

High-Performance VPN

- Protocols
 - IPSec
 - PPTP
 - L2TP
 - SSL
- VPN Tunnels
 - DSR-150/150N: Up to 21 tunnels simultaneously
 - Max. 10 for IPSec
 - Max. 10 for PPTP/L2TP
 - Max. 1 for SSL VPN
 - DSR-250/250N: Up to 55 tunnels simultaneously
 - Max. 25 for IPSec
 - Max. 25 for PPTP/L2TP
 - Max. 5 for SSL VPN
 - DSR-500/500N: Up to 70 tunnels simultaneously
 - Max. 35 for IPSec
 - Max. 25 for PPTP/L2TP
 - Max. 10 for SSL VPN
 - DSR-1000/1000N: Up to 115 tunnels simultaneously
 - Max. 70 for IPSec
 - Max. 25 for PPTP/L2TP
 - Max. 20 for SSL VPN
- DES, 3DES, AES Encryption
- Main/Aggressive Negotiation

Wireless Access and Security¹

- IEEE 802.11 a²/b/g/n (2.4 GHz, 5 GHz²)
- IEEE 802.1x RADIUS Authentication with EAP-TLS, EAP-TLS, EAP-PEAP
- WPS, WEP, WPA-PSK, WPA-EAP, WPA2-PSK, WPA2-EAP

Enhanced Network Services

- IPv6
- DHCP Server/ Relay
- Dynamic DNS
- IEEE 802.1q VLAN
- Multiple SSIDs
- SSID-to-VLAN Mapping

Content Filtering

- Static URL Address Filtering
- Keyword Filtering

Fault Tolerance³

- WAN Traffic Failover
- Outbound Load Balancing

¹ DSR-150N/250N/500N/1000N only

² DSR-1000N only

³ DSR-500/500N/1000/1000N only

⁴ The following 3G dongles are supported: DWM-152 A1/A2/A3, DWM-156 A1/A2/A3/A5*/A6*, DWM-157*, Huawei E1550, E173, and EC306.* The dongles marked with * will be supported through firmware upgrades.

⁵ Available through firmware upgrade

Unified Services Routers



D-Link Unified Services Routers provide secure, high-performance networking solutions to address the growing needs of small and medium businesses. The integrated high-speed IEEE 802.11n wireless technology in the DSR-150N, DSR-250N, DSR-500N, and the DSR-1000N routers offers comparable performance to traditional wired networks, but with fewer limitations. Each router provides optimal network security via features such as Virtual Private Network (VPN) tunnels, IP Security (IPSec), Point-to-Point Tunneling Protocol (PPTP), Layer 2 Tunneling Protocol (L2TP), and Secure Sockets Layer (SSL). These routers also allow you to empower your road warriors with clientless remote access anywhere and anytime using SSL VPN tunnels.

Comprehensive Management Capabilities

The DSR-500/500N and DSR-1000/1000N include dual-WAN Gigabit Ethernet that provides policy-based service management to ensure maximum productivity for your business operations. The failover feature maintains data traffic without disconnecting when a landline connection is lost. The Outbound Load Balancing feature adjusts outgoing traffic across two WAN interfaces and optimizes system performance, resulting in high availability. The second WAN port can be configured as a DMZ port, allowing you to isolate servers from your LAN.

Superior Wireless Performance

The DSR-150N, DSR-250N, DSR-500N, and DSR-1000N include 802.11a²/b/g/n, allowing for operation on either the 2.4 GHz or 5 GHz² wireless LAN radio bands. Multiple In Multiple Out (MIMO) technology allows the DSR-150N, DSR-250N, DSR-500N, and DSR-1000N to provide high data rates and a wide wireless coverage area with minimized “dead spots.”

Flexible Deployment Options

The DSR Series supports Third Generation (3G) networks via an extendable USB 3G dongle⁴. This 3G network capability offers an additional data connection for critical or backup services. For the DSR-1000/1000N, a 3G USB dongle can be configured as a third WAN port, performing Traffic Load Balancing and executing automatic failover whenever the

primary WAN link gets lost. For the DSR-500/500N,⁵ the second WAN port could be a dedicated WAN2 or 3G dongle, performing Traffic Load Balancing and executing automatic failover whenever the primary WAN link gets lost. For the DSR-150/150N/250/250N,⁵ the 3G dongle could be configured as a backup link when the primary WAN link is down or configured as the primary WAN port.

Robust VPN Features

A fully featured virtual private network (VPN) provides your mobile workers and branch offices with a secure link to your network. The DSR-150/150N, DSR-250/250N, DSR-500/500N, and DSR-1000/1000N are capable of simultaneously managing 1, 5, 10, or 20 Secure Sockets Layer (SSL) VPN tunnels respectively, empowering your mobile users by providing remote access to a central corporate database. Site-to-site VPN tunnels use IP Security (IPSec) Protocol, Point-to-Point Tunneling Protocol (PPTP), or Layer 2 Tunneling Protocol (L2TP) to facilitate branch office connectivity through encrypted virtual links. The DSR-150/150N simultaneously supports up to 10 IPSec VPN tunnels plus 10 additional PPTP/L2TP tunnels. The DSR-250/250N, DSR-500/500N, and DSR-1000/1000N simultaneously support up to 25, 35, and 70 IPSec VPN tunnels respectively, and 25 additional PPTP/L2TP tunnels.

Efficient Green Technology

D-Link Green Wi-Fi and D-Link Green Ethernet features save power and help cut energy usage costs. The D-Link Green WLAN Scheduler shuts down your wireless network automatically according to a schedule you define, allowing you to turn off your wireless network during off-peak hours, saving energy and keeping your network secure. The D-Link Green Ethernet feature can detect if a link is down on a port, and automatically puts that port into a sleep mode that drastically reduces the amount of power used. In addition, compliance with RoHS (Restriction of Hazardous Substances) and WEEE (Waste Electrical and Electronic Equipment) directives make D-Link Green-certified devices an environmentally responsible choice.



DSR-150

- 8 Fast Ethernet LAN Ports
- Fast Ethernet WAN Port
- USB 2.0 Port

DSR-150N

- IEEE 802.11b/g/n wireless LAN (2.4 GHz)
- 8 Fast Ethernet LAN Ports
- Fast Ethernet WAN Port
- USB 2.0 Port

DSR-250

- 8 Gigabit LAN Ports
- Gigabit WAN Port
- USB 2.0 Port

DSR-500

- 4 Gigabit Ethernet LAN Ports
- 2 Gigabit Ethernet WAN Ports
- USB 2.0 Port

DSR-1000

- 4 Gigabit Ethernet LAN Ports
- 2 Gigabit Ethernet WAN Ports
- 2 USB 2.0 Ports

DSR-250N

- IEEE 802.11b/g/n wireless LAN (2.4 GHz)
- 8 Gigabit LAN Ports
- Gigabit WAN Port
- USB 2.0 Port

DSR-500N

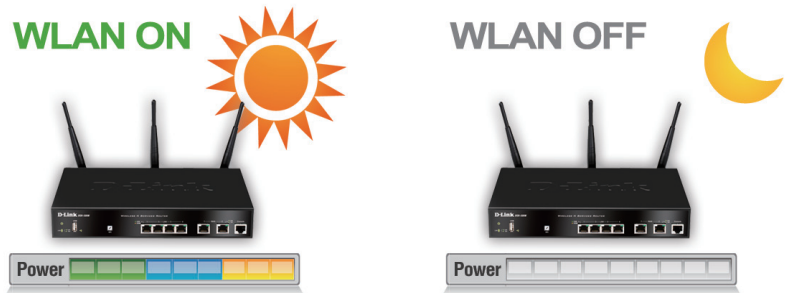
- IEEE 802.11b/g/n wireless LAN (2.4 GHz)
- 4 Gigabit Ethernet LAN Ports
- 2 Gigabit Ethernet WAN Ports
- USB 2.0 Port

DSR-1000N

- IEEE 802.11a/b/g/n wireless LAN (Selectable 2.4 GHz/5 GHz)
- 4 Gigabit Ethernet LAN Ports
- 2 Gigabit Ethernet WAN Ports
- 2 USB 2.0 Ports

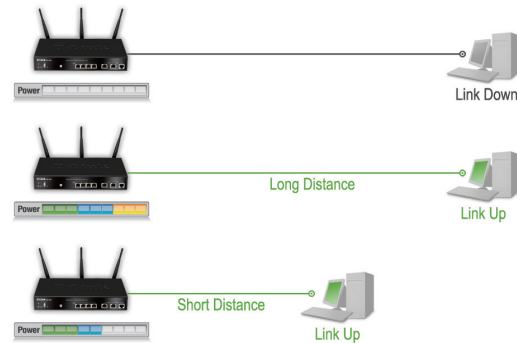


Green Wi-Fi⁶



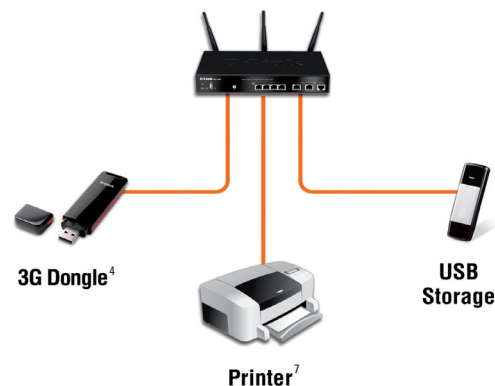
The WLAN Scheduler shuts down the WLAN during off-peak hours to enhance network security and save power.

Green Ethernet



D-Link Green Ethernet detects link status and cable length and adjusts power usage accordingly.

USB 2.0 Extension

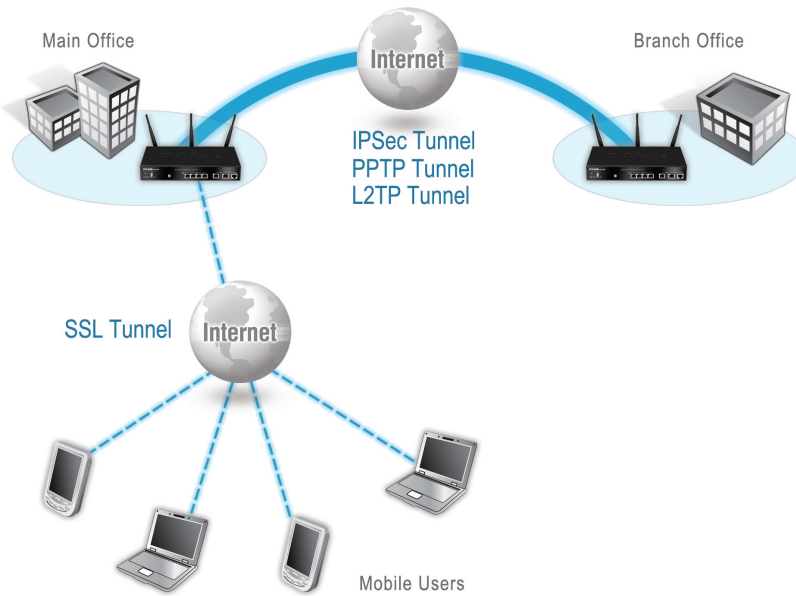


Supports one (DSR-150/150N/250/250N/500/500N) or two (DSR-1000/1000N) USB 2.0 devices to extend functionality.

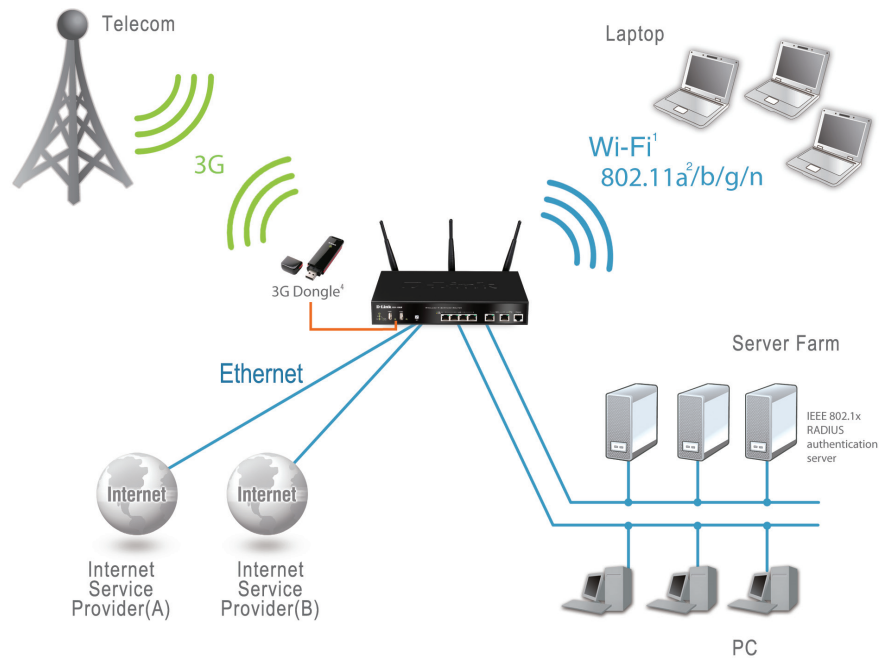
⁶ DSR-150N/250N/500N/1000N only





⁷ Printer support list can be referred to at <http://www.openprinting.org/printers>

Secure VPN Network Implementation



Dual WAN for Redundant Internet



Technical Specifications		DSR-150/150N	DSR-250/250N	DSR-500/500N	DSR-1000/1000N
					
Interface	Ethernet	10/100 Mbps WAN Port 8 10/100 Mbps LAN Ports	10/100/1000 Mbps WAN Port 8 10/100/1000 Mbps LAN Ports	2 10/100/1000 Mbps WAN Ports 4 10/100/1000 Mbps LAN Ports	2 10/100/1000 Mbps WAN Ports 4 10/100/1000 Mbps LAN Ports
	Wireless ¹	802.11b/g/n (Single Band) 2 fixed 2dBi Omni-Directional Antennas	802.11b/g/n (Single Band) 2 Detachable 2 dBi Omni-Directional Antennas	802.11b/g/n (Single Band) 3 Detachable 2 dBi Omni-Directional Antennas	802.11a/b/g/n (Selectable Dual Band) 3 Detachable 2 dBi Omni-Directional Antennas
	USB 2.0 Ports	1	1	1	2
	Console	1 RJ-45	1 RJ-45	1 RJ-45	1 RJ-45
System Performance ⁹	Firewall Throughput ⁸	45 Mbps	45 Mbps	70 Mbps	130 Mbps
	VPN Throughput ¹⁰	25 Mbps	35 Mbps	70 Mbps	100 Mbps
	Concurrent Sessions	20,000	20,000	30,000	60,000
	New Sessions (per second)	200	200	300	600
	Firewall Policies	200	200	300	600
Internet Connection Type	Static/ Dynamic IP	✓	✓	✓	✓
	PPPoE/ L2TP/ PPTP	✓	✓	✓	✓
	Multiple PPPoE	✓	✓	✓	✓
Firewall System	Static Route	✓	✓	✓	✓
	Dynamic Route	—	—	RIPv1, RIP v2, OSPF ¹¹	
	Dynamic DNS	✓	✓	✓	✓
	Inter-VLAN Route	✓	✓	✓	✓
	NAT, PAT	✓	✓	✓	✓
	Web Content Filtering	Static URL, Keywords			
	Intrusion Prevention System (IPS)	—	Signature Package Included in Firmware		
Networking	DHCP Server/ Client	✓	✓	✓	✓
	DHCP Relay	✓	✓	✓	✓
	IEEE802.1q VLAN	✓	✓	✓	✓
	VLAN (Port-Based)	✓	✓	✓	✓
	IP Multicast	IGMP Proxy			
	IPv6	✓	✓	✓	✓
	Route Failover	—	—	✓	✓
	Outbound Load Balancing	—	—	✓	✓
	3G Redundancy	✓	✓	✓	✓

Technical Specifications

DSR-150/150N

DSR-250/250N

DSR-500/500N

DSR-1000/1000N



Technical Specifications		DSR-150/150N	DSR-250/250N	DSR-500/500N	DSR-1000/1000N
Wireless ¹	Multiple Service Set Identifier (SSID)	✓	✓	✓	✓
	Service Set Identifier (SSID) to VLAN Mapping	✓	✓	✓	✓
	Standards	802.11b/g/n	802.11b/g/n	802.11b/g/n	802.11a/b/g/n
	Wireless Security	Wired Equivalent Privacy (WEP) Wi-Fi Protect Setup (WPS) Wi-Fi Protected Access – Personal (WPA-PSK) Wi-Fi Protected Access – Enterprise (WPA-EAP) Wi-Fi Protected Access version 2 – Personal (WPA-PSK) Wi-Fi Protected Access version 2 – Enterprise (WPA-EAP)	Wired Equivalent Privacy (WEP) Wi-Fi Protect Setup (WPS) Wi-Fi Protected Access – Personal (WPA-PSK) Wi-Fi Protected Access – Enterprise (WPA-EAP) Wi-Fi Protected Access version 2 – Personal (WPA-PSK) Wi-Fi Protected Access version 2 – Enterprise (WPA-EAP)	Wired Equivalent Privacy (WEP) Wi-Fi Protect Setup (WPS) Wi-Fi Protected Access – Personal (WPA-PSK) Wi-Fi Protected Access – Enterprise (WPA-EAP) Wi-Fi Protected Access version 2 – Personal (WPA-PSK) Wi-Fi Protected Access version 2 – Enterprise (WPA-EAP)	Wired Equivalent Privacy (WEP) Wi-Fi Protect Setup (WPS) Wi-Fi Protected Access – Personal (WPA-PSK) Wi-Fi Protected Access – Enterprise (WPA-EAP) Wi-Fi Protected Access version 2 – Personal (WPA-PSK) Wi-Fi Protected Access version 2 – Enterprise (WPA-EAP)
Virtual Private Network (VPN)	VPN Tunnels	21	55	70	115
	IPSec Tunnels	10	25	35	70
	SSL VPN Tunnels	1	5	10	20
	PPTP/L2TP Clients	10	25	25	25
	Encryption Methods	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL			
	SSL Encryption Methods	RC4-128, 3DES, AES			
	IPSec/PPTP/L2TP Server	✓	✓	✓	✓
	IPSec NAT Traversal	✓	✓	✓	✓
	Dead Peer Detection	✓	✓	✓	✓
	IP Encapsulating Security Payload (ESP)	✓	✓	✓	✓
	IP Authentication Header (AH)	✓	✓	✓	✓
	VPN Tunnel Keep Alive	✓	✓	✓	✓
Hub and Spoke	✓	✓	✓	✓	
Bandwidth Management	Max. Bandwidth Control	✓	✓	✓	✓
	Priority Bandwidth Control	Port-Based QoS 3 Classes			

Technical Specifications	DSR-150/150N	DSR-250/250N	DSR-500/500N	DSR-1000/1000N
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System Management	Web-based User Interface	HTTP, HTTPS				
	Command Line	✓	✓	✓	✓	
	SNMP	v1, v2c, v3				
Physical & Environment	Power Supply	External Power Supply Unit DC 12 V/1.5 A		Internal Power Supply Unit DC 12 V/2.5 A		
	Max. Power Consumption	7.44 W/ 10.5 W	11.8 W/ 12.6 W	15.6 W/ 16.8 W	17.2 W/ 19.3 W	
	Dimensions (L x W x H)	208 x 118 x 35 mm (8.19 x 4.65 x 1.38 inches)	140 x 203 x 35 mm (5.51 x 8.0 x 1.38 inches)	180 x 280 x 44 mm (7.09 x 11.02 x 1.73 inches)		
	Operation Temperature	0 to 40 °C (32 to 104 °F)				
	Storage Temperature	-20 to 70 °C (-4 to 158 °F)				
	Operation Humidity	5% to 95% non-condensing				
	EMI/EMC	FCC Class B, CE Class B, C-Tick, IC			FCC Class B, CE Class B, C-Tick, IC, VCCI ²	
	Safety	cUL, LVD (EN60950-1)				
	MTBF	240,000 hours	250,000 hours	260,000 hours		

⁸VPN throughput is measured using UDP traffic with a 1420 byte packet size, adhering to RFC2544.

⁹The maximum firewall throughput is based on RFC2544 testing methodologies.

¹⁰Actual performance may vary depending on network conditions and activated services.

¹¹Available with future firmware upgrade.



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