D-Link
Building Networks for People

Product Highlights

Comprehensive Management Solution

Advanced features such as WAN failover, load balancing and integrated firewall make this a reliable, secure and flexible way to manage your network

Complete VPN Features

With fully featured VPN as well as IPSec hub-and-spoke technology, secure communications between mobile employees and offices can be configured easily

Web Authentication Capabilities

Captive Portal allows employees and guest users to be easily authenticated and authorised by accessing customized landing pages

DSR Series

Unified Services VPN Routers

Features

High-Performance VPN

- Protocols
  - IPSec, PPTP/L2TP, GRE, SSL, OpenVPN
- VPN Tunnels
  - DES, 3DES, AES, Blowfish, Twofish, CAST128
  - Hub and Spoke

Enhanced Network Service

- IPv6
- IEEE 802.11q VLAN
- Multiple SSIDs
- Port Monitoring/Bandwidth Control
- IGMP Proxy, IGMP Snooping
- Web Content Filtering
- Web Authentication Capabilities

Wireless Access and Security

- IEEE 802.11 a[1]/b/g/n/ac[1]
- IEEE 802.1x RADIUS Authentication with EAP-TLS, EAP-TLLS, EAP-PEAP
- WPS, WEP, WPA-PSK, WPA-EAP, WPA2-PSK, WPA2-EAP

Fault Tolerance[2]

- WAN Traffic Failover & Outbound Load Balancing

The D-Link DSR Series Unified Services VPN Routers provide secure, high-performance networking solutions to address the growing needs of small and medium businesses. With integrated high-speed wireless technology, the DSR series routers offer comparable performance to wired networks, but with fewer limitations. Next generation wireless performance is available on the DSR-1000AC, which introduces 802.11ac support to the family. Available on the 5 GHz band, the combination of wider radio frequency bandwidths take data rates available to clients supporting the wireless AC standard to the next level.

Comprehensive Management Capabilities

The DSR-500N and DSR-1000AC Unified Services Routers include dual WAN Gigabit Ethernet ports to provide high availability for your WAN or Internet connections. Traffic can be load-balanced across the links with Outbound Load Balancing, increasing the performance and availability of business applications. The secondary WAN port can also be used to create a DMZ, isolating servers from your LAN. The DSR series supports mobile broadband networks via an extendable USB modem[3], such as 3G or 4G[7] dongles. Traffic load balancing can be performed on the mobile data connections, providing an additional layer of redundancy for critical or backup applications.

Web Authentication Capabilities

Captive Portal allows employees and guest users to be easily authenticated and authorised by accessing a customised landing page. Users can be authenticated by a local database, RADIUS, LDAP, Microsoft Windows Active Directory, NT Domain and POP3 server. A maximum of four servers can be configured at any one time.

Complete and 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 series routers are capable of Secure Sockets Layer (SSL) VPN tunnels, as well as Generic Routing Encapsulation (GRE) tunnels, 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. OpenVPN allows mobile users to connect to the intranet via encrypted links with their PC, laptops or mobile devices.

Web Content Filtering

The DSR series also provides a web content filtering feature to help administrators monitor, manage and control employees' Internet usage. Static web content filtering helps to remove malicious objects such as Java applets, ActiveX, and cookies, or to block URLs by keyword.

D-Link Assist
Rapid Response Support

If the worst should happen to your network you need the very best support and fast. Downtime costs your business money. D-Link Assist maximises your uptime by solving technical problems quickly and effectively. Our highly trained technicians are on standby around the clock, ensuring that award-winning support is only a phone call away.

With a choice of three affordable service offerings covering all D-Link business products, you can select the package that suits you best:

D-Link Assist Gold - for comprehensive 24-hour support

D-Link Assist Gold is perfect for mission-critical environments where maximum uptime is a high priority. It guarantees four hour around-the-clock response. Cover applies 24/7 for every day of the year including holidays.

D-Link Assist Silver - for prompt same-day assistance

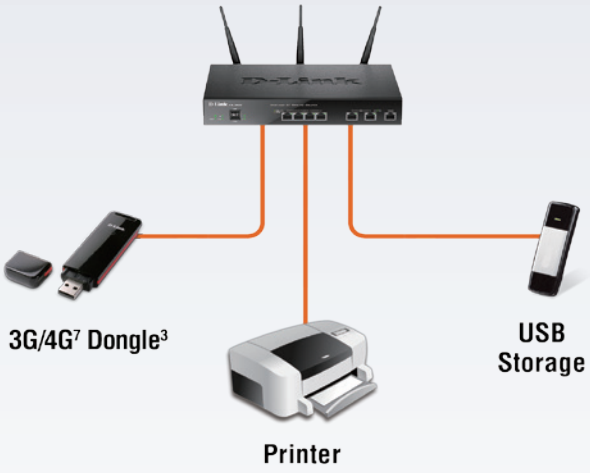
D-Link Assist Silver is designed for 'high availability' businesses that require rapid response within regular working hours. It provides a four hour response service Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist Bronze - for guaranteed response on the next business day

D-Link Assist Bronze is a highly cost-effective support solution for less critical environments. Response is guaranteed within eight business hours Monday to Friday from 8am to 5pm, excluding holidays.

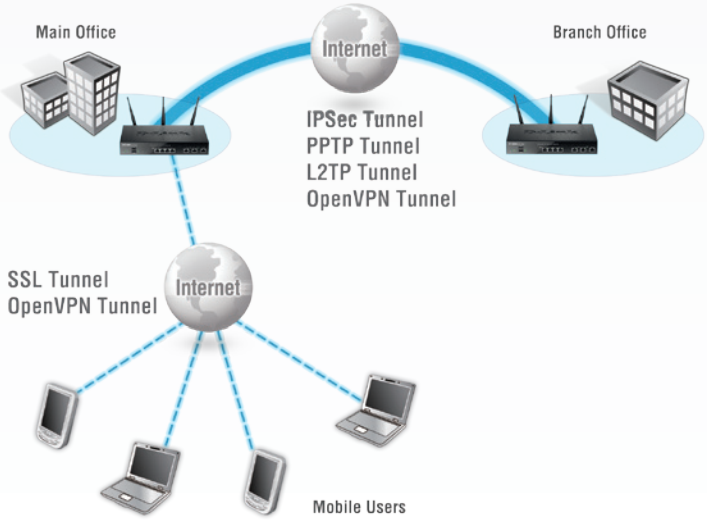
D-Link Assist can be purchased together with any D-Link business product. So whether you're buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.

USB 2.0 Extension

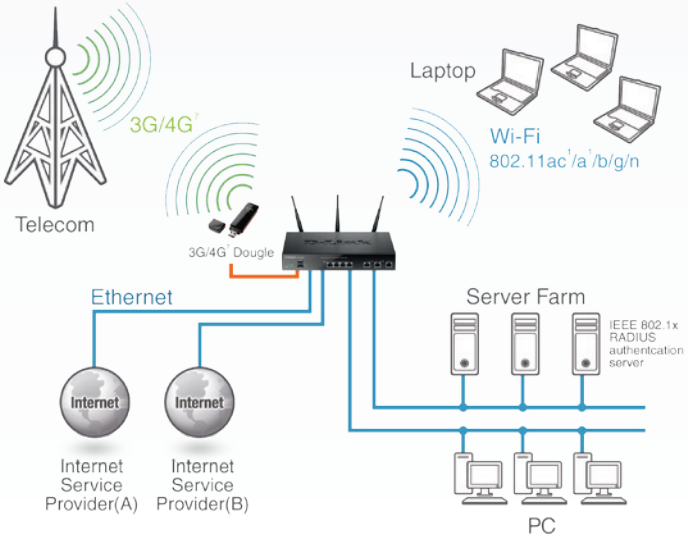


Supports one (DSR-150N/250N/500N) or two (DSR-1000AC) USB 2.0 devices to extend functionality.

Secure VPN Network Implementation



Dual WAN for Redundant Internet



Technical Specifications

General	DSR-150N	DSR-250N	DSR-500N	DSR-1000AC
Hardware Version	A2	B1	A1	DSR-1000AC A1
Ethernet Interface	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 Interface	802.11 b/g/n (Single Band) 2 Internal 2dBi Omni-Directional Antennas	802.11 b/g/n (Single Band) 2 Detachable 2 dBi Omni-Directional Antennas	802.11b/g/n (Single Band) 3 Detachable 2 dBi Omni-Directional Antennas	802.11 ac/a/b/g/n (Concurrent dual band) 3 Detachable 2 dBi Omni-Directional Antennas
Maximum Wireless Speeds[7]	300 Mbps - 2.4GHz	300 Mbps - 2.4GHz	450 Mbps - 2.4GHz	450 Mbps - 2.4 GHz 1300 Mbps - 5 GHz
USB 2.0 Port	1			2
Console Port	RJ-45			
Performance[5]				
Firewall Throughput[4]	95 Mbps	750 Mbps	950 Mbps	950 Mbps
VPN Throughput (3DES)[6]	40 Mbps	50 Mbps	70 Mbps	250 Mbps
Concurrent Sessions	20,000		30,000	100,000
New Sessions (per second)	200		300	1000
Firewall Policies	200		300	600
Internet Connection Type				
Static/Dynamic IP	✓			
PPPoE/L2TP/PPTP	✓			
Multiple PPPoE	✓			
Firewall System				
Static Route	✓			
Dynamic Route	—		RIP v1/v2, OSPF, OSPFv3	
Dynamic DNS	✓			
Inter-VLAN Route	✓			
NAT, PAT	✓			
Web Content Filtering	Static URL, Keywords			
Intrusion Prevention System (IPS)	—	Signature Package Included in Firmware		
Authentication	Internal User Database, Radius, POP3, LDAP, AD, NT Domain			

Technical Specifications

Networking	DSR-150N	DSR-250N	DSR-500N	DSR-1000AC
DHCP Server/Client	✓			
DHCP Relay	✓			
IEEE 802.11q VLAN	✓			
VLAN (port-based)	✓			
IP Multicast	IGMP Proxy, IGMP Snooping			
IPv6	✓			
Route Failover	—		✓	
Outbound Load Balancing	—		✓	
3G/4G[7] Redundancy	✓			
Wireless				
Multiple Service Set Identifier (SSID)	✓			
Service Set Identifier (SSID) to VLAN Mapping	✓			
Standard	802.11 b/g/n			802.11 ac/a/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)			
Virtual Private Network (VPN)				
VPN Tunnels	36	75	85	155
IPSec Tunnels	10	25	35	70
SSL VPN Tunnels	1	5	10	20
PPTP/L2TP Tunnels	10	25		
GRE	5	10	15	20
OpenVPN Tunnels	10			20
Encryption Methods	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL			
SSL Encryption Methods	RC4-128, 3DES, AES			
IPSec/PPTP/L2TP/OpenVPN Server	✓			
IPSec NAT Traversal	✓			
Dead Peer Detection	✓			
IP Encapsulating Security Payload (ESP)	✓			
IP Authentication Header (AH)	✓			
VPN Tunnel Keep Alive	✓			
Hub and Spoke	✓			

Technical Specifications

Bandwidth Management	DSR-150N	DSR-250N	DSR-500N	DSR-1000AC
Maximum Bandwidth Control	✓			
Priority Bandwidth Control	Port-based QoS 3 Classes			
System Management				
Web-based User Interface	✓			
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	External Power Supply Unit DC 12 V/3 A
Max. Power Consumption	10.5 W	12.6 W	16.8 W	23.1 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, RCM, IC			FCC Class B, CE Class B, RCM, IC, VCCI
Safety	cUL, LVD (EN60950-1)			
3rd Party Certification	IPv6 Ready, Wi-Fi, VPNC AES Interop, VPNC Basic Interop			
MTBF	240,000 hours	250,000 hours	260,000 hours	360,000 hours

[1] 1000AC only.
[2] DSR-500N/1000AC only.
[3] The following portable modem are supported: DWM-152 A1/A2/A3, DWM-156 A1/A2/A3/A5/A6/A7, DWM-157 A1/B1, DWM-158 D1, DWP-156 A1/B1, DWP-157 A1/B1, Huawei E1550, E173, E303 and EC306.
[4] Firewall throughput is measured using UDP traffic with a 1,518 bytes packet size, adhering to RFC2544.
[5] Actual performance may vary depending on network conditions and activated services.
[6] VPN throughput is measured using UDP traffic with the packet size 1420 bytes and encryption method 3DES plus SHA-1, adhering to PFC2544.
[7] Available with future firmware upgrade.
[8] Maximum wireless signal rate derived from IEEE standard 802.11 and 802.11ac specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors may adversely affect wireless signal range.

For more information: www.dlink.com

D-Link European Headquarters. D-Link (Europe) Ltd., D-Link House, Abbey Road, Park Royal, London, NW10 7BX.
Specifications are subject to change without notice. D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries.
All other trademarks belong to their respective owners. ©2015 D-Link Corporation. All rights reserved. E&OE.

Updated October 2015

D-Link®
Building Networks for People