

#### **High VPN Performance**

- Protocol: IPSec, PPTP, L2TP, SSL
- Up to 35 (DSR-500N) or 70 (DSR-1000N) VPN tunnels
- **Up to 10 (DSR-500N) or 20 (DSR-1000N)** SSL VPN tunnels
- DES, 3DES, AES encryption
- Main/ Aggressive Negotiation

#### Wireless Access and Security

- IEEE 802.11 a<sup>1</sup>/b/g/n (2.4GHz, 5GHz<sup>1</sup>)
- IEEE 802.1x RADIUS authentication with EAP-TLS, EAP-TLLS, EAP-PEAP
- WPS, WEP, WPA-PSK, WPA-EAP, WPA2-PSK, WPA2-EAP

#### **Enhanced Network Services**

- ■IPv6
- DHCP Servicer/ Relay
- Dynamic DNS
- IEEE 802.1g VLAN
- Multiple SSID
- SSID-to-VLAN Mapping

#### **Content Filtering**

- Static URL Address Filtering
- Keyword Filtering

#### **Fault Tolerance**

- ■Dual WAN with Traffic Failover
- ■WAN Failover to 3G1,2
- Outbound Load Balancing

# **Unified Services Routers**



D-Link Unified Services Routers offer secure, high performance networking solutions to address the growing needs of small and medium businesses. Integrated high-speed IEEE 802.11n and 3G1 wireless technologies offer comparable performance to traditional wired networks, but with fewer limitations. Optimal network security is provided 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). Empower your road warriors with clientless remote access anywhere and anytime using SSL VPN tunnels.

#### **Comprehensive Management Capabilities**

The DSR-500N and DSR-1000N include dual-WAN Gigabit Ethernet which provides policy-based service management ensuring 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<sup>2</sup> adjusts outgoing traffic across two WAN interfaces and optimizes the 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**

Designed to deliver superior wireless performance, the DSR-500N and DSR-1000N include 802.11 a1/b/ g/n, allowing for operation on either the 2.4 GHz or 5 GHz<sup>1</sup> radio bands. Multiple In Multiple Out (MIMO) technology allows the DSR-500N and DSR-1000N to provide high data rates with minimal "dead spots" throughout the wireless coverage area.

#### **Flexible Deployment Options**

The DSR-1000N supports Third Generation (3G) Networks via an extendable USB 3G dongle. This 3G network capability offers an additional secure data connection for networks that provide critical services. The DSR-1000N can be configured to automatically switch to a 3G network whenever a primary WAN connection is lost.

#### **eRobust 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-500N and DSR-1000N are capable of simultaneously managing 10 or 20 Secure Sockets Layer (SSL) VPN tunnels respectively, empowering your mobile users by providing remote access to a central corporate database. Site-tosite 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-500N supports up to 35 simultaneous VPN tunnels, and the DSR-1000N up to 70 VPN tunnels.

#### **Efficient Green Technology**

As a concerned member of the global community, D-Link is devoted to providing eco-friendly products. D-Link Green WiFi and D-Link Green Ethernet save power and prevent waste. The D-Link Green WLAN scheduler reduces wireless power automatically during off-peak hours. Likewise the D-Link Green Ethernet program adjusts power usage based on the detected cable length and link status. In addition, compliance with RoHS (Restriction of Hazardous Substances) and WEEE (Waste Electrical and Electronic Equipment) directives make D-Link Green certified devices the environmentally responsible choice.

<sup>&</sup>lt;sup>1</sup> DSR-1000N only <sup>2</sup> Available with future firmware upgrade





#### **DSR-500N**

- IEEE 802.11 b/g/n (2.4GHz)
- 4 Gigabit Ethernet LAN
- 2 Gigabit Ethernet WAN
- ■1 USB 2.0

#### **DSR-1000N**

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

#### **Accessories**

### DWM-152 (3.5G)

- GSM/GPRS/EDGE 850 / 900 / 1800 / 1900 MHz
- UMTS/HSDPA3 850 / 1900 / 2100 MHz
- DATA RATES<sup>4</sup>
  - DL: 3.6 Mbps
  - UL: 384 Kbps

#### DWM-156 (3.75G)

- GSM/GPRS/EDGE 850 / 900 / 1800 / 1900 MHz
- UMTS/HSDPA3 850 / 1900 / 2100 MHz
- DATA RATES<sup>4</sup>
  - DL: 7.2 Mbps
  - UL: 5.76 Mbps
- <sup>3</sup> Supported frequency band is dependant upon regional
- hardware version.

  Data rates are theoretical. Data transfer rate depends on network capacity and signal strength.



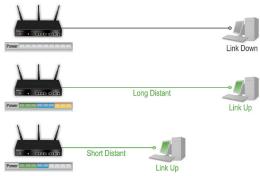
## Green Wi-Fi





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

# **Green Ethernet**



The D-Link Green Ethernet power-saving program can adjust power by detecting link status and cable length.

## **USB 2.0 Extension**

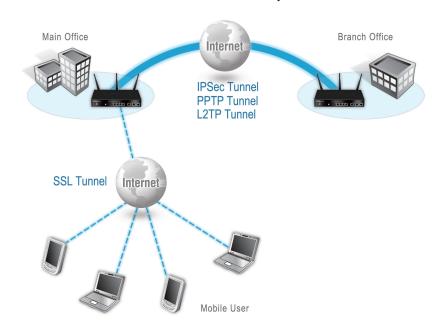


D-Link Unified Services Routers support USB 2.0 to extend functionality via Plug and Play.

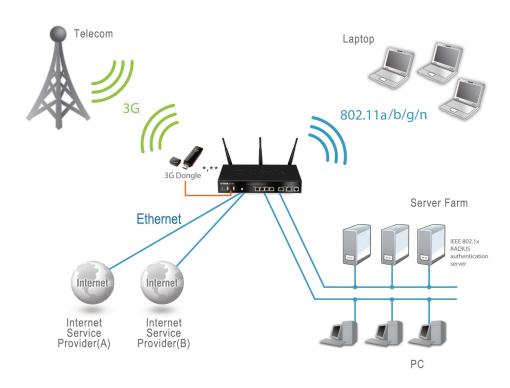
<sup>\*</sup> DSR-1000N only \*\* Available with future firmware upgrade



# Secure VPN Network Implementation



# Dual-WAN/3G for Redundant Internet



- \* DSR-1000N only
- \*\* Available with future firmware upgrade

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Technical Specifications DSR-500N DSR-1000N





Interface	Ethernet	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	802.11 b/g/n (Single Band) 3 Detectable 2dBi Omni-Directional Antennas	802.11 a/b/g/n (Dual Band) 3 Detectable 2dBi Omni-Directional Antennas	
	USB	1 USB 2.0	2 USB 2.0	
	Console	1 RJ-45	1 RJ-45	
System Performance <sup>7</sup>	Firewall Throughput <sup>6</sup>	70 Mbps	130 Mbps	
	VPN Throughput <sup>8</sup>	35 Mbps	70 Mbps	
	Concurrent Sessions	30,000	60,000	
	New Sessions (per second)	300	600	
	Policies	100 (Each Feature) 200 (Firewall Rule)	100 (Each Feature) 600 (Firewall Rule)	
Internet	Static/ Dynamic IP	✓	✓	
Connection Type	PPPoE/ L2TP/ PPTP	✓	✓	
	Multiple PPPoE	✓	✓	
Firewall System	Static Route	✓	✓	
	Dynamic Route	RIPv1, RIP v2, OSPF⁵		
	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	✓	✓	
	3G Redundancy <sup>5</sup>		✓	
	Outbound Load Balancing	✓	✓	

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Technical Specifications		DSR-500N	DSR-1000N	
Wireless	Multiple Service Set Identifier (SSID)	✓	✓	
	Service Set Identified (SSID) to VLAN Mapping	✓	<b>√</b>	
	Wireless Security	Wired Equivalent Privacy (WEP)  WiFi 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	VPN Tunnels	35	70	
Network (VPN)	Encryption Methods	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL		
	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	✓	✓	
SSL Virtual Private Network	SSL VPN Tunnel	10	20	
(SSL VPN)	SSL Encryption Methods	DES, 3DES, AES		
	SSL Message Integrity	MD5, SHA1		
Bandwidth Management	Max. Bandwidth Control	✓	✓	
	Priority Bandwidth Control	Port-Based QoS 3 Classes		
System Management	Web-based User Interface	HTTP, HTTPS		
	Command Line	✓	✓	
	SNMP	v1, v2c, v3		

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DSR-500N **Technical Specifications DSR-1000N** 





Physical & Environment	Power Supply	Internal Power Supply Unit DC12V/2.5A	Internal Power Supply Unit DC12V/2.5A	
	Dimensions (L x W x H)	180 x 280 x 44 mm	180 x 280 x 44 mm	
	Operation Temperature	0 to 40 °C		
	Storage Temperature	-20 to 70 °C		
	Operation Humidity	5% to 95% Non-condensing		
	EMI	FCC Class B, CE Class B, VCCI, C-Tick, IC		
	Safety	cUL, LVD (EN60950-1)		
	MTBF	260,000 hours		













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Available with future firmware upgrade
 The maximum Firewall plaintext throughput is based on RFC2544 testing methodologies.
 Actual performance may vary depending on network conditions and activated services.
 VPN throughput is measured using UDP traffic with a 1420 byte packet size, adhering to RFC2544.