D-Link®

AirPlus G+

DI-824VUP+

802.11g Wireless VPN Router

With Built-in 4-Port Switch & Parallel/USB Print Server

The DI-824VUP+ is an 802.11g wireless VPN router that combines broadband Internet sharing with robust VPN firewall security, print server and built-in 4-port switch for ready printer and workstation connection. It's designed for office users looking for high wireless speed, secure VPN connections, advanced firewall protection and policy-based content filtering security. This router gives your business a cost-effective way to install a secure and fast network with bottleneck-free link to the outside world.

Ready Network Connection

With built-in wireless LAN, a 4-port switch and print server, this router provides ready connection for workstations, file servers and printers, with or without the network wires. These built-in functions save you the cost and trouble of installing a separate wireless access point, an Ethernet switch and a print server.

Enhanced Wireless Speeds

At up to 54Mbps, the router provides wireless LAN users a very high data transfer rate when operating with other 802.11g wireless users. In addition, this router is also compatible with existing 802.11b and 802.11b+ wireless devices. This means that you may sacrifice some of the router's high wireless speed when you mix with your existing 802.11b and 802.11b+ devices, but you will not lose any ability to communicate.

Secure VPN Connections

The router is equipped with embedded VPN support, allowing you to create multiple IPSec tunnels to remote sites/clients. IPSec uses strong encryption with DES, 3DES, AES and Automated Key Management via IKE/ISAKMP. A VPN tunnel can be activated from the router to a remote site or a mobile user for secured traffic flow using triple DES encryption. This offers users a way to confidentially access and transfer sensitive information. Multiple VPN tunnels may be easily created without the need to setup IKE (Internet Key Exchange) policies. In addition to VPN tunnels, the router also supports VPN pass-through for those who want to use their own VPN client software.

Firewall Protection

Firewall protection includes Intrusion Detection System (IDS), Stateful Packet Inspection (SPI) packet filtering. The router protects your network from attacks and logs all attacks so you can check the log file to find out what happened.

Access Control

URL blocking and domain filtering are part of basic features offered by router. These functions provide the benefit of limiting access to undesirable Internet sites.

Virtual Mapping and DMZ Support

The router blocks and re-directs certain ports to limit the services that outside users can access your network. Virtual Server Mapping is used to re-task services to multiple servers. The router can be set to allow separate FTP, Web and servers to share the same Internet-visible IP address while still protecting your servers and workstations from hackers.

A DMZ setting can be applied to a single client (such as a Web server) behind the router to fully expose it to the Internet and ensure complete Internet application compatibility even if the specific port is not known. This allows you to set up web sites and e-commerce business from your office while maintaining protection for the rest of your office LAN.

Print Server Supporting Parallel and USB Printers

The router provides a bi-directional parallel printer port and a USB printer port, allowing you to share a parallel and a USB printer among your office users to print files and web pages.

Key Features

- 10/100BASE-TX port for DSL/cable modem connection
- Additional COM port for WAN link backup
- WAN port supports PPPoE for DSL dial-up mode to save ISP connection fee
- 4 built-in 10/100BASE-TX switch ports with auto MDI/MDIX support
- Built-in 802.11g WLAN with up to 54Mbps wireless speed *
- Built-in print server supporting parallel and USB printers
- VPN supports IPSec with up to 40 tunnels to 40 remote sites and VPN pass-through

- Stateful Packet Inspection (SPI)
- URL blocking, domain filtering
- Intrusion detection, security event log
- DMZ and Virtual Server Mapping support
- Network Time Protocol, UPnP support
- Web-based configuration
- Setup wizard for quick installation

* When used with AirPlus XtremeG+ products

DI-824VUP+
Technical Specifications

Hardware

WAN Ports
- 10/100BASE-TX port for connection to DSL/cable modem, supporting "Always-on" (bridged) and PPPoE for DSL dial-up
- RS-232 COM port for ISDN/analog modem backup

LAN Ports
4 10/100BASE-TX ports with auto MDI/MDIX

WLAN
802.11g standard

Printer Ports
- Bi-directional parallel port
- USB 1.1 port

LED indicators
- Power
- Status
- WAN Activity
- LAN Activity
- Printer

Software

Stateful Packet Inspection (SPI)
- IP Address and Port Number
- Packet Count and Byte Count
- Sequence and Acknowledgement Number
- Timestamps
- Payload Modification History
- Dynamic Association

Comprehensive Logging
- Filtering activity: logs rejected internal and external connection requests
- Session tracking activity: logs all session creation and termination information
- Intrusion detection activity: log information about outside attack

NAT
- IP Network Address Translation
- Traditional IP Network Translation
- Protocol Complications with IP Network Address Translation
- DHCP server and client support
- Subnet mask class A, B, and C
- DHCP server class C (1 to 254 clients)

NAT Application Level Gateway
- H.323 Protocol Suite
- File Transfer Protocol (FTP)
- Session Initiation Protocol (SIP)
- Session Description Protocol (SDP)
- Real-Time Transport Protocol (RTP)
- Internet Relay Chat (IRC)
- Multiple Gaming Protocol

VPN Pass-through Support
- PPTP pass-through
- L2TP pass-through
- IPSec pass-through

Advanced VPN Support
- Authentication transform: MD5 and SHA-1
- Encryption transform: Null, DES, 3DES
- Remote access VPN (up to 40 VPN tunnels)

Routing Support
- Static Route
- Dynamic Route
- RIP-1, RIP-2
- IP Alias
- IP Multicast
- UDP, TCP, ICMP, ARP

Firewall & Access Control
- Access-list control and rules
- Stateful Packet Inspection (SPI)
- Domain filtering
- URL filtering
- Packet filtering
- Ping of Death prevention
- IP spoofing
- Intrusion Detection
- Security event log

Print Server Support
- Windows 95, 98, ME, 2000, XP, NT
- MacOS

Configuration and Management
- Web-based Utilities
- UPnP support

Built-in Wireless LAN

Data Rates
- 802.11g: up to 54Mbps (6/9/12/18/24/36/48/54Mbps)
- 802.11b+: up to 22Mbps
- 802.11b: up to 11Mbps (1/2/5.5/11Mbps)

RF Frequency Range
2.4 to 2.4835 GHz

Operating Channels
- 1 to 11 channels (North America)
- 1 to 13 channels (General Europe)

Antenna
Built-in 2dBi Gain diversity patch antenna

Transmit Output Power
- 802.11b: 16dBm (typical)
- 802.11g: 14dBm (typical)

Receive Sensitivity (for 802.11b)
(typically @PER < 8% packet size 1024 @ 25 $^{\circ}$C +/- 5 $^{\circ}$C)
- 22Mbps (PBCC): -80dBm
- 11Mbps (PBCC): -85dBm
- 11Mbps (CCK): -84 dBm
- 5.5Mbps (CCK): -87 dBm
- 2Mbps (QPSK): -90 dBm
- 1Mbps (BPSK): -92 dBm

Receive Sensitivity (for 802.11g)
(typically @PER < 8% packet size 1024 @ 25 $^{\circ}$C +/- 5 $^{\circ}$C)
- 54Mbps (OFDM): -71 dBm
- 48Mbps (OFDM): -72 dBm
- 36Mbps (OFDM): -77 dBm
- 24Mbps (OFDM): -80 dBm
- 12Mbps (OFDM): -86 dBm
- 9Mbps (OFDM): -87 dBm
- 6Mbps (OFDM): -89 dBm

Operating Range *
- Indoors: 100 meters (328 feet)
- Outdoors: 400 meters (1,312 feet)

* Environmental factors may adversely affect range

Physical & Environmental

Power
- DC 5V 2.5A
- Through external power adapter

Dimensions
192 x 118 x 31 mm (device only)

Weight
320 grams (device only)

Operating Temperature
0° to 55 $^{\circ}$C

Storage Temperature
-20° to 70 $^{\circ}$C

Humidity
5% to 95% non-condensing

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

DI-824VUP+

Technical Specifications

Box Includes
- DI-824VUP+ Router
- CD (includes Print Server Driver programs for Windows and MacOS, user's Manual)
- Quick Installation Guide
- Cat. 5 cable
- External power adapter
- 4 rubber feet
- 2 stand rubber feet
- 1 set of screws

Ordering Information

DI-824VUP+	VPN Router With Built-in 802.11g Wireless LAN, 4-Port Switch, USB/Parallel Printer Server

Please specify your order as follows:

DI-824VUP+/ANA	With US standard power adapter, North America frequency
DI-824VUP+/ENA	With US standard power adapter, EU frequency
DI-824VUP+/BEU	With UK standard power adapter, EU frequency
DI-824VUP+/EEU	With EU standard power adapter, EU frequency
DI-824VUP+/NEU	With Australia standard power adapter, EU frequency
DI-824VUP+/CN	For China
TDI-824VUP+	For Taiwan

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	TEL	FAX
U.S.A	TEL: 1-714-885-6000	FAX: 1-866-743-4905
Canada	TEL: 1-905-8295033	FAX: 1-905-8295223
Europe	TEL: 44-20-8731-5555	FAX: 44-20-8731-5511
Germany	TEL: 49-6196-77990	FAX: 49-6196-7799300
France	TEL: 33-1-30238688	FAX: 33-1-30238689
Benelux	TEL: 31-10-282-1445	FAX: 31-10-282-1331
Italy	TEL: 39-2-2900-0676	FAX: 39-2-2900-1723
Iberia	TEL: 34-93-4090770	FAX: 34-93-4910795
Sweden	TEL: 46-(0)8564-61900	FAX: 46-(0)8564-61901
Norway	TEL: 47-22-309075	FAX: 47-22-309085
Denmark	TEL: 45-43-969040	FAX: 45-43-424347
Finland	TEL: 358-9-2707-5080	FAX: 358-9-2707-5081
Singapore	TEL: 65-6774-6233	FAX: 65-6774-6322
Australia	TEL: 61-2-8899-1800	FAX: 61-2-8899-1868
Japan	TEL: 81-3-5434-9678	FAX: 81-3-5434-9868
China	TEL: 86-10-8518-2533	FAX: 86-10-8518-2250
India	TEL: 91-022-652-6696	FAX: 91-022-652-8914
Middle East (Dubai)	TEL: 9714-8834234	FAX: 9714-8834394
Turkey	TEL: 90-212-335-2553	FAX: 90-212-335-2500
Egypt	TEL: 202-414-4295	FAX: 202-415-6704
Israel	TEL: 972-9-9715700	FAX: 972-9-9715601
Chile	TEL: 56-2-232-3185	FAX: 56-2-232-0923
Brasil	TEL: 55-11-55039320	FAX: 55-11-55039321
South Africa	TEL: 27(0)1266-52165	FAX: 27(0)1266-52186
Russia	TEL: 7-095-744-0099	FAX: 7-095-744-0099#350
Taiwan	TEL: 886-2-2910-2626	FAX: 886-2-2910-1515
D-Link Corp.	TEL: 886-2-2916-1600	FAX: 886-2-2914-6299

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