D-Link®

DSL-504

This remote router features 1 ADSL WAN port, 4 10/100Mbps switched LAN ports, IP routing, transparent bridging, NAT/DHCP Internet gateway functions and VPN.

ADSL Router for SOHO Networks

With the DSL-504 ADSL remote router, speeding up your network has never been easier or more cost-effective. Offering multi-user connectivity many times faster than traditional modems plus incredible traffic management and security features that allow you to take control of your network, this router is designed to power the WAN link for your entire office.

Up to 8Mbps Speed
At up to 8Mbps downstream and 640Kbps upstream for full-rate .dmt, and up to 1.5Mbps downstream and 512Kbps upstream for G.Lite, you'll see a startling and immediate increase in performance.

Uses Existing Telephone Line
The DSL-504 ADSL router operates on the existing telephone line and does not require any new cabling. ADSL simply makes better use of the existing wire by partitioning it into different channels or frequencies in order to get more data on the line. The frequency range used by traditional telephones remains untouched, with data travelling at other frequencies. This allows traditional phones and faxes to operate exactly as before without being affected by the high-speed ADSL data transfers which take place at the same time.

No More Busy Signals
ADSL is always on once it is installed, not a problem since ADSL providers don't charge per minute. It simply eliminates the need to dial up to establish a connection to an ISP or a corporate network and makes your online experience that much faster, reliable and convenient.

4 Built-in Switch Ports
The ADSL router comes with 4 built-in 10/100Mbps switched ports, each providing dedicated bandwidth for connected devices/computers. Since devices connected directly to a switch don't compete for local bandwidth, the DSL-504 can help speed up your LAN as well.

Routing
The DSL-504 has an integrated routing engine that gives you power and control over your network.

Multi-User Access
The router will save you both time and money. DHCP automatically configures computers for networking each time one is turned on. NAT allows multiple LAN users to share a single ISP account over the ADSL line, removing the need to get an account for each person wishing to go online.

Security
The router provides many security features found in firewalls such as IP filtering, socket filtering, NAT which makes your internal network invisible to the outside, and Virtual Private Networking (VPN*).

Traffic Management
The router allows you to maximize the use of your ADSL bandwidth through its innate ability to keep broadcast packets off the WAN, IP filtering which can keep certain computers off the WAN, socket filtering which can prevent specific application from using the WAN, and ATM traffic shaping which allows you to prioritize your traffic through service agreements with your ISP.

SOHO Router with Built-in Switched Ports

Key Features

- ADSL port, 4 10/100Mbps Fast Ethernet switched ports
- Supports both 8Mbps G.dmt and 1.5 Mbps G.lite flavors of ADSL
- Automatic sensing and configuring for the above two ADSL flavors
- Bridged Ethernet over ATM, IP over ATM, PPP over ATM
- Embedded PPP over Ethernet
- Precise ATM traffic shaping

- VPN for data protection over the Internet*
- IP packet routing/filtering
- Routing protocol supports RIP-1, RIP-2, Static Routing
- NAT, DHCP client/server support
- PAP/CHAP authentication, administrative passwords through Telnet
- Built-in MIBs for SNMP management
- Upgradable flash EPROM firmware
- Web-based GUI for easy installation and setup

* Optional

ROUTER

Technical Specifications

WAN

ADSL Interface
1 RJ-11 connector for phone line connection

Standards
- ANSI T1.413 issue 2 (full rate DMT over analog POTS)
- ITU G.992.1 (G.dmt)
- ITU G.992.2 (G.lite)
- ITU G.994.1 (G.hs)

Data Rates
- DMT full rate downstream: up to 8Mbps
- DMT full rate upstream: up to 640Kbps
- G.lite ADSL downstream: up to 1.5Mbps
- G.lite ADSL upstream: up to 512Kbps

Protocols
- Bridged Ethernet over ATM (RFC 1483)
- Classical IP over ATM (RFC 1577)
- PPP over ATM protocol (RFC 2364)
- PPP over Ethernet (RFC 2516)

Security
- PAP, CHAP
- Simple firewall
- Administrative passwords through Telnet and SNMP

Signaling
- ATM signaling: UNI 3.0, 3.1, 4.0
- Precise ATM traffic shaping
- OAM F4/F5

Routing

IP Packet Routing
- DHCP/NAT
- IP filtering
- TCP/IP with RIP-1 and RIP-2, Static Routing
- ICMP (RFC 791)
- UDP (RFC 792)
- ARP (RFC 826)

LAN

LAN Interface
- 4 10/100Mbps 10BASE-T/100BASE-TX switched ports
- Network speed auto-sensing, full/half duplex support

Standards
- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 10BASE-TX Fast Ethernet
- IEEE 802.3x NWay auto-negotiation

Flow Control
- IEEE 802.3x Flow Control (full duplex)
- Back Pressure Jamming (half duplex)

Others

Transparent Bridging
IEEE 802.1D Spanning Tree

Internet Support
- Dynamic Host Configuration Protocol (DHCP)
- Network Address Translation (NAT)

IP Multicasting
- IGMP (Internet Group Membership Protocol) Proxy
- Snooping, Multicast Forwarding

Virtual Private Networking (Optional)
- Layer 2 Tunnelling Protocol (L2TP)
- Point-to-Point Tunnelling Protocol (PPTP)

LED Indicators
- Power
- Status
- ADSL: Link, Act
- Per LAN port: Link/Act

Management

Standard/MIB
- SNMP standard
- MIB-II (RFC 1213) for IP
- Web-based management

Administration
- Telnet support
- SNMP support

User Authentication
- PPP Authentication Protocol (RFC 1334)
- Challenge Handshake Authentication Protocol with PPP (RFC 1994)

Statistic Monitoring
Ethernet, ATM and ADSL statistics

Firmware Upgrade, Configuration Backup/Restore
Supported via TFTP

Console Port
RS-232 DB-9 DCE x 1

Physical & Environmental

Power Input
Through external AC power adapter (provided)

Power Consumption
10 watts (max.)

Operating Temperature
$0^{\circ} \sim 40^{\circ}C$ ($32^{\circ} \sim 104^{\circ}F$)

Storage Temperature
$-25^{\circ} \sim 55^{\circ}C$ ($-13^{\circ} \sim 131^{\circ}F$)

Humidity
5% ~ 95% non-condensing

Dimensions
215 x 163 x 45mm (8.79 x 5.19 x 1.38 inches)

Weight
455 grams (1 lb.)

Emissions (EMI)
- UL, FCC Class B
- TUV, CE Class B
- C-Tick, BSMI Class B

Safety
- UL/CSA
- CUL
- TUV (EN60950)

LISTED
ITE
E141136
66F9

ACN 052 202 838

Ordering Information

ADSL Router
DSL-504 1 ADSL port, 4 10/100Mbps switched ports, IP routing, transparent bridging

For country-specific external AC power adapter and firmware, please specify one of the following after the model number:

/US	for usa and canada
/EU	for ec countries
/F	for finland
/DE	for germany
/UK	for united kingdom
/B	for belgium
/H	for holland
/S	for sweden
/D	for denmark
/I	for italy
/R	for austria
/AU	for australia
/CN	for china
/FR	for france

D-Link®