 220x150x32.5mm	Desktop; 235x162x36mm	11-inch Desktop; 1U Height; 280x214x44mm	19-inch Rack-Mount; 1U Height; 440x400x44mm		
	Power Input	External Power Adapter			80 PLUS Internal Universal Power Supply		
	Operating Temperature	0 to 40 °C					
	Storage Temperature	-20 to 70 °C					
	Operating Humidity	5% to 95% Non-Condensing					
	Mean Time Before Failure (MTBF)	119,642 hours	186,614 hours	140,532 hours	400,000 hours	310,000 hours	
Certification	EMI-EMC Compliance	FCC Class B; CE Class B; VCCI; C-Tick	FCC Class A; CE Class A; VCCI; C-Tick				
	Safety Compliance	UL/cUL; LVD (EN60950-1)	UL; LVD (EN60950-1)	LVD (EN60950-1)	cUL; CB		

** Available in Firmware 2.26.00 and above; Performance based on Firmware 2.26.00 and above

Unified Services Routers



Customized for small businesses, D-Link Unified Services Router is an all-in-one gateway device providing outstanding performance and rich functionalities, including IEEE 802.11n (ratified version), 3G WAN redundancy (for DSR-1000N), IPv6 and comprehensive VPN features (SSL/IPSec/PPTP/L2TP).

- Static/Dynamic IP WAN Type
- Point-to-Point over Ethernet (PPPoE)
- SSL/IPSec/PPTP/L2TP VPN
- VPN Hub & Spoke
- IPSec/PPTP/L2TP VPN Pass-through
- 3G WAN Redundancy (DSR-1000N)
- Network Address Translation (NAT)
- Transparent Mode
- Dynamic Routing (RIP, OSPF*)
- WAN Traffic Failover
- Outbound Load Balancing*
- Remote Management (Web, SNMP, SSH, Telnet)
- XML-Agent Support (Yahoo Widget, etc)
- Internet Group Management Protocol (IGMP) Proxy/Snooping
- Stateful Packet Inspection (SPI)
- L2 to L7 Access Control
- IP/MAC Binding
- Virtual LAN (VLAN)
- Intrusion Prevention System (IPS)
- 3 * 3 MIMO
- Wireless Security (WEP, WPA, WPA2, WPS)
- Wireless Connect Now (WCN) 2.0
- Radio Profile
- Multiple SSIDs
- SSID-to-VLAN Mapping
- IPv6 Phase 2 Certified*

DSR-500N

- 10/100/1000BASE-T x 2 (WAN)
- 10/100/1000BASE-T x 4 (LAN)
- IEEE 802.11n Wireless LAN (2.4GHz)
- USB 2.0 Port x 1
- 2dBi Dipole Antenna x 3 (3*3 MIMO)
- Detectable Antenna with RP-SMA Interface
- Internal Power Supply
- D-Link Green Technology

DSR-1000N

- 10/100/1000BASE-T x 2 (WAN)
- 10/100/1000BASE-T x 4 (LAN)
- IEEE 802.11n Wireless LAN (2.4GHz/5GHz)
- USB 2.0 Port x 2
- 2dBi Dipole Antenna x 3 (3 * 3 MIMO)
- Detectable Antenna with RP-SMA Interface
- Internal Power Supply
- D-Link Green Technology

* Available in future firmware upgrade

Unified Services Routers

Model		DSR-500N	DSR-1000N
Port Interface	Ethernet WAN	Two 10/100/1000BASE-T Gigabit Ethernet Port for xDSL/Cable Connection	
	Ethernet Wired LAN	Four 10/100/1000BASE-T Gigabit Ethernet LAN Connection	
Port Interface	Wireless LAN	IEEE 802.11b/g/n (2.4GHz) Wireless LAN Three Detectable 2dBi (3 * 3 MIMO) Omni-Directional Antennas	IEEE 802.11a/b/g/n (2.4GHz & 5GHz) Wireless LAN Three Detectable 2dBi (3 * 3 MIMO) Omni-Directional Antennas
	Universal Serial Bus (USB)	One USB 2.0 Interface Share Port; WCN Configuration	Two USB 2.0 Interfaces (3G Dongle Compatible) Share Port; WCN Configuration
System Performance	Firewall Throughput	70Mbps	130Mbps
	Concurrent Sessions	30,000	60,000
	New Sessions (Per Second)	300	600
	AES Throughput	Over 40Mbps	Over 80Mbps
	Policies	100 (each feature); 300 (firewall rule)	100 (each feature); 600 (firewall rule)
Internet Connection		Static IP Address; Dynamic IP Address; Point-to-Point over Ethernet (PPPoE); Point-to-Point Tunneling Protocol (PPTP); Layer 2 Tunneling Protocol (L2TP); Japan Multiple/Unnumbered PPPoE; Russia Dual Access L2TP; 3G USB Adapter (Applicable for DSR-1000N)	
Firewall System		Transparent Mode; Network Address Translation (NAT) Mode; Router Mode; Dynamic Routing: Routing Information Protocol (RIP), Open Shortest Path First (OSPF) Network Address Translation (NAT) Endpoint Filtering; H.323 NAT Traversal; Application Layer Gateway (ALG); VPN Pass-Through; Pre-Defined Service Definitions	
Networking		DHCP Server; DHCP Relay; DHCP Reservation; DHCP Client List; Universal Plug and Play (UPnP); Multicast Stream	
Wireless		Wireless Security Mode: Wired Equivalent Privacy (WEP), Wi-Fi Protected Access-Personal Mode (WPA-Personal), Wi-Fi Protected Access-Enterprise Mode (WPA-Enterprise); Transmission Speed: Auto Adjustment, Manual Adjustment; WLAN Partition; Power Save; Request-to-Send (RTS) Threshold; Fragment Threshold	
Internet Protocol Version 6 (IPv6)		Native IPv6 Connectivity; Static IPv6 Address and Route; DHCPv6; IPv6 over PPPoE; IPv6 in IPv4 Tunneling; 6to4 Tunneling; Teredo Tunneling; Link-Local Connectivity	
Virtual Private Network (VPN)		Encryption Methods: DES/3DES/AES/Twofish/Blowfish/CAST-128/NULL; IPSec NAT Traversal; Dedicated VPN Tunnels: 35 (DSR-500N), 70 (DSR-1000N); SSL VPN Tunnel: 10 (DSR-500N), 20 (DSR-1000N); Hub and Spoke; DHCP over IPSec; Dynamic Authentication; Perfect Forward Secrecy	
Advanced Functions		Port-Forwarding; Application Rules; Website Filter; Intrusion Prevention System (IPS); Anti-Spoof Checking; Anti-Denial of Service (Anti-DoS); Traffic Management	
Physical & Environment	Dimension (W x D x H)	Desktop; 1U Height; 280 x 180 x 44mm	
	Power Input	Internal Power Supply	
	Operating Temperature	0 to 40 °C	
	Storage Temperature	-20 to 70 °C	
Certification	Operating Humidity	5% to 95% Non-Condensing	
	EMI-EMC Compliance	FCC Class B; CE Class B; VCCI*; C-Tick*; IC*	
	Safety Compliance	cUL; LVD (EN60950-1)	

VPN Routers



D-Link VPN Routers provide an easy-to-deploy VPN and firewall solution that comes with superior performance and security designed for the Small Office/Home Office (SOHO) market. With small business becoming increasingly network-dependent, the need to invest in a reliable security solution is crucial. D-Link VPN routers offer high return on investment through robust security features, flexible configuration, and superior network protection for SOHO networks.

D-Link Load Balancing Router, DI-LB604, has the ability to connect up to two Internet connections, the total available bandwidth doubles in capacity and results in a tremendous increase in network efficiency and user productivity. Dual WAN ports also provide a fast-acting failover response mechanism. With businesses becoming increasingly network-dependent, the need to invest in a reliable network solution is crucial. With load balancing capabilities and advanced firewall protection, DI-LB604 offers high return on investment for any small business.

- Network Firewall
- VPN Server
- Content Manager
- Network Access Control
- Transparent Firewall Mode
- Network Address Translation (NAT)
- Stateful Packet Inspection (SPI)
- Internet Protocol Security (IPSec)
- Point-to-Point Tunneling Protocol (PPTP)
- Layer 2 Tunneling Protocol (L2TP)
- Outbound Load Balancing
(Applicable on DI-LB604 only)

DIR-130

- 10/100BASE-TX x 1 (WAN)
- 10/100BASE-TX x 8 (LAN)
- External Power Adapter

DIR-330

- 10/100BASE-TX x 1 (WAN)
- 10/100BASE-Tx x 4 (LAN)
- IEEE 802.11g Wireless LAN
- USB 2.0 Port x 1
- 2dBi Dipole Antenna x 2
- Detectable Antenna with RP-SMA Interface
- External Power Adapter

DI-LB604

- 10/100BASE-TX x 2 (WAN)
- 10/100BASE-TX x 4 (LAN)
- External Power Adapter

VPN Routers

Model	DIR-130		DIR-330	
Interface	WAN	One 10/100BASE-TX Port for xDSL/Cable Connection		
	Wired LAN	Eight 10/100BASE-TX LAN Connections		
	Wireless LAN	Four 10/100BASE-TX LAN Connections IEEE 802.11b/g (2.4GHz) Wireless LAN 2dBi Detachable Dipole Antennas		
	Universal Serial Bus (USB)	- One USB 2.0 Interface		
Firewall System	Layer 3 Mode: Route Mode, Network Address Translation (NAT) Mode; Network Address Translation (NAT); Port Address Translation (PAT); Port Forwarding;			
Virtual Private Network (VPN) Security	Internet Protocol Security (IPSec) LAN-to-LAN / Remote User; Point-to-Point Tunneling Protocol (PPTP) / Layer 2 Tunneling Protocol (L2TP) Server/Client; IPSec/PPTP/L2TP Pass-through; IPSec NAT-Traversal; VPN Tunnels (IPSec/PPTP/L2TP): 25 SSL VPN Tunnel: 10; Remote Access IPSec Tunnel: 100; Encryption Transform: DES, 3DES, AES, CAST-128, Twofish-128, Blowfish; Extended Authentication (XAUTH) for IPSec Authentication			
Firewall Security	Stateful Packet Inspection (SPI); Network Address Translation (NAT); Internal User Database: 20 Records			
Network Service	Static IP Address; DHCP Client for WAN Interface; Internal DHCP Server; Point-to-Point Protocol over Ethernet (PPPoE) for xDSL; Static Routes; Domain Name System (DNS) Resolving of Remote Gateway; Dynamic DNS; DNS Relay; Russian PPPoE/PPTP (Dual Access); Syslog Support; E-mail Alert; Bandwidth Control			
Device Management	Via Internet Explorer 6 or Later, or other Java-enabled Browser			
Physical & Environment	Dimension (W x D x H)	190.5 x 119.38 x 30.48 mm		193 x 116.8 x 30.5 mm
	Weight	303.9 grams		303.9 grams
	Power Input	Via External Power Adapter		
	Operating Temperature	0°C 55°C		
	Operating Humidity	95% Maximum (Non-condensing)		
Certification	FCC Class B, CE, C-Tick, VCCI, IC, VPNC		FCC Class B, CE, C-Tick, VCCI, IC, TELEC, VPNC	

Model	DI-LB604			
Interface	Wide Area Network (WAN)	Two 10/100BASE-TX Port for xDSL/Cable Connection		
	Local Area Network (LAN)	Four 10/100BASE-TX LAN Connections		
Protocol	Security	Network Address Translation (NAT); User/Password Authentication Protocol (UPAP); Challenge Handshake Authentication Protocol (CHAP)		
	Network	Transmission Control Protocol / Internet Protocol (TCP/IP); Hypertext Transfer Protocol (HTTP); Dynamic Host Configuration Protocol (DHCP); Point-to-Point Protocol (PPP); User/Password Authentication Protocol (UPAP); Point-to-Point over Ethernet (PPPoE); Multi-session PPPoE; Internet Control Message Protocol (ICMP); Address Resolution Protocol (ARP) Proxy		
	Connection	Static IP; Dynamic IP; PPPoE; Point-to-Point Tunneling Protocol (PPTP)		
Outbound Load Balance & Backup	Outbound Load Balance by Byte, Packet, Session; Auto Backup Connection			
Virtual Private Network (VPN)	Point-to-Point Tunneling Protocol (PPTP) Pass-through; Internet Protocol Security (IPSec) Pass-through			
VPN Security	Internet Key Exchange (IKE) Phase 1	Cipher Algorithm Type Key Exchange: Triple Data Encryption Standard (3DES); Message Digest for Key Exchange: Message Digest Algorithm (MD5); Authentication Method: Pre-Shared Key; Diffie-Hellman (DH) Group: 2; IKE Security Association (SA) Lifetime: 120 minutes; IKE Negotiation Mode: Main		
	Internet Key Exchange (IKE) Phase 2	Internet Protocol Security (IPSec) Type: Encapsulating Security Payload (ESP) Cipher Algorithm: Triple Data Encryption Standard (3DES); Message Digest Algorithm: MD5; Compression Algorithm: None; IPSec Tunnel Lifetime: 120 minutes		
	VPN Encryption Policy	Security Association Granularity: Net; IPSec Mode: Internet Key Exchange (IKE)		
Firewall	Network Address Translation (NAT); Network Address Port Translation (NAPT); Denial of Service (DoS); Access Control by Group; Stateful Packet Inspection (SPI); Internet Control Message Protocol (ICMP) Filter for WAN; Ping to Death; Port Scan; Packet Filter; Uniform Resource Locator (URL) Block			
Security Management	Administrator Passwords; Authentication with UPAP and CHAP for PPPoE Management through WAN and LAN Port; HTTP Web-based Management; Email Alert of WAN Failure; Syslog			
Applications	MSN & Netmeeting; H.323 Voice over IP (VoIP) Products; Multi-Session PPPoE; Simple Mail Transfer Protocol (SMTP) Bind; Simple Network Management Protocol (SNMP); Universal Plug-and-Play (UPnP); NAT Status & Connection List; Virtual Server; Multi Demilitarized Zone (Multi-DMZ); Dial-on-Demand & Auto-Disconnect; Maximum Transmission Unit (MTU) Changeable for WAN; MAC Address Clone; Dynamic Domain Name System (DNS); Quality of Service (QoS)			
Firmware Upgrade	HyperText Transfer Protocol (HTTP) Web-based Download; Trivial File Transfer Protocol (TFTP) Download			
Physical & Environment	Dimension (W x D x H)	191 x 117 x 33.6 mm		
	Weight	285 grams		
	Power Input	Via External Power Adapter		
	Operating Temperature	0°C to 55°C		
	Operating Humidity	95% Maximum (Non-Condensing)		

NetDefend Firewall Selection Matrix

	IPS Firewalls				UTM Firewalls					
	DFL-210	DFL-800	DFL-1600	DFL-2500	DFL-160	DFL-260	DFL-860	DFL-1660	DFL-2560	DFL-2560G
Interface										
Ethernet WAN Port	1	2	-	-	1	1	2	-	-	-
Ethernet DMZ Port	1	1	-	-	1	1	1	-	-	-
Ethernet LAN Port	4	7	-	-	4	4	7	-	-	-
User-Configurable Gigabit RJ-45 Port	-	-	6	8	-	-	-	6	10	6
User-Configurable Gigabit SFP Port	-	-	-	-	-	-	-	-	-	4
System Performance										
Firewall Throughput (Mbps)	80	150	320	600	70	80	150	1,200	2,000	2,000
VPN Throughput (Mbps)	25	45	120	300	25	25	45	350	1,000	1,000
Concurrent Sessions	10K	20K	400K	1,000K	6K	10K	20K	600K	1,500K	1,500K
Policies	500	1,000	2,500	4,000	300	500	1,000	4,000	6,000	6,000
Firewall System										
Transparent Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Network & Port Address Translation (NAT, PAT)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OSFP Dynamic Routing Protocol	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Time-Scheduled Policies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Proactive Network Security (ZoneDefense)	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
ICSA Firewall Corporate Level Certified	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Networking										
DHCP Server / Client	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DHCP Relay / Policy-based Routing	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
IEEE 802.1Q Virtual LAN (VLAN)	8	16	128	1,024	No	8	16	1,024	2,048	2,048
IP Multicast (IGMPv3)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Virtual Private Network (VPN)										
DES/3DES/AES/TwoFish/Blowfish/CAST-128	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dedicated VPN Tunnels	100	200	1,200	2,500	30	100	200	2,500	5,000	5,000
PPTP/L2TP Server / IPSec NAT Traversal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hub and Spoke	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
ICSA IPSec 1.3 Enhanced Certified	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
System Management										
Web-Based User Interface (HTTP/HTTPS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Command Line/SSH	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Configuration Backup/Restore	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
User Authentication										
Built-in Database	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
External RADIUS / LDAP (IPSec only) Server	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
External Microsoft IAS Server	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
XAUTH for IPSec Authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Logging and Monitoring										
Internal / External Log (Syslog Server)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Email Notification, Event Log & Alarm	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SNMP v1, v2c	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Traffic Load Balancing										
Outbound Traffic Load Balancing	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Server Load Balancing	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Algorithms for Outbound Traffic Load Balancing										
Round-Robin, Destination-Based, Spillover	Yes ¹	Yes ¹	Yes ¹	Yes ¹	No	Yes ¹	Yes ¹	Yes	Yes	Yes
Bandwidth Management										
Policy-Based Traffic Shaping	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Guaranteed / Maximum / Priority Bandwidth	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Dynamic Bandwidth Balancing	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Bandwidth Management in VPN Tunnel	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
High Availability (HA)										
WAN Fail-Over / Traffic Redirect at Fail-Over	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Device / Link Failure Detection	No	No	Yes	Yes	No	No	No	Yes	Yes	Yes
Intrusion Detection & Prevention System (IDP/IPS)										
Automatic Pattern Update	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DoS, DDoS Protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IP Blacklist by Threshold or IPS/IDP	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Content Filtering										
HTTP / Script / Email Type	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
External Database Content Filtering	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Anti-Virus										
Real Time AV Scanning / Unlimited File Size	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Scans VPN Tunnels / Compression File	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Signature Licensor (Kaspersky)	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Automatic Pattern Update	Yes ²	Yes ²	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Email Security										
SMTP & POP3 Protocol Support	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
MIME Header Check for File Extension Filtering	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Email Rate & Size Protection (SMTP Protocol only)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Anti-Spam (for SMTP Protocol only)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
IM/P2P Blocking	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

¹Available in Firmware 2.25.01

²Available in Firmware 2.26.00

IP SURVEILLANCE

Keeping an eye on the business anywhere in the world is what all businesses need. Choosing to implement IP surveillance offers the advantage of leveraging existing network infrastructure to maximize investment. Products under this category include Network Cameras, Network Video Recorders, Video Server and Surveillance Starter Kits.



Fixed Network Cameras

D-Link offers a wide range of fixed network camera series to meet different surveillance requirements from indoor to outdoor and from day to night. Our fixed network cameras are reliable, economical and of high-quality. The cameras can be connected to a network to provide a fixed viewing direction once they are mounted.

DCS-3110

Megapixel PoE Camera



Main Features

- MPEG4/MJPEG Dual-Stream
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- 1.3 Megapixel Progressive Color CMOS Sensor
- Vari-Focal DC-Iris CS Mount Lens
- IR Cut Removable (ICR) Filter
- CF Card Slot
- Digital Input/Digital Output
- Audio Line In/Out

Optional Accessories

- DCS-45/50/60 (Outdoor Enclosure)

DCS-3410

PoE D&N Camera



Main Features

- MPEG4/MJPEG Multi-Profile
- Day and Night monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- CCD Sensor, CS Mount Lens
- Dual-Band Filter
- Digital Input/Digital Output
- BNC Video Output
- Audio Line In/Out

Optional Accessories

- DCS-25 (Vari-Focal Auto-Iris Lens)
- DCS-45/50/60 (Outdoor Enclosure)

DCS-3411

PoE D&N Camera



Main Features

- H.264/MPEG-4/MJPEG Multi-Profile Compression
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- CMOS Sensor, CS Mount Lens
- IR Cut Removable (ICR) Filter
- SD Card Slot
- Digital Input/Digital Output
- BNC Output, Audio Line In/Out

Optional Accessories

- DCS-25 (Vari-Focal Auto-Iris Lens)
- DCS-45/50/60 (Outdoor Enclosure)

DCS-3415

18x PoE Camera



Main Features

- MPEG4/MJPEG Dual-Stream
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- Sony Progressive Scan CCD Sensor
- IR Cut Removable (ICR) Filter
- CF Card Slot
- Digital Input/Digital Output
- Audio Line In/Out

Optional Accessories

- DCS-60 (Outdoor Enclosure)

Fixed Network Cameras

Model		DCS-3110	DCS-3410	DCS-3411	DCS-3415
IEEE Standard	Wired	802.3, 802.3u, 802.3af			
	Wireless	-			
Wired Network	Port Interface	10/100BASE-TX			
	Power over Ethernet	Yes			
Camera Specification	Image Sensor	1/4" 1.3 Megapixel Progressive Color CMOS	1/3" CCD	1/4" CMOS	1/4" Sony Progressive Scan CCD
	Lens	Vari-Focal, DC-Iris CS Mount	CS Mount	CS Mount	Fixed
	Focal Length	4.5 ~ 10mm	6mm	6mm	4.1 ~ 73.8mm
	F-Number	F1.6	F1.6	F1.8	F1.4 (Wide); F3.0 (Tele)
	Minimum Illumination	1.5 Lux	0.3 Lux (Typical) 0 Lux (10m with IR Lens)	0.5 Lux (typical) 0 Lux (10m with IR Lens)	1.61 Lux (typical) 0.38 Lux (with ICR On)
	Angle of View (Horizontal)	80.5°~37°	45°	41°	48° ~ 2.8°
	Angle of View (Vertical)	60° ~ 28°	34°	31°	-
	Digital Zoom	4x	16x	16x	4x
	Optical Zoom	-	-	-	18x
	Day & Night	IR Cut Removable Filter	Dual-Band Filter	IR Cut Removable Filter	IR Cut Removable Filter
Video Management	Video Format	MPEG-4 / MJPEG	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG
	Dual Stream	Yes	-	-	Yes
	Multi-Profile	-	Yes	Yes	-
	Video Bit Rate	20kbps ~ 4Mbps	64kbps ~ 2Mbps	64kbps ~ 2Mbps	20kbps ~ 4Mbps
	Max. Video Resolution	1280 x 1024 (MJPEG) 640 x 480 (MPEG-4)	704 x 480 (NTSC) 704 x 576 (PAL)	704 x 480 (NTSC) 704 x 576 (PAL)	640 x 480
	Frame Rate (fps)	8 (MJPEG); 30 (MPEG-4)	30 (NTSC); 25 (PAL)	30 (NTSC); 25 (PAL)	30
	Automatic Electronic Shutter	Yes	Yes	Yes	Yes
	Automatic Gain Control	Yes	Yes	Yes	Yes
	Automatic White Balance	Yes	Yes	Yes	Yes
	Electronic Shutter (Seconds)	1/5~1/15,000	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	1/2~1/10,000
	Configurable Privacy Mask	-	-	-	-
	Flip & Mirror	Yes	Yes	Yes	Yes
	Mobile Video	3GPP	3GPP	3GPP	3GPP
	Monitor Output	-	BNC	BNC	-
	Audio Management	2-Way Audio	Yes	Yes	Yes
Built-in Microphone		Yes	Yes	Yes	Yes
External Microphone (Line In)		Yes	Yes	Yes	Yes
External Speaker (Line Out)		Yes	Yes	Yes	Yes
Audio Recording		Yes	Yes	Yes	Yes
Audio Codec		AAC / GSM-AMR	GSM-AMR / ADPCM	GSM-AMR / ADPCM	AAC / GSM-AMR
Sampling Rate		ACC: 16~128kbps GSM-AMR: 4.75~12.2kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps	ACC: 16~128kbps GSM-AMR: 4.75~12.2kbps
Audio Frequency		20 ~ 20,000Hz	50 ~ 16,000Hz	20 ~ 20,000Hz	20 ~ 20,000Hz
Audio Mute	Hardware & Software	Software	Software	Hardware & Software	
Event Management	Motion Detection	Yes	Yes	Yes	Yes
	Event Triggered Recording	Yes	Yes	Yes	Yes
	Email Alarm Notification	Yes	Yes	Yes	Yes
	Pre/Post Alarm Buffer	Yes	-	-	Yes
Storage Management	Direct to NAS	Yes	Yes	Yes	Yes
	Direct to Card Slot	Yes	-	Yes	Yes
	External Card Slot	CF Card	-	SD Card	CF Card
I/O Connector	Digital Input / Digital Output (DI/DO)	1 / 1	2 / 1	2 / 1	1 / 1
	RS-485 Interface	Yes	Yes	Yes	Yes
Outdoor Usage		With Outdoor Enclosure DCS-45 / DCS-50 / DCS-60			With Outdoor Enclosure DCS-60
Physical and Environment	Dimension (W x D x H)	80 x 143.8 x 62 mm	78 x 177 x 60 mm	78 x 177 x 60 mm	80 x 143.5 x 92.4 mm
	Weight	521 grams	577.8 grams	577.8 grams	1012 grams
	Power Input	Via External Power Adapter or Power over Ethernet (PoE)			
	Max. Power Consumption	4W	12.5W	5.484W	5.4W
	Power over Ethernet (IEEE 802.3af)	Class 2/3 ¹	Class 2/3 ¹	Class 2/3 ¹	Class 2/3 ¹
	Operating Temperature	0 to 40°C			
	Storage Temperature	-20 to 70°C			
Humidity	20% to 80% Non-Condensing				
Certification	FCC; CE; C-Tick	FCC, CE, C-Tick, IC	FCC, CE, C-Tick, IC, LVD	FCC; CE; C-Tick	

¹Include Power Output for External Devices

Fixed Network Cameras

DCS-3430 Wireless N D&N Camera



Main Features

- MJPEG/MPEG4/H.264 Multi-Profile Compression
- 4 Concurrent Video Profiles
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for Network NAS

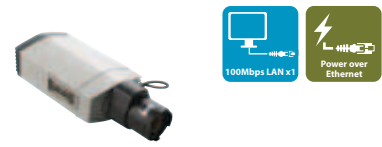
Physical Features

- CMOS Sensor, CS Mount Lens
- IR Cut Removable (ICR) Filter
- SD Card Slot
- Digital Input/Digital Output
- BNC Output, Audio Line In/Out

Optional Accessories

- DCS-25 (CS Mount Vari-Focal Auto-Iris Lens)
- DWL-P50 (PoE Splitter)

DCS-3710 HDTV WDR Camera



Main Features

- MPEG4/MJPEG Multi-Profile
- 3GPP Mobile Surveillance
- Low-Light Recording
- Samba Client for NAS
- HTTPS, Privacy Mask
- HDTV Resolution
- Wide Dynamic Range (WDR)

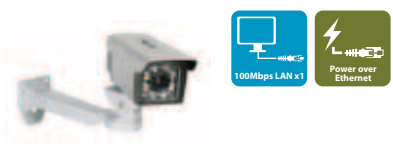
Physical Features

- 1.3 Megapixel WDR Progressive Scan
- CMOS Sensor
- Vari-Focal DC-Iris Lens
- IR Cut Removable (ICR) Filter
- SD Card Slot
- Digital Input/Digital Output
- BNC Output, Audio Line In/Out

Optional Accessories

- DCS-45/50/60 (Outdoor Enclosure)

DCS-7410 D&N Outdoor PoE Camera



Main Features

- MPEG4/MJPEG Multi-Profile
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- Color CCD Sensor
- Dual-Band Filter
- Built-in 30m IR LED
- Digital Input/Digital Output
- BNC Video Output
- Audio Line In/Out
- IP66 Certified Casing for Outdoor Use

DCS-7510 D&N Outdoor PoE Camera



Main Features

- MPEG4/MJPEG Multi-Profile
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- Color CCD Sensor
- Vari-Focal Auto-Iris Lens
- IR Cut Removable (ICR) Filter
- Built-in 50m IR LED
- Digital Input/Digital Output
- BNC Video Output
- Audio Line In/Out
- IP66 Certified Casing for Outdoor Use

Fixed Network Cameras

Model		DCS-3430	DCS-3710	DCS-7410	DCS-7510	
IEEE Standard	Wired	802.3, 802.3u		802.3, 802.3u, 802.3af		
	Wireless	802.11n, 802.11g		-		
Wired Network	Port Interface		10/100BASE-TX			
	Power over Ethernet	-		Yes		
Wireless Network	Frequency Range	2.412~2.4835GHz		-		
	Data Rate	802.11n: MCS0~MCS15 802.11g: 6~54Mbps		-		
	Antenna	2dBi Dipole		-		
Camera Specification	Image Sensor	1/4" CMOS	1/3" 1.3 Megapixel WDR Progressive Scan CMOS	1/3" Color CCD	1/3" Color CCD	
	Lens	CS Mount	Vari-Focal, DC Iris	Fixed	Vari-Focal Auto Iris	
	Focal Length	6mm	2.8 ~ 12mm	12mm	9 ~ 22mm	
	F-Number	F1.8	F1.3	F1.4	F1.5~360	
	Minimum Illumination	0.5 Lux (typical) 0 Lux (10m with IR Lens)	0.1 Lux (Color) 0.02 Lux (B/W)	0.7 Lux	1 Lux	
	Angle of View (Horizontal)	41°	102.2° ~ 23.7°	22°	31° ~ 13°	
	Angle of View (Vertical)	31°	-	17°	23° ~ 10°	
	Digital Zoom	16x	10x	16x	16x	
	Optical Zoom	-	-	-	-	
	Day & Night	IR Cut Removable Filter	IR Cut Removable Filter	Dual-Band Filter IR LEDs (30m)	IR Cut Removable Filter IR LEDs (50m)	
Video Management	Video Format	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	
	Dual Stream	-	-	-	-	
	Multi-Profile	Yes	Yes	Yes	Yes	
	Video Bit Rate	64kbps ~ 2Mbps 704 x 480 (NTSC) 704 x 576 (PAL)	64kbps ~ 8Mbps	64kbps ~ 2Mbps 720 x 480 (NTSC) 720 x 576 (PAL)	64kbps ~ 2Mbps 720 x 480 (NTSC) 720 x 576 (PAL)	
	Max. Video Resolution	704 x 480 (NTSC) 704 x 576 (PAL)	1280 x 960	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	
	Frame Rate (fps)	30 (NTSC); 25 (PAL)	30	30 (NTSC); 25 (PAL)	30 (NTSC); 25 (PAL)	
	Wide Dynamic Range (WDR)	-	Yes	-	-	
	Automatic Electronic Shutter	Yes	Yes	Yes	Yes	
	Automatic Gain Control	Yes	Yes	Yes	Yes	
	Automatic White Balance	Yes	Yes	Yes	Yes	
	Electronic Shutter (Seconds)	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	1/2~100,000	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	1/60~1/100,000 (NTSC) 1/50~1/110,000 (PAL)	
	Configurable Privacy Mask	-	3 Zones	-	-	
	Flip & Mirror	Yes	Yes	Yes	Yes	
	Mobile Video	3GPP	3GPP	3GPP	3GPP	
Monitor Output	BNC	BNC	BNC	BNC		
Audio Management	2-Way Audio	Yes	Yes	Yes	Yes	
	Built-in Microphone	Yes	-	-	-	
	External Microphone (Line In)	Yes	Yes	Yes	Yes	
	External Speaker (Line Out)	Yes	Yes	Yes	Yes	
	Audio Recording	Yes	Yes	Yes	Yes	
	Audio Codec	GSM-AMR / ADPCM	ADPCM	GSM-AMR / ADPCM	GSM-AMR / ADPCM	
	Sampling Rate	GSM-AMR: 12.2kbps ADPCM: 8kbps	ADPCM: 8kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps	
	Audio Frequency	20 ~ 20,000Hz	20 ~ 20,000Hz	20 ~ 20,000Hz	20 ~ 20,000Hz	
Audio Mute	Software	Software	Software	Software		
Event Management	Motion Detection	Yes	Yes	Yes	Yes	
	Event Triggered Recording	Yes	Yes	Yes	Yes	
	Email Alarm Notification	Yes	Yes	Yes	Yes	
	Pre/Post Alarm Buffer	-	Yes	-	-	
Storage Management	Direct to NAS	Yes	Yes	Yes	Yes	
	Direct to Card Slot	Yes	Yes	-	-	
	External Card Slot	SD Card	SD Card	-	-	
I/O Connector	Digital Input / Digital Output (DI/DO)	2 / 1	2 / 1	2 / 1	2 / 1	
	RS-485 Interface	Yes	Yes	Yes	Yes	
Outdoor Usage	-	With Outdoor Enclosure DCS-45/DCS-50/DCS-60	IP66 Certified Weather Proof Casing			
Physical and Environment	Dimension (W x D x H)	78 x 177 x 60 mm	80 x 140 x 53 mm	8.79 x 240 x 84.1 mm	8.79 x 240 x 109.1 mm	
	Weight	577.8 grams	576 grams	1.63 kg	1.72 kg	
	Power Input	Via External Power Adapter			Via External Power Adapter or Power over Ethernet (PoE)	
	Max. Power Consumption	6.9W	2W	7.88W	7.95W	
	Power over Ethernet (IEEE 802.3af)	PoE Splitter Required ²	Class 2/3 ¹	Class 2/3 ¹	Class 2/3 ¹	
	Operating Temperature	0 to 40°C				
	Storage Temperature	-20 to 70°C				
Humidity	20% to 80% Non-Condensing					
Certification	FCC, CE, C-Tick, IC, LVD		FCC, CE, C-Tick	FCC, CE, C-Tick, IC	FCC, CE, C-Tick, IC	

¹ Include Power Output for External Devices² PoE Splitter - DWL-P50 (Refer to Network Peripheral-Power Over Ethernet Section)

PTZ Network Cameras

D-Link PTZ network cameras feature motorized pan, tilt and digital zoom for greater remote viewing options.

DCS-5300 Wired PTZ Camera



Main Features

- H.263+ (MPEG-4 Short Header Mode)
- 2-Way Audio
- Motion Detection

Physical Features

- Color CCD Sensor
- Digital Input/Digital Output
- AV Video Output
- Audio Line In/Out

Optional Accessories

- DCS-70 (Outdoor Enclosure)

DCS-5300G Wireless G PTZ Camera



Main Features

- H.263+ (MPEG-4 Short Header Mode)
- 2-Way Audio
- Motion Detection

Physical Features

- Color CCD Sensor
- Digital Input/Digital Output
- AV Video Output
- Audio Line In/Out

DCS-5605 H.264 PTZ Camera



Main Features

- MJPEG/MPEG4/H.264 Multi-Profile Compression
- 4 Concurrent Video Profiles
- Day and Night Monitoring
- 3GPP/RTSP Mobile Surveillance
- 2-Way Audio, Privacy Mask
- Samba Client for NAS

Physical Features

- Samsung De-Interlace CCD Sensor
- IR Cut Removable (ICR) Filter
- MicroSD Card Slot
- Digital Input/Digital Output
- RS-485 Interface
- AV Video Out Output
- Audio Line In/Out

DCS-5610 PoE PTZ Camera



Main Features

- MPEG4/MJPEG Dual-Stream
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- Sony Progressive Color CCD Sensor
- Digital Input/Digital Output
- Audio Line In/Out

Optional Accessories

- DCS-70 (Outdoor Enclosure)

DCS-5635 Wireless N PTZ Camera



Main Features

- MJPEG/MPEG4/H.264 Multi-Profile Compression
- 4 Concurrent Video Profiles
- Day and Night Monitoring
- 3GPP/RTSP Mobile Surveillance
- 2-Way Audio, Privacy Mask
- Samba Client for NAS

Physical Features

- Samsung De-Interlace CCD Sensor
- IR Cut Removable (ICR) Filter
- MicroSD Card Slot
- Digital Input/Digital Output
- RS-485 Interface
- AV Video Out Output
- Audio Line In/Out

PTZ Network Cameras

Model		DCS-5300	DCS-5300G	DCS-5605	DCS-5610	DCS-5635
IEEE Standard	Wired		802.3, 802.3u		802.3, 802.3u, 802.3af	802.3, 802.3u
	Wireless	-	802.11g	-	-	802.11n, 802.11g
Wired Network	Port Interface	10/100BASE-TX				
	Power over Ethernet	-			Yes	-
Wireless Network	Frequency Range	-	2.4~2.4835GHz	-	-	2.412~2.4835GHz
	Data Rate	-	802.11g: 6~54Mbps	-	-	802.11n: MCS0~15 802.11g: 6~54Mbps
	Antenna	-	2dBi Dipole	-	-	Embedded Antenna PIFA
Camera Specification	Image Sensor	1/4" Color CCD	1/4" Color CCD	1/3" Samsung De-Interlace CCD	1/4" Sony Progressive Color CCD	1/3" Samsung De-Interlace CCD
	Lens	Fixed	Fixed	Fixed	Fixed	Fixed
	Focal Length	3.4mm	3.4mm	3.8 ~ 38mm	2.8 ~ 7.3mm	3.8 ~ 38mm
	F-Number	F2.0	F2.0	F1.8	F1.9~200	F1.8
	Minimum Illumination	1 Lux	1 Lux	0.7 (Color) 0.02 (B/W)	0.1 Lux (typical) 0 Lux (15m with IR Lens)	0.7 (Color) 0.02 (B/W)
	Angle of View (Horizontal)	53°	53°	51° ~ 6°	73.4° ~ 28.7°	51° ~ 6°
	Angle of View (Vertical)	46°	46°	40° ~ 4°	54.7° ~ 21.6°	40° ~ 4°
	Pan Range	+135° to -135°	+135° to -135°	+165° to -165°	+150° to -150°	+165° to -165°
	Tilt Range	+90° to -45°	+90° to -45°	+87° to -34°	+90° to -45°	+87° to -34°
	Digital Zoom	4x	4x	16x	4x	16x
	Optical Zoom	-	-	10x	2.6x	10x
Day & Night	-	-	IR Cut Removable Filter	-	IR Cut Removable Filter	
Video Management	Video Format	H.263+ (MPEG-4 Short Header Mode)	H.263+ (MPEG-4 Short Header Mode)	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG
	Dual Stream	-	-	-	Yes	-
	Multi-Profile	-	-	Yes	-	Yes
	Video Bit Rate	64kbps ~ 1.2Mbps	64kbps ~ 1.2Mbps	64kbps ~ 2Mbps	20kbps ~ 4Mbps	64kbps ~ 2Mbps
	Max. Video Resolution	704 x 480 (NTSC) 704 x 576 (PAL)	704 x 480 (NTSC) 704 x 576 (PAL)	704 x 480 (NTSC) 704 x 576 (PAL)	640 x 480	704 x 480 (NTSC) 704 x 576 (PAL)
	Frame Rate (fps)	30	30	30 (NTSC); 25 (PAL)	30	30 (NTSC); 25 (PAL)
	Automatic Electronic Shutter	Yes	Yes	Yes	Yes	Yes
	Automatic Gain Control	Yes	Yes	Yes	Yes	Yes
	Automatic White Balance	Yes	Yes	Yes	Yes	Yes
	Electronic Shutter (Seconds)	1/60 ~ 1/15,000	1/60 ~ 1/15,000	1/60 ~ 1/100,000 (NTSC) 1/50 ~ 1/110,000 (PAL)	1/60 ~ 1/15,000	1/60 ~ 1/100,000 (NTSC) 1/50 ~ 1/110,000 (PAL)
	Privacy Mask	-	-	3 Zones	-	3 Zones
	Flip & Mirror	Yes	Yes	Yes	Yes	Yes
	Mobile Video	-	-	3GPP, RTSP	3GPP	3GPP, RTSP
	Monitor Output	AV	AV	AV	-	AV
Audio Management	2-Way Audio	Yes	Yes	Yes	Yes	Yes
	Built-in Microphone	Yes	Yes	Yes	Yes	Yes
	External Microphone (Line In)	Yes	Yes	Yes	Yes	Yes
	External Speaker (Line Out)	Yes	Yes	Yes	Yes	Yes
	Audio Recording	Yes	Yes	Yes	Yes	Yes
	Audio Codec	ADPCM	ADPCM	GSM-AMR / ADPCM	AAC / GSM-AMR	GSM-AMR / ADPCM
	Sampling Rate	ADPCM: 24kbps	ADPCM: 25kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps	ACC: 16~128kbps GSM-AMR: 4.75~12.2kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps
	Audio Frequency	-	-	50~16,000Hz	50~16,000Hz	50~16,000Hz
	Audio Mute	-	-	Software	Hardware & Software	Software
	Motion Detection	Yes	Yes	Yes	Yes	Yes
Event Management	Event Triggered Recording	Yes	Yes	Yes	Yes	Yes
	Email Alarm Notification	Yes	Yes	Yes	Yes	Yes
	Pre/Post Alarm Buffer	-	-	-	Yes	-
	Direct to NAS	-	-	Yes	Yes	Yes
Storage Management	Direct to Card Slot	-	-	Yes	-	Yes
	External Card Slot	-	-	MicroSD Card	-	MicroSD Card
I/O Connector	Digital Input / Digital Output (DI/DO)	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
	RS-485 Interface	-	-	-	-	-
Outdoor Usage	With Outdoor Enclosure DCS-70	-	-	-	With Outdoor Enclosure DCS-70	-
Physical and Environment	Dimension (W x D x H)	103.5x99x104mm	103.5x99x110.5mm	136.1x140.3x140.1 mm	103.5x104x118mm	136.1x140.3x140.1 mm
	Weight	343 grams	395 grams	810 grams	319 grams	855 grams
	Power Input	Via External Power Adapter or Power over Ethernet (PoE) (Applicable for DCS-5610)				
	Max. Power Consumption	7.8W	9.2W	11.92W	6W	13.37W
	Power over Ethernet (IEEE 802.3af)	-	-	-	Class 2	-
	Operating Temperature	0 to 40°C				
	Storage Temperature	-20 to 70°C				
Humidity	20% to 80% Non-Condensing					
Certification	FCC, CE, LVD	FCC, CE, LVD	FCC, CE, C-Tick, IC	FCC, CE, C-Tick	FCC, CE, C-Tick, IC	

Fixed Dome Network Cameras

D-Link high-performance fixed dome network cameras provide the necessary professional look and surveillance for business environments, and are especially popular with CCTV. They are equipped with progressive CMOS technology which delivers exceptional picture quality.

D-Link D-ViewCam software, which comes included with the cameras, provides the ability to view up to 32 camera sites concurrently with a single computer screen at a central location.

DCS-6110

Fixed Dome Camera



Main Features

- MPEG4/MJPEG Dual-Streaming
- 3GPP Mobile Surveillance
- Samba Client for NAS

Physical Features

- VGA Progressive CMOS Sensor
- Vari-Focal, Board Mount Lens
- Dual-Band Filter
- Digital Input/Digital Output

DCS-6111

Fixed Dome Camera



Main Features

- MPEG4/MJPEG Dual-Stream
- Day and Night Monitoring
- 3GPP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS
- HTTPS, IPv6, Privacy Mask
- Link Layer Topology Discovery
- Wide Dynamic Range (WDR)

Physical Features

- WDR VGA CMOS Sensor
- Vari-Focal, Board Mount lens
- Built-in 20m IR LED
- IR-Cut Removable (ICR) Filter
- Digital Input/Digital Output
- Audio Line In/Out
- 3-Axis Mechanical Design

DCS-6410

WDR D&N Fixed Dome Camera



Main Features

- MPEG4/MJPEG Multi-Profile
- Day and Night Monitoring
- 3GPP/RTSP Mobile Surveillance
- 2-Way Audio
- Samba Client for NAS

Physical Features

- CCD Sensor
- Dual-Band Filter
- Built-in 15m IR LED
- Digital Input/Digital Output
- RS-485 Interface
- RCA Video Output
- Audio Line In/Out

Fix Dome Network Cameras

Model		DCS-6110	DCS-6111	DCS-6410
IEEE Standard	Wired		802.3, 802.3u, 803.3af	
	Wireless		-	
Wired Network	Port Interface		10/100BASE-TX	
	Power over Ethernet		Yes	
Camera Specification	Image Sensor	1/4"VGA Progressive CMOS	1/4"WDR VGA CMOS	1/3" CCD
	Lens	Vari-Focal, Board Mount	Vari-Focal, Board Mount	Fixed
	Focal Length	3.7 ~ 12mm	3.3 ~ 12mm	4.3mm
	F-Number	F1.4~F2.8	F1.4~F2.9	F1.6
	Minimum Illumination	1.5 Lux	1.5 Lux	0.1 Lux (typical), 0 Lux (15m with IR Lens)
	Angle of View (Horizontal)	77° ~ 23° ~	63° ~ 18°	73.1°
	Angle of View (Vertical)	57° ~ 17°	47° ~ 13°	55.3°
	Pan Range	-	-	+170° to -170° (Manual)
	Tilt Range	-	-	+60° to -15° (Manual)
	Digital Zoom	4x	4x	16x
	Optical Zoom	-	-	-
	Day & Night	Dual-Band Filter	IR Cut Removable Filter IR LED (20m)	Dual-Band Filter IR LED (15m)
Video Management	Video Format	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG
	Dual Stream	Yes	Yes	-
	Multi-Profile	-	-	Yes
	Video Bit Rate	20kbps ~ 4Mbps	20kbps ~ 4Mbps	64kbps ~ 2Mbps
	Max. Video Resolution	640 x 480	640 x 480	704 x 480 (NTSC) 704 x 576 (PAL)
	Frame Rate (fps)	30	30	30 (NTSC); 25 (PAL)
	Wide Dynamic Range (WDR)	-	Yes	-
	Automatic Electronic Shutter	Yes	Yes	Yes
	Automatic Gain Control	Yes	Yes	Yes
	Automatic White Balance	Yes	Yes	Yes
	Electronic Shutter (Seconds)	1/5 ~ 1/15,000	1/5 ~ 1/15,000	1/60 ~ 1/100,000 (NTSC) 1/50 ~ 1/110,000 (PAL)
	Configurable Privacy Mask	-	5 Zones	-
	Flip & Mirror	Yes	Yes	Yes
	Mobile Video	3GPP	3GPP	3GPP, RTSP
Monitor Output	-	-	RCA	
Audio Management	2-Way Audio	-	Yes	Yes
	Built-in Microphone	-	-	-
	External Microphone (Line In)	-	Yes	Yes
	External Speaker (Line Out)	-	Yes	Yes
	Audio Recording	-	Yes	Yes
	Audio Codec	-	AAC / GSM-AMR	GSM-AMR / ADPCM
	Sampling Rate	-	ACC: 16~128kbps GSM-AMR: 4.75~12.2kbps	GSM-AMR: 12.2kbps ADPCM: 8kbps
	Audio Frequency	-	20~20,000Hz	50~16,000Hz
Audio Mute	-	Hardware & Software	Software	
Event Management	Motion Detection	Yes	Yes	Yes
	Event Triggered Recording	Yes	Yes	Yes
	Email Alarm Notification	Yes	Yes	Yes
	Pre/Post Alarm Buffer	Yes	Yes	-
Storage Management	Direct to NAS	Yes	Yes	Yes
	Direct to Card Slot	-	-	-
	External Card Slot	-	-	-
I/O Connector	Digital Input / Digital Output (DI/DO)	1 / 1	1 / 1	2 / 1
	RS-485 Interface	-	-	Yes
Outdoor Usage				
Physical and Environment	Dimension (W x D x H)	194 x 180 x 107 mm	194 x 180 x 107 mm	195 x 180 x 110 mm
	Weight	630 grams	650 grams	575.5 grams
	Power Input	Via External Power Adapter or Power over Ethernet (PoE)		
	Max. Power Consumption	3.6W	11W	11.04W
	Power over Ethernet (IEEE 802.3af)	Class 1	Class 3	Class 2/3 ¹
	Operating Temperature	0 to 40°C		
	Storage Temperature	-20 to 70°C		
Humidity	20% to 80% Non-Condensing			
Certification	FCC, CE, C-Tick	FCC, CE, C-Tick	FCC, CE, C-Tick, IC	

¹ Include Power Output for External Devices

PTZ Dome Network Cameras

These high speed dome cameras feature endless (360°) pan for wide range surveillance. Equipped with outdoor enclosure and ultra low lux CCD sensor and ICR support, this series is very useful for many applications. It has many preset points and an auto patrol cruise that can work as multiple camera inside or outside of the building.

DCS-6815

18x Speed Dome Camera



Main Features

- MPEG4/MJPEG
- Day and Night Monitoring
- Wide Dynamic Range (WDR)
- 256 Preset Points
- Auto Cruise PTZ
- Privacy Mask

Physical Features

- Sony Exview CCD Sensor
- Auto Iris Lens
- IR-Cut Removable (ICR) Filter
- Dual-Band Filter
- Digital Input x 8
- Digital Output x 1
- BNC Video Output
- Built-in Fan and Heater
- IP66 Certified Casing for Outdoor

DCS-6817

30x Speed Dome Camera



Main Features

- MPEG4/MJPEG
- Day and Night Monitoring
- Wide Dynamic Range (WDR)
- 256 Preset Points
- Auto Cruise PTZ
- Privacy Mask

Physical Features

- Sony Exview CCD Sensor
- Auto Iris Lens
- IR-Cut Removable (ICR) Filter
- Dual-Band Filter
- Digital Input x 8
- Digital Output x 1
- BNC Video Output
- Built-in Fan and Heater
- IP66 Certified Casing for Outdoor

DCS-6818

36x Speed Dome Camera



Main Features

- MPEG4/MJPEG
- Day and Night Monitoring
- Wide Dynamic Range (WDR)
- 256 Preset Points
- Auto Cruise PTZ
- Privacy Mask

Physical Features

- Sony Exview CCD Sensor
- Auto Iris Lens
- IR-Cut Removable (ICR) Filter
- Dual-Band Filter
- Digital Input x 8
- Digital Output x 1
- BNC Video Output
- Built-in Fan and Heater
- IP66 Certified Casing for Outdoor

PTZ Dome Network Cameras

Model		DCS-6815	DCS-6817	DCS-6818
IEEE Standard	Wired		802.3, 802.3u	
	Wireless		-	
Wired Network	Port Interface		10/100BASE-TX	
Camera Specification	Image Sensor	1/4" Exview CCD	1/4" Exview CCD	1/4" Exview CCD
	Lens	Auto Iris	Auto Iris	Auto Iris
	Focal Length	3.4~61.2mm	3.4~102mm	3.4~122.4mm
	F-Number	F1.4~F3.0	F1.4~F3.0	F1.4~F3.0
	Minimum Illumination	0.1 Lux (Color); 0.01 Lux (B/W)	0.1 Lux (Color); 0.01 Lux (B/W)	0.1 Lux (Color); 0.01 Lux (B/W)
	Angle of View (Horizontal)	60.8° ~ 3.6°	60.8° ~ 2.2°	60.8° ~ 1.8°
	Angle of View (Vertical)	-	-	-
	Pan Range	360°	360°	360°
	Tilt Range	-10° to 190°	-10° to 190°	-10° to 190°
	Preset Point	256	256	256
	Auto Cruise	Yes	Yes	Yes
	Manual Speed	0° to 90° per second	0° to 90° per second	0° to 90° per second
	Pan/Tilt Preset Accuracy	0.225°	0.225°	0.225°
	Pan/Tilt Preset Speed	5° to 400°	5° to 400°	5° to 400°
	Digital Zoom	12x	12x	12x
	Optical Zoom	18x	30x	36x
	Day & Night	IR Cut Removable Filter	IR Cut Removable Filter	IR Cut Removable Filter
Video Format	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	
Dual Stream	-	-	-	
Multi-Profile	-	-	-	
Video Bit Rate	Up to 3Mbps	Up to 3Mbps	Up to 3Mbps	
Video Management	Max. Video Resolution	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)
	Frame Rate (fps)	30 (NTSC); 25 (PAL)	30 (NTSC); 25 (PAL)	30 (NTSC); 25 (PAL)
	Wide Dynamic Range (WDR)	-	-	-
	Automatic Focus	Yes	Yes	Yes
	Automatic Gain Control	Yes	Yes	Yes
	Automatic White Balance	Yes	Yes	Yes
	Electronic Shutter (Seconds)	1/1 ~ 1/10,000	1/1 ~ 1/10,000	1/1 ~ 1/10,000
	Configurable Privacy Mask	16 Zones	16 Zones	16 Zones
	Auto Flip	Yes	Yes	Yes
	Mobile Video	-	-	-
Monitor Output	BNC	BNC	BNC	
Audio Management	2-Way Audio	-	-	-
	Built-in Microphone	-	-	-
	External Microphone (Line In)	-	-	-
	External Speaker (Line Out)	-	-	-
	Audio Recording	-	-	-
	Audio Codec	-	-	-
	Sampling Rate	-	-	-
	Audio Mute	-	-	-
Event Management	Motion Detection	Yes	Yes	Yes
	Event Triggered Recording	Yes	Yes	Yes
	Email Alarm Notification	Yes	Yes	Yes
	Pre/Post Alarm Buffer	Yes	Yes	Yes
Storage Management	Direct to NAS	-	-	-
	Direct to Card Slot	-	-	-
	External Card Slot	-	-	-
I/O Connector	Digital Input / Digital Output (DI/DO)	8 / 1	8 / 1	8 / 1
	RS-485 Interface	-	-	-
Outdoor Usage		IP66 Standard, Built-in Heater and Fan		
Physical and Environment	Dimension (Diameter x Height)	172 x 302.5 mm; 190 x 302.5mm (with sunshield)		
	Weight	6kg		
	Power Input	Via External Power Adapter		
	Max. Power Consumption	65W (with heater)		
	Operating Temperature	-40 to 50°C		
	Storage Temperature	-20 to 70°C		
Certification	Humidity	20% to 80% Non-Condensing		
		FCC, CE, C-Tick, RoHS		

Network Camera Outdoor Enclosures

D-Link SecuriCam network camera enclosures provide a cost-effective solution for protecting D-Link's network cameras from the rigors of outdoor use. The fixed enclosures include heavy-duty, angle-adjustable mounting brackets that can be used for securing the camera on a vertical or horizontal surface. These enclosures maximize the full potential of D-Link's network cameras for outdoor installations.

DCS-45

Outdoor Enclosure



Physical Features

- IP66 Certified
- Water-Resistant
- Dust-Proof

Supported Cameras

- DCS-3110
- DCS-3410
- DCS-3411
- DCS-3710

DCS-50

Outdoor Enclosure



Physical Features

- IP66 Certified
- Water-Resistant
- Dust-Proof
- Built-in Power Supply

Supported Cameras

- DCS-3110
- DCS-3410
- DCS-3411
- DCS-3710

DCS-60

Outdoor Enclosure



Physical Features

- IP44 Certified
- Water-Resistant
- Dust-Proof
- Built-in Power Supply
- Heater and Blower

Supported Cameras

- DCS-3110
- DCS-3410
- DCS-3411
- DCS-3415
- DCS-3710

DCS-70

Outdoor Enclosure



Physical Features

- IP66 Certified
- Water-Resistant
- Dust-Proof
- Built-in Power Supply
- Heater and Blower
- Dome Type

Supported Cameras

- DCS-5300
- DCS-5610

Network Camera Accessories

DCS-25

Vari-Focal Auto-Iris Lens



D-Link SecuriCam network camera lens provide a cost-effective solution for CS mount D-Link network cameras of various light condition use.

Physical Features

- CS Mount
- Vari-Focal Auto-Iris Lens
- For 1/3" and 1/4" Sensors with IR Connection

Supported Cameras

- DCS-3410
- DCS-3411
- DCS-3430

Network Camera vs Optional Accessory Compatible Matrix

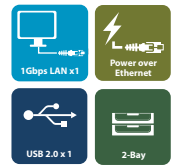
	CS Mount Vari-Focal Auto Iris Lens	Outdoor Enclosures					Power over Ethernet Splitter
	DCS-25	DCS-45	DCS-50	DCS-60	DCS-70	DWL-P50	
Fixed Cameras							
DCS-3110	-	Yes	Yes	Yes	-	-	
DCS-3410	Yes	Yes	Yes	Yes	-	-	
DCS-3411	Yes	Yes	Yes	Yes	-	-	
DCS-3415	-	-	-	Yes	-	-	
DCS-3430	Yes	-	-	-	-	Yes	
DCS-3710	-	Yes	Yes	Yes	-	-	
PTZ Cameras							
DCS-5300	-	-	-	-	Yes	-	
DCS-5610	-	-	-	-	Yes	-	

Network Video Recorders

D-Link standalone wired Network Video Recorders (NVR) support 8-channel network cameras with M-JPEG, MPEG4 or H.264 recording with 2 high-speed 3.5-inch SATA hard disks for long term recording. The NVR can record video from network cameras located in local or remote sites into a dedicated HDD storage without turning on a computer. D-Link NVR supports real-time monitoring and playback anytime anywhere via IE web browser.

DNS-722-4

2-Bay Basic NVR



Main Features

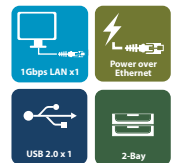
- 8-channel Network Camera Recording
- Real-time Monitoring and Playback
- Scheduled, Motion Detection, Manual Recording
- E-map
- Schedule Auto Backup
- Support D-Link Network Cameras

Physical Features

- USB Port for UPS Status Update
- 2 Bays for SATA HDD
- Key Lock for Device and Front Panel

DNS-726-4

2-Bay Pro NVR



Main Features

- 8-channel Network Camera Recording
- Real-time Monitoring and Playback
- Scheduled, Motion Detection, Manual and Event Recording
- E-map
- Schedule Auto Backup
- Smart Search for Advance Playback
- Support D-Link, ACTi, Arecont, Axis, Cisco, IQinVision, Mobotix, Panasonic, Sony Network Cameras

Physical Features

- USB Port for UPS Status Update
- 2 Bays for SATA HDD
- Key Lock for Device and Front Panel

Network Video Recorders

Model	DNS-722-4	DNS-726-4	
Hardware Specification	IEEE Standard	802.3; 802.3u; 802.3ab	
	Network Port	One 10/100/1000BASE-T Gigabit Ethernet Port	
	Universal Serial Bus (USB)	One USB 2.0 Port for UPS Status Update (Power Failure Update)	
	Memory	Flash ROM: 32MByte; RAM: 128MByte DDR	
	Hard Disk Drive (HDD)	2-Bay; SATA I, II; Control & Manage via PC; Reformat Disk; Redundant Array of Inexpensive Disks (RAID) 0, 1, Just a Bunch of Drives (JBOD)	
	Reset to Factory Default	Hardware Reset Button; Reset Button in Firmware GUI	
	Device Security	Front Panel Lock; Device Lock Hole	
Firmware Specification	Operating System	Linux	
	Supported Network Cameras	D-Link Network Cameras	D-Link, ACTi, Arecont, Axis, Cisco, IQinVision, Mobotix, Panasonic, Sony Network Cameras
	Recording Performance	NTSC: Up to 120fps; PAL: Up to 200fps at CIF	
	Camera Search	Universal Plug-and-Play (UPnP)	
	Audio & Video Recording	Synchronized Audio & Video Recording	
	Compression Format	H.264; MPEG-4; MJPEG (for supported cameras)	
	Video Setting	Resolution; Quality; Frame Rate; Enable Audio; Go to Camera Interface	
	Recording Type	Record by Schedule; Manual Record; Event Record (Motion Detection)	Record by Schedule; Manual Record; Event Record (DI Trigger, Motion Detection)
	Remote Live View	Via Internet Explorer Remote Live Viewer; Maximum four Simultaneous Channels	
	Remote Live View Control	Live View; Preset/Go; Patrol; Focus; PTZ Function; Snapshot; Full Screen; Digital Zoom	Live View; Preset/Go; Patrol; Focus; PTZ Function; Snapshot; Full Screen; Digital Zoom; Remote I/O
	Remote Playback	Internet Explorer and NVR Client; Playback System with Timeline GUI, Search by Event, Area, Camera, Date and Time Support One-Channel Playback Digital Zoom to Specific Area	Internet Explorer and NVR Client; Playback System with Timeline GUI, Search by Event, Area, Camera, Date and Time Support Four-Channel Playback Simultaneous Playback and Smart Search by General Motion, Missing Object
	Remote Playback Control	Playback with Normal, Fast Forward/Rewind and Step Forward/Rewind	Playback with Normal, Fast Forward/Rewind and Step Forward/Rewind; Smart Search Intelligent Function: General Motion, Missing Object, Foreign Object, Camera Occlusion, Lose Focus
	Overwrite Recording	Automatic Recycling when Disk Storage is Full	
	File Export	Export Videos to "AVI" or "ASF" File (ASF with Timestamp) Export Images to "BMP" or "JPG" File	
	User Account	Additional Accounts can be created to allow User Access to the System and specify Authorization for Camera Channels, PTZ, etc	
	Dynamic Domain Name System (DDNS)	D-Link DDNS Server	
	System Time	Set System Time (D-Link NTP, Input Time, Sync with Computer, Daylight Saving Time)	
	Remote Backup	Remote Software can Backup Raw Data to Redundant Storage	
	System Status	Camera Status; System Status	
	Network Service Protocol	Internet Protocol Version 4 (IPv4); Address Resolution Protocol (ARP); User Datagram Protocol (UDP); Internet Control Message Protocol (ICMP); Dynamic Host Configuration Protocol (DHCP) Client; D-Link Network Time Protocol (NTP); Domain Name System (DNS) Client; Dynamic DNS (DDNS) Client; Simple Mail Transfer Protocol (SMTP); HyperText Transfer Protocol HTTP); Point-to-Point over Ethernet (PPPoE); Universal Plug-and-Play (UPnP); IP Filtering	
User Interface	Internet Explorer and NVR Client;		
Physical and Environment	Dimension (W x D x H)	198 x 104 x 132 mm	
	Weight	1.23 kg	
	Power Input	External Power Adapter	
	Max. Power Consumption	23.59W; Standby State: 7.26W	
	Operating Temperature	0°C to 55°C	
	Storage Temperature	-20°C to 70°C	
	Operating Humidity	5% to 90% (Non-Condensing)	

Video Encoders

D-Link high-performance, single channel video encoder integrates an existing analog CCTV (closed circuit television) into an IP-based video surveillance system.

DVS-210-1

Video Encoder



Main Features

- MPEG4/MJPEG Dual-Codec
- 2-Way Audio
- Motion Detection

Physical Features

- 1-Channel BNC Input
- SD Card Slot
- Digital Input/Digital Output
- Alarm Input x 2
- Alarm Output x 1
- RS-485 Interface
- Audio Line In/Out

DVS-310-1

Video Encoder with PoE



Main Features

- H.264/MPEG4/MJPEG Multi-Codec
- 2-Way Audio
- Motion Detection
- 3GPP Mobile Surveillance
- Samba Client for NAS

Physical Features

- 1-Channel BNC Input
- SD Card Slot
- Digital Input/Digital Output
- Alarm Input x 2
- Alarm Output x 1
- RS485 Interface
- Audio Line In/Out

Video Encoders

Model	DVS-210-1	DVS-310-1
Network Specifications	Local Area Network (LAN)	One 10/100BASE-TX RJ-45
	Power over Ethernet (PoE)	Yes
Network Specifications	Network Protocols	Transmission Control Protocol / Internet Protocol (TCP/IP); Dynamic Host Configuration Protocol (DHCP); HyperText Transfer Protocol (HTTP); Dynamic domain Name System (DDNS); Network Time Protocol (NTP); File Transfer Protocol (FTP); Simple Mail Transfer Protocol (SMTP); User Datagram Protocol (UDP); Real Time Protocol (RTP); Real Time Streaming Protocol (RTSP); Universal Plug-and-Play (UPnP)
	Video Format	MJPEG and MPEG-4 Simultaneous Dual Codec
Video Specifications	Frame Rate	NTSC: 30fps; PAL: 25fps
	Bit Rate	64kbps to 4Mbps
	Resolution	NTSC: 720 x 480 (D1), 352 x 240 (CIF), 176 x 120 (QCIF) PAL: 720 x 576 (D1), 352 x 288 (CIF), 176 x 144 (QCIF)
	Video Input	1 CH; NTSC/PAL; BNC Connector; 1.0Vp-p with 75Ω loading
	Video Recording	Instant Local Video Recording
	Video Buffer	Pre/Post Buffer for Image/Video Capture
Audio Specification	Audio Input	8kHz Sample Rate; Adaptive Differential Pulse-Code Modulation (ADPCM)
	Audio Output	8kHz Sample Rate; Adaptive Differential Pulse-Code Modulation (ADPCM)
	Audio Connector	3.5mm Stereo Input/Output
Pan/Tilt/Zoom Specification	Audio Direction	Bi-Directional Audio
	PTZ Protocols	PelcoP; PelcoD; Merit Lilin; Visca; DynaColor; Transparent
	Baud Rate	1200, 1800, 2400, 4800, 9600, 19200
Alarm Handling	PTZ Connector	RS-485 for PTZ Control
	Loss Detection	Video and Network Loss Detection
	Motion Alarm	Built-in Motion Alarm with Configurable Detection Areas
Storage	Event Handler	FTP and E-mail Event Handler
	Local Storage	Store video to removable SD Card (Local SD Card Slot)
Storage	Remote Storage	Store video to NAS or a Compatible Network Video Recorder
	Central Processing Unit (CPU)	Pentium 4, 2.4GHz and above
Minimum System Requirement	Hard Disk	40GB or higher
	Memory	512MB or higher
	Operating System	Windows 7 / Windows Vista / Windows XP SP2 or higher / Windows 2000 SP4 or higher
	Video Resolution	1024 x 768 (SVGA/XGA)
	Software	DirectX 9.0c or higher
Physical and Environment	Browser	Microsoft Internet Explorer 6.0 or higher
	Dimension (L x W x H)	90 x 78 x 36 mm
	Weight	232 gram
	Power Input	Via External Power Adapter
	Operating Temperature	0°C to 40°C
	Operating Humidity	20% to 80% Non-Condensing

Video Management Software (VMS)

D-ViewCam Standard (DCS-100) video management software (VMS), bundled with D-Link network cameras, provides video recording, live view and playback management for network cameras and video servers.

D-ViewCam Professional (DCS-220) and D-ViewCam Enterprise (DCS-230) VMS provide advance management features and supports more live view and playback channels.

D-ViewCam NVR software is bundled with D-Link network video recorders (DNS-722-4 and DNS-726-4) for video management.

D-ViewCam Standard



D-ViewCam Standard 3.0 network camera surveillance software (DCS-100) is bundled with D-Link network cameras and is a comprehensive surveillance system designed to centrally manage multiple network cameras for Home, Small Office and Home Office (SOHO), or Small and Medium Business (SMB) users. Supporting up to 32 network cameras, D-ViewCam 3.0 is compatible with all current D-Link network cameras and video servers. It offers digital monitoring and recording capabilities of video, audio and events for various security applications. This software provides users with a wide array of features including video recording, playback and video live view.

The easy-to-use D-ViewCam 3.0 software allows users to manage up to 32 network cameras on one screen and display real-time operating information from the camera on the main screen. The e-map mode allows users to arrange a map with camera locations and orientation. Additional features such as auto-patrol, rotate, zoom, and focus provide users with optimal control over their video surveillance. Up to 64 live clients can monitor videos via browsers.

D-ViewCam 3.0 offers users scheduled, motion and manual recording options to meet individual needs. Recorded files can be searched by video type and selected within the user interface where the files can be played, edited and converted into AVI or ASF files.

Event action configuration provides users with optimal surveillance and security by detecting motion occurring on the cameras or through added devices such as smoke detectors, magnetic door sensors, emergency buttons, card readers and other I/O devices. By attaching these devices to a compatible D-Link network camera, a warning will be sent to D-ViewCam 3.0 to notify users during the occurrence of an event. Users can combine event actions, such as triggering I/O devices and send email notifications when an event occurs.

The backup function of D-ViewCam 3.0 saves everything from the playback panel including log information. Users can load backup files to any PC with Windows operating system. D-ViewCam 3.0 also provides DB-Tool utility to help user reconstruct, repair or relocate the database in local drive, external drive or network drive. Backup videos and logs can also be burned into CDs.



Video Display



Video Playback

D-ViewCam Professional & Enterprise



D-ViewCam Professional and D-ViewCam Enterprise video management software solutions provide users the ability to perform surveillance management and are ideal for small and medium enterprise (SME) and campus environment.

These VMS offer powerful digital surveillance management platform similar to D-ViewCam 3.0. D-ViewCam Professional (DCS-220) can manage up to 32 network cameras on one screen, while D-ViewCam Enterprise (DCS-230) can managed up to 64 cameras. Both software support dual monitor and are compatible with all current D-Link network cameras, video servers and network video recorders (NVR). Users can include up to 7 layers e-maps to arrange camera locations and orientation at different areas. Up to 128 live clients can monitor videos via browsers.

These VMS offer similar event actions as D-ViewCam 3.0. When an event occurs, besides triggering I/O devices and sending email notifications and SMS alerts. Users can playback 4 channels simultaneously. The smart search tool allows users to locate the desired video clips easily. Backup videos and logs can be burned into both CDs and DVDs. It is also compatible with third party CMS.



View Display

D-ViewCam NVR

D-ViewCAM NVR software is bundled with D-Link network video recorders (NVR) and it consists of three main components: Playback Manager, Backup and File Manager and Multi-NVR Viewer. D-Link NVR models are DNS-722-4 and DNS-726-4. DNS-722-4 supports all D-Link network cameras, while DNS-726-4 also supports other branded network cameras, such as ACTi, Arecont, Axis, Cisco, IQinVision, Mobotix, Panasonic and Sony.

Multi-NVR Viewer supports up to 8 concurrent live view channels. The views can be organized easily by dragging and dropping video directly onto the display window. Cameras managed by NVR can be viewed as individual sites or categorized into groups. DNS-726-4 supports digital input trigger and motion detection from cameras.

The Playback Manager has a clean and simple web GUI interface which allows users to play, search or export video. DNS-722-4 supports only 1 playback channel while, DNS-726-4 supports 4 playback channels. DNS-726-4 supports smart search tool which allows users to locate desired video clips easily.

The Backup and File Manager is a flexible backup utility which simplifies the process of backing up video data from the NVR to external storage.



Live View Display

D-ViewCam

		Video Management Software			Standalone Network Video Recorder	
Product Name		D-ViewCam Standard	D-ViewCam Professional	D-ViewCam Enterprise	D-ViewCam NVR	
Model		DCS-100	DCS-220	DCS-230	With DNS-722-4	With DNS-726-4
Tools		Remote Live Viewer Playback System Backup System	Remote Live Viewer Playback System Backup System	Remote Live Viewer Playback System Backup System	Playback Manager Backup Manager	Multi-NVR Viewer Playback Manager Backup Manager
General		Microsoft Windows XP Pro (SP2 or higher) / 2003 / Vista			Embedded Linux	
Recording Performance		1200fps@CIF with Intel Core 2 Quad Q6600 CPU			240fps@CIF	
Video Input		32 Channels			8 Channels	
Compression Format		H.264 / MPEG-4 / MJPEG				
Camera Support		All D-Link Cameras			All D-Link Cameras and Other Brands ²	
Video Setting		Megapixel (Depend on Network Cameras)			Up to 1.3 Megapixel	
Monitor Support		Single Monitor		Dual Monitor	Single Monitor	
Auto Scan			Yes		Yes ¹	
Camera OSD Option			Yes		Yes ¹	
Event Popup			Yes		-	
I/O Control Panel			Yes		-	Yes ¹
PTZ Control			Yes		Yes ¹	
Digital PTZ Control			Yes		-	
Preset Control			Yes		Yes ¹	
Auto Patrol			Yes		Yes ¹	
Full Screen			Yes		Yes ¹	
SMS Alert		-	Yes		-	
Live View Channel		64 Channels	128 Channels		Yes ¹	16 Channels
Privilege (Camera, PTZ, Audio)			Yes		Yes ¹	Yes
Concurrent Login Users		64 Live Clients 16 Playback Clients	128 Live Clients 64 Playback Clients		Yes ¹	32 Live Clients 8 Playback Clients
Display Mode		1, 4, 6, 9, 10, 13, 16, 25, 36 Channels	1, 4, 6, 9, 10, 13, 16, 25, 36, 49, 64 Channels		Yes ¹	1, 4, 9, 16 Channels
Recording		By Schedule, Manual and Event			By Schedule, Manual and Event ¹	
Schedule Recording		No Limitation			No Limitation ¹	
Digital Input Trigger		-			-	Yes ¹
Motion Detection from Camera		Yes			Yes ¹	
Audio Recording		Yes			Yes ¹	
Store Video for Fixed Days		Yes			Yes ¹	
Pre-Record / Post-Record		Yes			Yes ¹	
Automatic Overwrite		Yes			Yes ¹	
Playback Client		Browser / Remote Client			NVR Client	
Playback Channel		1 Channel	4 Channels		1 Channel	4 Channels
Playback Mode		Video Control-Play, Stop, Pause, Forward, Backward, Next, Previous				
Video Search		By Time, Event, Camera				
Smart Search		-	Yes		-	Yes
Image Export		BMP / JPG				
Video Export		AVI / ASF (Support OSD Export)			AVI / ASF (With Time Stamp)	
E-Map Support		2 Layers	7 Layers		1 Layer ¹	
Indicator		Camera and I/O			-	
E-Map Type		BMP / JPG / GIF / PNG / TIF			BMP / JPG ¹	
Unlimited E-Map Pictures		Yes			-	
Camera Preview		Yes			-	
Multiple Storage		Yes			-	
Storage / Backup		Network Storage Device			Yes	
CD Burning		Yes			Yes	
DVD Burning		-	Yes		-	
CMS Support		-	Yes		-	
Security		Power Recovery Auto Boot			Yes ¹	
Device Lock		-			Front Panel Lock, Rear Panel Key Slot ¹	

¹ Supported on Hardware (Standalone NVR)

² Other brands include ACTi, Arecont, Axis, Cisco, IQinVision, Mobotix, Panasonic, Sony

SecureCenter Kits

The surveillance solution in a kit – D-Link SecureCenter Kit – comes in four different packaging options to suit your business requirements. Each kit is cost-efficient and requires little learning effort. It enables you to have remote access to the surveillance system, and quick search for the intrusion footage during video playback.

DSCK-722-3410

SecureCenter Kit



Consists of:

- DCS-3410 x 2
(PoE D&N Network Camera)
- DNS-722-4 x 1
(2-Bay Basic NVR)
- D-ViewCam NVR Software

DSCK-722-6410

SecureCenter Kit



Consists of:

- DCS-6410 x 2
(WDR D&N Fixed Dome Network Camera)
- DNS-722-4 x 1
(2-Bay Basic NVR)
- D-ViewCam NVR Software

DSCK-726-3410

SecureCenter Kit



Consists of:

- DCS-3410 x 2
(PoE D&N Network Camera)
- DNS-726-4 x 1
(2-Bay Pro NVR)
- D-ViewCam NVR Software

DSCK-726-6410

SecureCenter Kit



Consists of:

- DCS-6410 x 2
(WDR D&N Fixed Dome Network Camera)
- DNS-726-4 x 1
(2-Bay Pro NVR)
- D-ViewCam NVR Software

Network Camera Selection Matrix

Model	Fixed Network Camera										PTZ Network Camera				Fixed Dome Camera				PTZ Dome Camera	
	DCS-3110	DCS-3410	DCS-3411	DCS-3415	DCS-3430	DCS-3710	DCS-7410	DCS-7510	DCS-5300	DCS-5300G	DCS-5605	DCS-5610	DCS-5635	DCS-6110	DCS-6111	DCS-6410	DCS-6815	DCS-6817	DCS-6818	
Image Sensor	1/4" 1.3 Megapixel Progressive Color CMOS	1/3" CCD	1/4" CMOS	1/4" Sony Progressive Scan CCD	1/4" CMOS	1/3" 1.3 Megapixel WDR Progressive Scan CMOS	1/3" Color CCD	1/3" Color CCD	1/4" Color CCD	1/4" Color CCD	1/3" Samsung De-Interlace CCD	1/4" Sony Progressive Color CCD	1/3" Samsung De-Interlace CCD	1/4" VGA Progressive CMOS	1/4" WDR VGA CMOS	1/3" CCD	1/4" Sony Exview CCD	1/4" Sony Exview CCD	1/4" Sony Exview CCD	
Lens	Vari-Focal DC-Iris CS Mount 4.5~10mm F1.6	CS Mount 6mm/F1.6	CS Mount 6mm/F1.8	Fixed 4.1~73.8mm F1.4~F3.0	CS Mount 6mm/F1.8	Vari-Focal DC Iris 2.8~12mm F1.3	Fixed 12mm/F1.4	Vari-Focal Auto-Iris 9~22mm F1.5-360	Fixed 3.4mm/F2.0	Fixed 3.4mm/F2.0	Fixed 3.8~38mm F1.8	Fixed 2.8~7.3mm F1.9-F200	Fixed 3.8~38mm F1.8	Vari-Focal Board Mount 3.7~12mm F1.4~F2.8	Vari-Focal Board Mount 3.3~12mm F1.4~F2.9	Fixed 4.3mm/F1.6	Auto Iris 3.4~61.2mm F1.4~F3.0	Auto Iris 3.4~102mm F1.4~F3.0	Auto Iris 3.4~122.4mm F1.4~F3.0	
Minimum Illumination / Light Sensitivity (Lux)	1.5 Lux	0.3 Lux (typical), 0 Lux (10m with IR Lens)	0.5 Lux (typical), 0 Lux (10m with IR Lens)	1.61 Lux (typical), 0.38 Lux (with ICR On)	0.5 Lux (typical), 0 Lux (10m with IR Lens)	0.1 Lux (Color) 0.02 Lux (B/W)	0.7 Lux	1 Lux	1 Lux	1 Lux	0.7 (Color) 0.02 (B/W)	0.1 Lux (typical), 0 Lux (15m with IR Lens)	0.7 (Color) 0.02 (B/W)	1.5 Lux	1.5 Lux	0.1 Lux (typical), 0 Lux (15m with IR Lens)	0.1 Lux (Color) 0.01 Lux (B/W)	0.1 Lux (Color) 0.01 Lux (B/W)	0.1 (Color) 0.01 (B/W)	
Angle of View (Horizontal/Vertical)	80.5°~37° / 60°~28°	45° / 34°	41° / 31°	48°~2.8° / -	41° / 31°	102.2°~23.7° / -	22° / 17°	31°~13° / 23°~10°	53° / 46°	53° / 46°	51°~6° / 40°~4°	73.4°~28.7° / 54.7°~21.6°	51°~6° / 40°~4°	77°~23° / 57°~17°	63°~18° / 47°~13°	73.1° / 55.3°	60.8°~3.6° / -	60.8°~2.2° / -	60.8°~1.8° / -	
Pan/Tilt	-	-	-	-	-	-	-	-	+/-135° / +90°~45°	+135°~135° / +90°~45°	+165°~165° / +87°~34°	+150°~150° / +90°~45°	+165°~165° / +87°~34°	-	-	+170°~170° / +60°~15° (Manual)	256 Presets Auto Cruise 5~400° Preset Speed	256 Presets Auto Cruise 5~400° Preset Speed	256 Presets Auto Cruise 5~400° Preset Speed	
Zoom Ratio	4x Digital	16x Digital	16x Digital	4x Digital 18x Optical	16x Digital	10x Digital	16x Digital	16x Digital	4x Digital	4x Digital	16x Digital 10x Optical	4x Digital 2.6x Optical	16x Digital 10x Optical	4x Digital	4x Digital	16x Digital	12x Digital 18x Optical	12x Digital 30x Optical	12x Digital 36x Optical	
Max. Video Resolution (Pixels)	1280 x 1024 (MJPEG) 640 x 480 (MPEG-4)	704 x 480 (NTSC) 704 x 576 (PAL)	704 x 480 (NTSC) 704 x 576 (PAL)	640 x 480	704 x 480 (NTSC) 704 x 576 (PAL)	1280 x 960	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	704 x 480 (NTSC) 704 x 576 (PAL)	704 x 480 (NTSC) 704 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	640 x 480	720 x 480 (NTSC) 720 x 576 (PAL)	640 x 480	640 x 480	704 x 480 (NTSC) 704 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	720 x 480 (NTSC) 720 x 576 (PAL)	
Video Compression	MPEG-4 / MJPEG	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	H.263+ (MPEG-4 Short Header Mode)	H.263+ (MPEG-4 Short Header Mode)	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	H.264 / MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	MPEG-4 / MJPEG	
Dual Stream	Yes	-	-	Yes	-	-	-	-	-	-	-	Yes	-	Yes	Yes	-	-	-	-	
Multi-Profile	-	Yes	Yes	-	Yes	Yes	Yes	Yes	-	-	Yes	-	Yes	-	-	Yes	-	-	-	
Frame Rate (fps)	30	30 (NTSC) 25 (PAL)	30 (NTSC) 25 (PAL)	30	30 (NTSC) 25 (PAL)	30	30 (NTSC) 25 (PAL)	30 (NTSC) 25 (PAL)	30	30	30 (NTSC) 25 (PAL)	30	30 (NTSC) 25 (PAL)	30	30	30 (NTSC) 25 (PAL)	30 (NTSC) 25 (PAL)	30 (NTSC) 25 (PAL)	30 (NTSC) 25 (PAL)	
Video Bit Rate Range	20kbps~4Mbps	64kbps~2Mbps	64kbps~2Mbps	20kbps~4Mbps	64kbps~2Mbps	64kbps~8Mbps	64kbps~2Mbps	64kbps~2Mbps	64kbps~1.2Mbps	64kbps~1.2Mbps	64kbps~2Mbps	64kbps~4Mbps	64kbps~2Mbps	20kbps~4Mbps	20kbps~4Mbps	64kbps~2Mbps	Up to 3Mbps	Up to 3Mbps	Up to 3Mbps	
3A Control ¹	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AES / AGC / AWB	AGC / AF / AWB	AGC / AF / AWB	
Wide Dynamic Range (WDR)	-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	Yes	-	Yes	Yes	Yes	
Day & Night	ICR Filter	Dual-Band Filter	ICR Filter	ICR Filter	ICR Filter	ICR Filter	Dual-Band Filter IR LEDs (30m)	ICR Filter IR LEDs (50m)	-	-	ICR Filter	-	ICR Filter	Dual-Band Filter	ICR Filter IR LED (20m)	Dual-Band Filter IR LED (15m)	ICR Filter Dual-Band Filter	ICR Filter Dual-Band Filter	ICR Filter Dual-Band Filter	
Audio Support	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Line In/Out	• 2-Way Audio • Line In/Out	• 2-Way Audio • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	• 2-Way Audio • Built-in Microphone • Line In/Out	-	• 2-Way Audio • Line In/Out	• 2-Way Audio • Line In/Out	-	-	-	
Audio Codec ²	AAC / AMR	AMR / ADPCM	AMR / ADPCM	AAC / AMR	AMR / ADPCM	ADPCM	AMR / ADPCM	AMR / ADPCM	ADPCM	ADPCM	AMR / ADPCM	AMR / ADPCM	AAC / AMR	AMR / ADPCM	-	AAC / AMR	AMR / ADPCM	-	-	
Audio Recording	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	
Intelligent Video	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	• Motion Detection • Event Triggered Recording	
Network Security	• Multi-Level Password • HTTP & RTSP Digest Encryption • IP Filtering	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Multi-Level Password • HTTP & RTSP Digest Encryption • IP Filtering	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Administrator & User Group Protected • Password Authentication	• Multi-Level Password	• Multi-Level Password	• Administrator & User Group Protected • Password Authentication	• Multi-Level Password • HTTP & RTSP Digest Encryption • IP Filtering	• Administrator & User Group Protected • Password Authentication	• Multi-Level Password • HTTP & RTSP Digest Encryption • IP Filtering	• Multi-Level Password • HTTP & RTSP Digest Encryption • IP Filtering	• Administrator & User Group Protected	• Administrator & User Group Protected	• Administrator & User Group Protected	• Administrator & User Group Protected	
Privacy Masking	-	-	-	-	-	3 Zones	-	-	-	-	3 Zones	-	3 Zones	-	5 Zones	-	16 Zones	16 Zones	16 Zones	
Storage Support	Direct to NAS or CF Card	Direct to NAS	Direct to NAS or SD Card	Direct to NAS or CF Card	Direct to NAS or SD Card	Direct to NAS or SD Card	Direct to NAS	Direct to NAS	-	-	Direct to NAS or MicroSD Card	Direct to NAS	Direct to NAS or MicroSD Card	Direct to NAS	Direct to NAS	Direct to NAS	-	-	-	
Mobile Video Surveillance	3GPP	3GPP	3GPP	3GPP	3GPP	3GPP	3GPP	3GPP	-	-	3GPP, RTSP	3GPP	3GPP, RTSP	3GPP	3GPP	3GPP, RTSP	-	-	-	
Digital Input/Digital Output (DI/DO)	1 / 1	2 / 1	2 / 1	1 / 1	2 / 1	2 / 1	2 / 1	2 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	2 / 1	8 / 1	8 / 1	8 / 1	
External Device Interface	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	RS-485, 12VDC Output	-	-	RS-485, 12VDC Output	-	RS-485, 12VDC Output	-	-	RS-485, 12VDC Output	-	-	-	
Monitor Output	-	BNC	-	-	BNC	BNC	BNC	BNC	AV	AV	AV	-	-	-	-	RCA	BNC	BNC	BNC	
External Card Slot	CF Card	-	SD Card	CF Card	SD Card	SD Card	-	-	-	-	MicroSD Card	-	MicroSD Card	-	-	-	-	-	-	
Power over Ethernet (IEEE 802.3af)	Class 2/3 ⁴	Class 2/3 ⁴	Class 2/3 ⁴	Class 2/3 ⁴	PoE Splitter Required ⁵	Class 2/3 ⁴	Class 2/3 ⁴	Class 2/3 ⁴	-	-	-	Class 2	-	Class 1	Class 3	Class 2/3 ⁴	-	-	-	
Wireless LAN	-	-	-	-	802.11n 802.11g	-	-	-	-	802.11g	-	-	802.11n 802.11g	-	-	-	-	-	-	
Max. Power Consumption	4W	12.5W	5.484W	5.4W	6.9W	2W	7.88W	7.95W	7.8W	9.2W	11.92W	6W	13.37W	3.6W	11W	11.04W	65W (with heater)	65W (with heater)	65W (with heater)	
Outdoor Usage	Yes ⁵	Yes ⁵	Yes ⁵	Yes ⁵	-	Yes ⁵	Yes (IP66 Certified)	Yes (IP66 Certified)	Yes ⁵	-	-	Yes ⁵	-	-	-	-	Yes (IP66 Certified)	Yes (IP66 Certified)	Yes (IP66 Certified)	

¹ AES (Automatic Electronic Shutter); AGC (Automatic Gain Control); AWB (Automatic White Balance); AF (Auto-Focus)

² AAC (Advanced Audio Coding); AMR (Adaptive Multi-Rate); ADPCM (Adaptive Differential Pulse-Code Modulation)

³ PoE Splitter - DWL-P50 (Refer to Network Peripheral-Power Over Ethernet Section)

⁴ Class 3: Include Power Output for External Devices

⁵ Outdoor Enclosure Required

NETWORK STORAGE

With the ever increasing volume of information required for the smooth running of business operations, ensuring information availability when needed is of great importance. Reliable information storage is an essential part of every business. Products under this category include Network Attached Storage (NAS) Enclosures and Storage Area Network (SAN) Arrays.



Network Attached Storage (NAS) Enclosures

D-Link Network Attached Storage (NAS) enclosures enable the addition of disk storage devices to the network for sharing documents, files and digital media such as music, video and photographs. NAS enclosures are ideal for server deployment in office and business settings, and can add up to four internal SATA drives on a per need basis to fulfill storage requirements as the business grows. Remote access to files via the Internet is also possible through the built-in FTP server. Administrators can set access privileges for users, groups or folders according to their respective rights.

DNS-343

4-Bay NAS Enclosure



Main Features

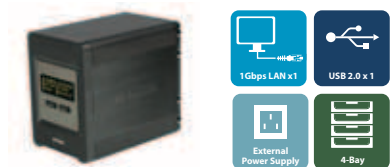
- NAS only
- Support Standard, JBOD, RAID 0,1,5
- Scheduled backup
- Support volume snapshot
- Support VLAN tags
- Built-in FTP Server
- Built-in UPnP AV Server
- Built-in iTunes Server
- Built-in Printer Server

Physical Features

- USB Port to Printer or UPS x 1
- OLED Display Screen

DNS-346

4-Bay NAS/iSCSI Enclosure



Main Features

- Pure NAS & iSCSI
- Support Standard, JBOD, RAID 0, 1, 5, 10
- Scheduled backup
- Volume snapshot
- VLAN tags
- Built-in FTP Server
- Built-in Print Server

Physical Features

- USB Port to Printer or UPS x 1
- OLED Display Screen

Network Attached Storage (NAS) Enclosures

Model		DNS-343	DNS-346	
Port Interface	LAN Port	One 10/100/1000BASE-T Gigabit Ethernet Port		
	Universal Serial Bus (USB)	One USB 2.0 Port for Print Server and UPS Monitoring		
Display	Organic Light-Emitting Diode (OLED)	256 x 64 OLED Display Screen	56 x 64 OLED Display Screen	
Drive Management	HDD Type	SATA (Any Capacity)		
	HDD Size	3.5-inch (Internal)		
	Conventional NAS Function	Yes		
	iSCSI Technology	-	Yes	
	HDD Configuration	RAID 0, RAID 1, RAID 5, JBOD, Standard	RAID 0, RAID 1, RAID 5, RAID 5+Spare, RAID 10, JBOD, Standard	
	Scan Disk	Yes		
	Disk Roaming	-	Yes	
	S.M.A.R.T. ¹ for HDD Self-Diagnostic	-	Yes	
	Auto-Rebuild	Yes		
	Hot-Plug	-	Yes	
	Hard Drive Power Saving Mode	Yes		
HDD Installation	Tool-less Installation			
User Management	User Account Management	Yes		
	Group Account Management	Yes		
	User/Group Quota Management	Yes		
	Windows Active Directory Service	Yes		
File Sharing Management	Max. User Accounts	64	64 (Samba) / 4,000 (ADS)	
	Max. Groups	10	10 (Samba) / 1,700 (ADS)	
	Max. Shared Folders	45	45	
	Max. Concurrent Connections	64 (Samba) / 10 (FTP)	64 (Samba) / 10 (FTP)	
	Built-in FTP Server	Yes		
	Built-in UPnP AV Server	Yes	-	
	Built-in iTunes Server	Yes	-	
	Built-in Print Server	Yes		
Jumbo Frame	Yes			
Device Management	Internet Explorer 6 or other Java-Enabled Browser	Yes		
	Easy Search Utility	Yes		
	Plug-and-Play Extensions (PnP-X)	Yes		
	Link Layer Topology Discovery (LLTD)	Yes		
	HyperText Transfer Protocol Secure (HTTPS)	Yes		
	Uninterruptible Power Supply (UPS) Monitoring	Yes		
	E-mail Alerts	Yes		
	Power Management	Yes		
	Real-Time Clock (RTC)	Yes		
	Dynamic Host Configuration Protocol (DHCP) Server	Yes		
Dynamic Domain Name System (DDNS)	Yes			
Power Management	Power Input	Via External Power Adapter		
	Max. Power Consumption	Normal Mode: 71.76W; Sleep Mode: 21.44W	Normal Mode: 37.31W; Sleep Mode: 13.30W	
	Power Saving	Ultra Cooler (Aluminum Housing with Fan Speed Control)		
Environmental	HDD Hibernation	Yes		
	Operating Temperature	0°C to 55°C		
	Storage Temperature	-20°C to 70°C		
Physical	Operating Humidity	5% to 90% (Non-Condensing)		
	Dimension (W x D x H)	128 x 200 x 178 mm		
	Weight	2.7 kg		

¹ S.M.A.R.T.: Self-Monitoring, Analysis and Reporting Technology

Storage Area Network (SAN) Arrays

D-Link Storage Area Network (SAN) arrays are designed to provide reliable network data storage solution for entry-level and SMB segments using the 10Gbit iSCSI System-on-a-Chip (SoC). These SAN arrays can be easily implemented as nearline storage or as a supplement to the primary backup and recovery devices.

DSN-1100-10

5-Bay iSCSI SAN Array



Main Features

- Support RAID
- SATA-II
- Online Capacity Expansion and RAID Level Migration

Physical Features

- 5 Real Trays

Optional Accessories

- DSN-010 (Single Real Tray)
- DSN-020 (Single Dummy Tray)

DSN-2100-10

8-Bay iSCSI SAN Array



Main Features

- Support RAID
- SATA-II
- Online Capacity Expansion and RAID Level Migration

Physical Features

- 8 Real Trays

Optional Accessories

- DSN-030 (Power Supply)
- DSN-040 (Fan)
- DSN-050 (Battery)

DSN-3200-10

15-Bay iSCSI SAN Array



Main Features

- Support RAID
- SATA-II
- Online Capacity Expansion and RAID Level Migration

Physical Features

- 15 Real Trays

Optional Accessories

- DSN-010 (Single Real Tray)
- DSN-020 (Single Dummy Tray)
- DSN-030 (Power Supply)
- DSN-040 (Fan)
- DSN-050(Battery)

DSN-3400-10

15-Bay iSCSI SAN Array with XFP



Main Features

- Support RAID
- SATA-II
- Online Capacity Expansion and RAID Level Migration

Physical Features

- 15 Real Trays

Optional Accessories

- DSN-010 (Single Real Tray)
- DSN-020 (Single Dummy Tray)
- DSN-030 (Power)
- DSN-040 (Fan)
- DSN-050 (Battery)
- 10-Gigabit XFP Transceivers
DEM-421XT / DEM-422XT / DEM-423XT

Storage Area Network (SAN) Arrays

Model	DSN-1100-10	DSN-2100-10	DSN-3200-10	DSN-3400-10
Drive Bay	5	8	15	
Drive Interface Support	SATA-II			
System Memory	256MB to 512MB (256MB Standard)	256MB to 512MB (512MB Standard)		
Cache Memory	256MB to 1GB (256MB Standard)	256MB to 4GB (512MB Standard)		
Battery Backup for Cache	Standard (Approximately 72 hours on Full Charge)			
Bandwidth	Up to 425MB/s		Up to 850MB/s	Up to 1160MB/s
Storage Capacity ¹	5TB with 1TB HDDs	8TB with 1TB HDDs	15TB with 1TB HDDs	
Storage Feature	Intel® Pro 1000MT & XT (1GbE) Alacritech® SES2104ET (SNP 9.1.0.1092 & 7.3.1.0) Alacritech® SES2102ET (SNP 9.1.0.1092 & 7.3.1.0) Qlogic® 4010C, 4052C & 4062C		Intel® Pro 1000MT & XT (1GbE) Intel® Pro 1000 CX4 (1GbE) Myricom 10G-PCIE-8A-C+E (10GbE) Chelsio® S310X-SR-XFP (10GbE) Neterion® Xframe® II & Xframe® E (10GbE) Alacritech® SES2104ET (SNP 9.1.0.1092 & 7.3.1.0) Alacritech® SES2102ET (SNP 9.1.0.1092 & 7.3.1.0) Qlogic® 4010C, 4052C & 4062C	
Supported Operating Systems ²	Windows Vista® 32-bit & x64 (Ultimate & Enterprise) with Built-in iSCSI Initiator Windows Server 2003® 32-bit & x64 SP1 (Standard & Enterprise) with v2.07 iSCSI Initiator Windows Server 2003® R2 32-bit & x64 SP1 (Standard & Enterprise) with v2.07 iSCSI Initiator Windows XP Pro® 32-bit & x64 with v2.07 iSCSI Initiator Windows 2000 Advanced Server® with v1.6 & v2.01 iSCSI Initiator Red Hat® 7.3; Red Hat® Enterprise AS Update 5 SuSE® Enterprise Server 10.2 32-bit (x86); SuSE® Professional 9.3 32-bit & x64 Mac OS X (10.4 & 10.5)			
iSCSI Network Interface	Four 1GbE Copper Ports		Eight 1GbE Copper Ports	One 10GbE XFP (XFP sold separately)
Host Interface	iSCSI Draft 20 Compliant Initiator			
Connections	1,024 Hosts			
CHAP Authentication	Yes			
Access Control of Management	Yes			
iSCSI/TCP/IP Full Hardware Offload	Yes			
Jumbo Frame	Yes			
IEEE 802.3ad Link Aggregation	Up to Four LAGs		Up to Eight LAGs	Not Applicable
IEEE 802.1Q Virtual LAN (VLAN)	Up to Four 1-to-1 Mapping between IP Subnet and VLAN	Up to Eight 1-to-1 Mapping between IP Subnet and VLAN		
RAID Controller	Single-Integrated in ASIC			
RAID Support	RAID Levels 0, 1, 1+0 and 5			
Volumes	1,024 Virtual Volumes (256 Accessible per Initiator)			
Target Nodes	1,024			
Online Capacity Expansion	Yes			
Hot-Swappable Drives	Yes			
Instant Volume Access	Yes			
Free Space Defragmentation	Yes			
Auto-Detection Failed Drive	Yes			
Auto-Rebuild Spare Drive	Yes			
RAID Level Migration	Yes			
Drive Roaming in Power Off	Yes (Configured Drives are Not Bay-Specific)			
Micro Rebuilds	Yes			
Storage Management	Embedded IP-based Management GUI Create, Mange, Expand and Monitor Storage Pool, Volumes and RAID			
Firmware Field Upgradable	Yes			
Power	Supply Type	1U 200-Watt	Redundant 2U 400-Watt	Redundant 3U 2+1 760-Watt
Input Voltage	100~240 VAC			90~264 VAC (Auto-Switching)
Input Frequency	50~60Hz	47~63Hz		
Input Current (Maximum)	4A	8A@100VAC; 4A@240VAC	20A@90VAC; 10A@264VAC	
Power Factor Correction	95%@110V, Full Load			
Power Consumption (Full Configuration)	112-Watt	360-Watt	570-Watt	
Thermal (Full Configuration)	815 BTU/hour	1,260 BTU/hour	2,000 BTU/hour	
Environmental	Operating Temperature 0°C to 40°C Storage Temperature -20°C to 70°C			
Operating Humidity	20% to 90% (Non-Condensing)			
Storage Humidity	10% to 95% (Non-Condensing)			
Physical	Form Factor	Tower	2U, 19-inch Rack-Mount	3U, 19-inch Rack-Mount
Dimension (W x D x H)	167 x 273 x 259 mm	438 x 635 x 89 mm		438 x 571 x 133 mm
Weight (Full Configuration)	4.0 kg	20.4 kg		33 kg
Certification	Emission FCC Class A; CE Class A; C-Tick Class A; VCCI Class A Safety CSA 60950-1; UL 60950-1; IEC 60950-1; EN 60950-1			

¹ Support for higher capacity drives as they are introduced² Please refer to D-Link website for latest support information

Network Storage Selection Matrix

	NAS Enclosures		SAN Arrays			
Model	DNS-343	DNS-346	DSN-1100-10	DSN-2100-10	DSN-3400-10	DSN-3400-10
Network Interface						
Gigabit 10/100/1000BASE-T	1	1	4	4	8	-
10-Gigabit XFP Slot	-	-	-	-	-	1
Hard Disk Drive						
Number of Bays/Trays	4	4	5	8	15	15
Drive Type	3.5-inch SATA	3.5-inch SATA	3.5-inch SATA-II	3.5-inch SATA-II	3.5-inch SATA-II	3.5-inch SATA-II
Storage Capacity ¹	4TB with 1TB HDDs	4TB with 1TB HDDs	5TB with 1TB HDDs	8TB with 1TB HDDs	15TB with 1TB HDDs	15TB with 1TB HDD
RAID Support	Standard; RAID 0, 1, 5; JBOD	Standard; RAID 0, 1, 1+0, 5, 5+Spares; JBOD	Standard; RAID 0, 1, 1+0, 5; JBOD	Standard; RAID 0, 1, 1+0, 5; JBOD	Standard; RAID 0, 1, 1+0, 5; JBOD	Standard; RAID 0, 1, 1+0, 5; JBOD
RAID Level Migration	-	-	Yes	Yes	Yes	Yes
Hot-Swappable Drive	-	Yes	Yes	Yes	Yes	Yes
Instant Volume Access	-	-	Yes	Yes	Yes	Yes
Free Space Defragmentation	-	-	Yes	Yes	Yes	Yes
Micro Rebuild	-	-	Yes	Yes	Yes	Yes
Drive Roaming in Power Off	-	Yes	Yes	Yes	Yes	Yes
S.M.A.R.T for HDD Self-Diagnostic	Yes	Yes	Yes	Yes	Yes	Yes
File Sharing						
Target Nodes	N.A.	10	1,024	1,024	1,024	1,024
Built-in FTP Server	Yes	Yes	-	-	-	-
Built-in UPnP AV Server	Yes	No	-	-	-	-
Built-in iTunes Server	Yes	No	-	-	-	-
Built-in Print Server	Yes	Yes	-	-	-	-
iSCSI Network						
iSCSI Technology	-	Yes	Yes	Yes	Yes	Yes
CHAP Authentication	-	Yes	Yes	Yes	Yes	Yes
Access Control of Management	-	-	Yes	Yes	Yes	Yes
IEEE 802.3ad Link Aggregation	-	-	Yes	Yes	Yes	-
IEEE 802.1Q Virtual VLAN (VLAN)	-	Yes	Yes	Yes	Yes	Yes
Volume Visualization	-	-	Yes	Yes	Yes	Yes
Jumbo Frame	Yes	Yes	Yes	Yes	Yes	Yes

¹ Support for higher capacity drives as they are introduced

NETWORK PERIPHERALS

Accessories that help support network solutions. Products under this category include Keyboard Video Mouse (KVM) Switches, Power over Ethernet (PoE) Adapters, Print Servers and Network Adapters.



KVM Switches

D-Link Keyboard, Video, Mouse (KVM) switches provide cost-effective solution for businesses to control multiple computers or servers from a single set of keyboard, mouse and monitor. The computers and servers are connected to a KVM switch. From a single console, users can switch back and forth among the computers with the push of a button or hot keys. It is a very cost-effective way to control multiple computers that do different tasks.

DKVM-IP1

1-Port KVM Switch over IP



Main Features

- TCP/IP
- Web-based Management
- Video Refresh Upgradeable from Remote Session
- Maximum Concurrent 15 User Login
- 256bit SSL Security
- BIOS Level Access
- Video Calibration Adjustment
- Auto-Logout When Idle More Than 30 Minutes
- Video Resolution 1280 x 1024 at 60Hz

Physical Features

- RS-232 Modem Port x 1
- Console :
DB-15 x 1 (Video)
PS/2 x 2 (Keyboard & Mouse)
- KVM:
DB-15 x 1 (Video)
PS/2 x 2 (Keyboard & Mouse)

KVM-440

8-Port KVM Stackable Switch



Main Features

- Windows, Linux, Mac OS9/OSX, and Sun Microsystems
- Daisy-Chain up to 3 Cascade Levels
- Hot-Swappable
- LED Display for PC and/or Server Status Monitoring
- Video Resolution 2048 x 1536

Physical Accessories

- 19" Rack-Mount (1U)
- Console :
DB-15 x 1 (Video)
PS/2 x 2 (Keyboard & Mouse)
- KVM:
DB-15 x 1 (Video)
Combo PS/2 or USB x 8 (KB & Mouse)
- Mini USB2.0 x 1 (for F/W Upgrade)
- Switch Selection Button x 8

KVM-450

16-Port KVM Stackable Switch



Main Features

- Windows, Linux, Mac OS9/OSX, and Sun Microsystems
- Daisy-Chain up to 3 Cascade Levels
- Hot-Swappable
- LED Display for PC and/or Server Status Monitoring
- Video Resolution 2048 x 1536

Physical Features

- 19" Rack-Mount (1U)
- Console :
DB-15 x 1 (Video)
PS/2 x 2 (Keyboard & Mouse)
- KVM:
DB-15 x 16 (Video)
Combo PS/2 or USB x 16 (KB & Mouse)
- Mini USB2.0 x 1 (for F/W Upgrade)
- Switch Selection Button x 16

Power over Ethernet (PoE)

D-Link Power over Ethernet (PoE) adapters are designed to help simplify network maintenance and deployments at offices, factories and Wi-Fi hot spots. These adapters allow surveillance cameras and wireless access points to be installed on building rooftops, ceilings or high walls where wall AC outlets may be inaccessible.

DWL-P50

5/12VDC PoE Splitter



Main Features

- Use with a PoE Switch or Midspan
- Supply Power to Devices

Physical Features

- IEEE 802.3af Power over Ethernet
- Terminal Unit x 1
- 5VDC and 12VDC Output
- Output Selection via DIP Switch

DWL-P200

5/12VDC PoE Kit



Main Features

- Use without a PoE Switch
- Supply Power to Devices

Physical Features

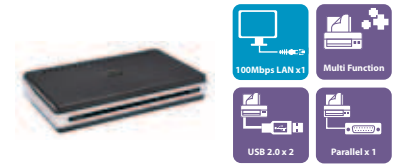
- Base Unit x 1
- Terminal Unit x 1
- 5VDC and 12VDC Output
- Output Selection via DIP Switch

Print Servers

These print servers allow users to share printers over the network through simple, transparent printing operation. Tested with a wide range of different printer models, D-Link print servers offer a high level of compatibility. They support multiple network Operating Systems, including Windows, Mac OS and Linux, giving users the flexibility of installing their print servers regardless of the network environment.

DPR-1061

3-Port Multifunction Print Server



Main Features

- TCP/IP
- NetBEUI
- AppleTalk
- Line Printer Remote (LPR) Protocol
- RAW Printer Protocol
- Server Message Block (SMB) over IP
- Internet Printing Protocol (IPP)

DPR-2000

4-Port Wireless G Multifunction Print Server



Main Features

- TCP/IP
- NetBEUI
- AppleTalk
- Line Printer Remote (LPR) Protocol
- RAW Printer Protocol
- Server Message Block (SMB) over IP
- Internet Printing Protocol (IPP)
- Wi-Fi Protected Setup (WPS)

Network Adapters

D-Link network adapters are designed for workstations to operate within a secure network environment. These adapters provide many software functionalities to enable the workstations to integrate as part of a managed network. The adapters provide the necessary bandwidth for server deployment for fast access by workstations. D-Link offers optional remote boot ROMs for adding to LAN adapters to provide remote boot from boot servers. This function allows users to deploy the adapters in diskless workstations.

DFE-551FX

Fast Ethernet Fiber PCI Adapter



Main Features

- Windows 7, Server 2008, Vista, XP
- Mac OS, NetWare, Linux
- IEEE 802.1p Priority Queues
- IEEE 802.1Q VLAN
- Standard and Low Profile Brackets are Available

Physical Features

- 100BASE-FX Fiber x 1
- PCI Bus Interface
- SC Fiber Connector
- Up to 2km Multi-Mode Fiber Cable Distance
- ACPI Wake-On-LAN Power Management
- Socket for Optional Remote Boot ROM

Optional Features

- DFE-551P (PXE Boot ROM)
- DFE-551R (RPL Boot ROM)

DGE-560SX

Gigabit Fiber PCI Express x4 Adapter



Main Features

- Windows 7, Server 2008, Vista, XP
- Linux
- ACPI 2.0 Power Management
- 9K Bytes Jumbo Frame
- IEEE 802.1p Priority Queue
- IEEE 802.1Q VLAN
- Built-in MIB for SNMP Management
- Laser Eye Safety Certified

Main Features

- 1000BASE-SX Fiber x 1
- PCI Express x4 Bus Interface
- SC Fiber Connector
- Up to 550m Multi-Mode Fiber Cable Length