



—— DFL-600

# VPN Firewall

## Integrated VPN Firewall Solution for SME Networks

D-Link's DFL-600 is an easy-to-deploy, hardware-based VPN Firewall designed for small and medium enterprises (SMEs), workgroups, and departments that require superior price/performance. This device is a powerful security solution that provides integrated Network Address Translation (NAT), Firewall, Denial of Service (DoS) protection as well as Virtual Private Network (VPN) support. Within a compact-sized industrial design, the DFL-600 VPN Firewall includes 1 WAN link support, 4 trusted LAN ports that eliminate the need for an external hub or switch, and a DMZ port to support local e-mail and web servers, and is compact enough to fit anywhere. With an intuitive web-based interface and simple process, D-Link installation wizard enables users to complete most installations in minutes.

### Multi-Function Security Appliance

The DFL-600 is an integrated VPN Firewall solution for SMEs, featuring Stateful Packet Inspection (SPI), detect/drop intruding packets, embedded VPN, physical DMZ port, multiple-mapped IPs and multiple virtual servers, which are typically found from enterprise-grade firewalls. The DFL-600 connects your office easily to a broadband modem such as cable or DSL through an external 10/100BASE-TX WAN port.

### Robust SPI Firewall Protection Against Hacker Attacks

The DFL-600 is designed with advanced security features typically cannot be found in residential gateways. It defends your networks against damaging Denial of Service (DoS) attacks and offers network reliability through Stateful Packet Inspection. It can detect hacker attacks and filter intruding packets from entering the office network.

The DFL-600 protects your network from attacks such as SYN Flood, Ping of Death, Spoof, Tear Drop, ICMP Flood, UDP Flood, etc. It can be configured to log all these attacks, locate the source IP address generating the attack, send the attack report notification to a specified e-mail address and establish the policy to restrict incoming traffic from the specific IP address source.

### High Performance IPSec VPN Support

The DFL-600 is equipped with embedded VPN support that can create multiple IPSec tunnels to remote offices. IPSec on the DFL-600 uses strong encryption with DES, 3DES, and Automated Key Management via IKE/ISAKMP. A VPN tunnel can be activated from the DFL-600 to a remote site for a secured traffic flow between two locations for mobile users 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.

### Access Control List (ACL)

URL blocking is part of basic features offered by DFL-600 and provides the benefit of limiting access to undesirable Internet sites. Logs of real-time Internet traffic, alarms of Internet attacks, and

notice of web-browsing activities are logged and can be reported through e-mail notification.

DFL-600 supports Radius authentication so you can make use of your existing Radius Server and user information. It also supports X.509 certificate-based authentication, using a set of PKIX-compliant certificate enrollment and verification standards (\*).

(\*) X.509 feature available through future firmware upgrade.

### E-Mail Alert \*

Network administrators can set e-mail addresses to receive alert message from the DFL-600. When intrusion events are detected, the DFL-600 will log them and send alert e-mail, and the administrator can check the log file on the router to find out what happened.

### 1 DMZ Port, 3 Fast Ethernet Switch Ports

The DFL-600 includes 3 auto-sensing 10/100BASE-TX LAN ports that connect to your internal office network, and a physical DMZ (Demilitarized Zone) port that can connect your Web, mail or FTP servers for access from the Internet. You can add DMZ ports to the DFL-600 by designating any of the 3 LAN ports as DMZ ports. This DMZ function is useful because it alleviates congested server traffic from entering the Internal network, while protecting your other office computers from Internet attacks by hiding them behind the firewall.

(\*) Function available in future firmware upgrade.

### Easy Setup

The DFL-600 provides an easy-to-use interface that is password-protected but still easily accessible through any Internet browser. Incoming and outgoing policies for firewall traffic, as well as setup configuration can be easily accomplished through this web-based interface.

## Key Features

- 3 10/100BASE-TX LAN ports, 1 10/100BASE-TX DMZ port
- 1 10/100BASE-TX WAN port for cable/DSL modem connection
- PPTP, L2TP, IPSec VPN tunneling support
- PPTP, L2TP, IPSec VPN pass throughput support
- Stateful Packet Inspection (SPI) firewall protection
- Denial of Service (DoS) attack blocking
- Network Address Translation (NAT)/Network Address Port Translation (NAPT)
- NAT Application Level Gateway (ALG) support
- DHCP server/client and parental control
- PPPoE routing support
- Universal Plug and Play (UPnP) enabled
- Content filtering, URL/domain blocking
- Virtual server support
- Web configuration management
- Syslog protocol support

### Hardware

#### WAN Port

- 10/100BASE-TX port
- NWay auto-negotiation support

#### LAN Ports

- 3 10/100BASE-TX LAN ports
- 1 10/100BASE-TX DMZ port
- Auto MDI/MDIX, NWay auto-negotiation for all ports

#### Reset Button

Factory reset to default

#### System Memory

- SDRAM: 32Mbytes
- Flash: 8Mbytes

### VPN Security

#### VPN Support

- L2TP/PPTP/IPSec tunneling
- L2TP/PPTP/IPSec pass-through

#### Hashing Algorithm

- ESP-MD5/AH-MD5
- RSP-SHA1/AH-SHA1

#### Encryption Algorithm

- DES/3DES
- AES \*

*\* AES function available in future firmware upgrade.*

#### Key management

- Manual Key
- Internet Key Exchange (IKE)
- Internet Security Association and Key Management Protocol (ISAKMP)

#### Authentication Mechanisms/PKI \*

- RADIUS authentication support (RADIUS client)
- X.509 Certificate-based authentication support
- X.509 Public Key Infrastructure Certificate and CRL Profile (RFC 2489)
- X.509 Public Key Infrastructure Certificate Management Protocols (RFC 2510)
- X.509 Certificate Request Message Format (RFC 2511)
- X.509 Public Key Infrastructure Online Certificate Status Protocol (OCSP) (RFC 2560)
- Certificate Management Messages over CMS (RFC 2797)

*\* Authentication functions available in future firmware upgrade.*

### Routing

#### Functions & Protocol Support

- Static Route
- Dynamic Route \*
- RIP-1, RIP-2 \*
- IP Multicast \*
- UDP, TCP, ICMP, ARP

*\* Dynamic Route (RIP-1, RIP-2, IP multicast) functions available in future firmware upgrade.*

#### Firewall Security

- Internet Gateway Basics
- NAT/NAPT

#### NAT ALG

- 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
- NetMeeting 3/ 2.0 Video/Audio receive/send
- ICQ: Chat and File Send

*\* SIP function available in future firmware upgrade.*

#### Stateful Packet Inspection (SPI)

- IP address and port number
- Packet count and byte count
- Sequence and acknowledgement number
- Timestamps
- Payload modification history
- Dynamic association

#### Denial of Service (DOS)

- SYN Flooding
- TCP Hijacking
- LAND Attack
- WinNuke/OOBNuke
- Christmas Tree SYN/FIN (Jackal)
- SYN / FIN (zero-sized DNS zone payload)
- BackOffice (UDP 31337)
- NetBus
- Smurf
- Tear Drop
- ICMP Flooding
- Trojan Horse
- UDP Flooding
- UDP Scan
- ARP Attack

#### User Blocking

- (Default blocking port number for each server)
- NNTP Server -- TCP Port(s): 119
- SMTP Server -- TCP Port(s) - 25
- POP3 Server -- TCP Port(s): 110, 995
- Quake 3 Server -- UDP Port(s): 27960
- IMAP Server -- TCP Port(s): 143, 220, 585, 993
- FTP Server (active mode only) -- TCP Port(s): 20, 21
- SSH Server -- TCP Port(s): 22
- Telnet Server
- HTTP server

#### Configuration & Management

- IP Management
- DHCP Server/Client
- PPPoE for DSL
- UPnP \*

*\* UPnP function available in future firmware upgrade.*

#### System

- System log
- Firmware backup
- E-mail alerts \*
- Remote management from WAN
- Simple Network Time Protocol (SNTP)

*\* Function supported in future firmware upgrade.*

#### Configuration Interface

- Web-based configuration (from web browser)
- Firmware upgrade from web

#### Diagnostic LEDs

- Power (per device)
- Link/Act (WAN port)
- Link/Act (per internal LAN port)

### Physical & Environmental

#### Dimensions

234 (W) x 161 (D) x 35 (H) mm

#### Weight

500 grams

#### Input Power

- 5VDC 2.5A
- Through external power adapter

#### Operating Temperature

0° to 45 °C

#### Storage Temperature

-25° to 55 °C

# DFL-600

## Technical Specifications

## VPN Firewall

### Storage Humidity

10% to 95% non-condensing

### Operating Humidity

10% to 95% non-condensing

### EMI Certification

- FCC Class B
- CE Class B
- C-Tick Class B

### Safety

CSA International



## Ordering Information

### Broadband Firewall/VPN Router

#### DFL-600

- 1 RJ-45 10/100BASE-TX port (for DSL/cable modem connection)
- 1 RJ-45 10/100BASE-TX port (for DMZ network)
- 3 RJ-45 10/100BASE-TX switch ports (for internal network)

### Please specify your order as follows:

#### DFL-600/A

Includes a US standard power adapter

#### DFL-600/E

Includes an EU standard power adapter

#### DFL-600/B

Includes a UK standard power adapter

#### DFL-600/N

Includes an Australia standard power adapter

#### DFL-600/CN

Includes a China standard power adapter

# D-Link®

Specifications subject to change without prior notice.  
D-Link is a registered trademark of D-Link Corporation/D-Link System Inc. All other trademarks belong to their proprietors.

<b>U.S.A</b>	TEL: 1-949-788-0805	FAX: 1-949-753-7033
<b>Canada</b>	TEL: 1-905-8295033	FAX: 1-905-8295095
<b>Europe</b>	TEL: 44-20-8731-5555	FAX: 44-20-8731-5511
<b>Germany</b>	TEL: 49-6196-77990	FAX: 49-6196-7799300
<b>France</b>	TEL: 33-1-30238688	FAX: 33-1-30238689
<b>Benelux</b>	TEL: 31-10-2045740	FAX: 31-10-2045880
<b>Italy</b>	TEL: 39-2-2900-0676	FAX: 39-2-2900-1723
<b>Iberia</b>	TEL: 34-93-4090770	FAX: 34-93-4910795
<b>Sweden</b>	TEL: 46-(0)8564-61900	FAX: 46-(0)8564-61901
<b>Norway</b>	TEL: 47-22-309075	FAX: 47-22-309085
<b>Denmark</b>	TEL: 45-43-969040	FAX: 45-43-424347
<b>Finland</b>	TEL: 358-9-2707-5080	FAX: 358-9-2707-5081
<b>Singapore</b>	TEL: 65-6774-6233	FAX: 65-6774-6322
<b>Australia</b>	TEL: 61-2-8899-1800	FAX: 61-2-8899-1868
<b>Japan</b>	TEL: 81-3-5434-9678	FAX: 81-3-5434-9868
<b>China</b>	TEL: 86-10-8518-2533	FAX: 86-10-8518-2250
<b>India</b>	TEL: 91-22-652-6696	FAX: 91-22-652-8914
<b>Middle East</b>	TEL: 9714-8834234	FAX: 9714-8834394
<b>Turkey</b>	TEL: 90-212-335-2553	FAX: 90-212-335-2500
<b>Chile</b>	TEL: 56-2-232-3185	FAX: 56-2-232-0923
<b>Brazil</b>	TEL: 55-11-3094-2910	FAX: 55-11-3094-2921
<b>South Africa</b>	TEL: 27(0)1266-52165	FAX: 27(0)1266-52186
<b>Russia</b>	TEL: 7-095-737-3389	FAX: 7-095-737-3390
<b>Taiwan</b>	TEL: 886-2-2910-2626	FAX: 886-2-2910-1515
<b>D-Link Corp.</b>	TEL: 886-2-2916-1600	FAX: 886-2-2914-6299



RECYCLABLE  
Rev. 01 (Aug. 2003)