D-Link®

Smart ™

DES-1226G

24-Port 10/100Mbps Smart Switch
With 2 Combo Copper Gigabit/SFP

The DES-1226G Smart Switch presents a cost-effective solution for the small and medium business to implement Ethernet packet switching with easy fine-tuning of network performance and security. This switch comes with 24 10/100BASE-TX Fast Ethernet ports and 2 combo 1000BASE-T/SFP ports for flexible copper/fiber Gigabit connection. Port trunks are provided for server deployment and network backbone attachment, while functions important for bandwidth-intensive applications such as Priority Queues and VLANs are supported to enable you to implement Quality of Service (QoS) and security without having to go through complex network management usually found in other managed switches.

24 10/100Mbps Ports for Workstations Connection
The switch provides 24 10/100Mbps ports supporting auto-sensing and auto-negotiation of network speeds and full/half duplex. These ports can connect to workstations and print servers, giving each a dedicated bandwidth. All ports support auto MDI/MDIX cross-over, allowing you to connect to any node without the need to change your usual straight-through twisted-pair cables.

2 Combo 1000BASE-T/SFP for Flexible Gigabit Connection
2 combo 1000BASE-T/SFP are provided for flexible copper or fiber Gigabit connection. You can select to install optional transceivers in the SFP slots for short, medium or long-distance fiber backbone attachment. Use of the SFP will disable their corresponding built-in 1000BASE-T connections.

Port Trunks for Aggregated Bandwidths
Ports can be combined together to create multi-link load-sharing aggregated bandwidths to a server or a network backbone. To expand the network, you can also make use of the port trunks to eliminate bottlenecks between the cascaded switches. The switch allows you to combine multiple ports per trunk, and to create multi-link port trunks.

VLANs for Enhanced Security & Performance
The switch support VLANs to let you improve security and bandwidth utilization by limiting the broadcast domains and confining intra-group traffic within their segments. To segment up the network, VLAN-supported workstations and servers that are connected to the switch can be grouped into different Virtual LANs (VLANs).

Quality of Service Support
The switch supports Layer 2 802.1p Priority Queue control to prioritize network packets. Classification of users' data priorities can be based on a data packet Priority Queue. This QoS function support allows you to run bandwidth-intensive and delay-sensitive applications and to attach video servers to the switch for video conference.

Port Mirroring
The switch supports port mirroring to assist network traffic monitoring. The network administrator can use this function as a diagnostic tool or debugging feature, especially when fending off an attack. It enables you to keep close track of switch performance and alter it if necessary. Port mirroring can be managed locally or remotely. The administrator places a protocol analyzer on the port receiving the mirrored data to monitor each segment separately. The analyzer captures and evaluates the data without affecting the client on the original port.

Key Features

- *24 10/100Mbps Fast Ethernet ports for workstations*
- *2 combo 1000BASE-T/SFP for flexible Gigabit connection Auto MDI/MDIX cross over for all twisted-pair ports*
- *802.3x Flow Control for protection against data loss*
- *Port trunks for server/network backbone attachments*
- *Static MAC-based access control*

- *Port mirroring for traffic monitoring*
- *802.1Q VLAN support to enhance security/network performance*
- *802.1p Priority Queues QoS*
- *Easy configuration through web-based management*
- *SNMP management with built-in MIB support*
- *Standard rack-mount size*

DES-1226G
Technical Specifications

General
Port Standards & Functions
- IEEE 802.3 10BASE-T Ethernet (twisted-pair copper)
- IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper)
- IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper)
- IEEE 802.3z Gigabit Ethernet (fiber)
- ANSI/IEEE 802.3 NWay auto-negotiation
- IEEE 802.3x Flow Control
- Port mirroring

Number of Ports
- 24 10BASE-T/100BASE-TX ports
- 2 combo 1000BASE-T/SFP *

* Use of the SFP will disable their corresponding 10/100/1000BASE-T connections

SFP Support
- IEEE 802.3z 1000BASE-LX (DEM-310GT transceiver)
- IEEE 802.3z 1000BASE-SX (DEM-311GT/DEM-312GT2 transceiver)
- IEEE 802.3z 1000BASE-LHX (DEM-314GT transceiver)
- IEEE 802.3z 1000BASE-LX (DEM-315GT transceiver)

Protocol
CSMA/CD

Data Transfer Rates
- Ethernet:
  10Mbps (half duplex)
  20Mbps (full duplex)
- Fast Ethernet:
  100Mbps (half duplex)
  200Mbps (full duplex)
- Gigabit Ethernet:
  2000Mbps (full duplex)

Topology
Star

Network Cables
- UTP Cat. 5, Cat. 5e (100 m max.)
- EIA/TIA-568 100-ohm STP (100 m max.)

Full/half Duplex
- Full/half duplex for 10/100Mbps speeds
- Full duplex for Gigabit speed

Media Interface Exchange
Auto MDI/MDIX adjustment for all twisted-pair ports

LED Indicators
- Per port: Link/Act, Speed
- Per device: Power/CPU

Software
VLAN
- 802.1Q VLAN
- Maximum number of VLAN: 64 per device

User Access Security
- MAC-based access control (64 static entries)

Quality of Service (QoS)
- 802.1p Priority Queues
- Maximum number of queues: 2

Port Trunks
- 2 10/100Mbps port trunk groups (up to 12 10/100Mbps ports per trunk)
- 1 Gigabit port trunk (2 Gigabit ports per trunk)

Management & Configuration
- Web-based configuration
- Windows-based utility
- Configuration reset through software or hardware (reset button)
- SNMP v.1 with MIB-II (RFC 1213), private MIB support

Port Mirroring

Performance
Transmission Method
Store-and-forward

MAC Address Table
8K entries per device

MAC Address Learning
Automatic update

Packet Filtering/Forwarding Rates (half duplex)
Maximum 1,488,095 pps per port

RAM Buffer
256KB per device

Physical & Environmental
AC Input
100 to 240 VAC 50/60Hz internal universal power supply

Power Consumption
16 watts

Operating Temperature
0° to $40\ ^{\circ}$C

Storage Temperature
-10° to $70\ ^{\circ}$C

Operating Humidity
10% to 90% non-condensing

Storage Humidity
5% to 90% non-condensing

Dimensions
440 (W) x 140 (D) x 44 (H) mm (device only)
19-inch standard rack mounting size

Weight
2.125 kg (device only)

Emission (EMI)
- FCC Class A
- CE Class A

Safety
CUL

Ordering Information

D-Link®