

## NetDefend™ SOHO UTM FIREWALL

### HIGH-SPEED FIREWALL

Provides firewall throughput of up to 70Mbps and VPN speeds up to 25Mbps

### UNIFIED THREAT MANAGEMENT

Combines Antivirus, Content Filtering and Intrusion Prevention for a strong and reliable defense

### GREEN TECHNOLOGY

Green Ethernet reduces power usage, while recyclable packaging prevents waste



### A ROBUST DEFENSE AGAINST MODERN THREATS

Today's continuously shifting security environment presents a challenge for home users with limited IT capabilities. Fortunately, the D-Link DFL-160 NetDefend™ SOHO Unified Threat Management (UTM) Firewall provides a comprehensive defense against virus attacks, unauthorized intrusions, and harmful content.

### PROTECT AGAINST INTRUSIONS

The DFL-160 allows you to manage, monitor, and maintain a healthy network with ease. The DFL-160 protects your private information and prevents damage caused by hazardous applications, malicious hackers, and various other threats. Optional content filters can also prevent access to offensive websites based on your personal preferences.

### PREVENT VIRUSES FROM EVER REACHING YOUR PC

Your PC's antivirus software helps you to detect viruses and other malware, but can only detect these threats once they have reached your PC. This is where the DFL-160 can make all the difference. The DFL-160 is placed between your PC and the Internet, where it monitors network traffic and actively blocks dangerous content such as viruses and worms. In doing so, the firewall keeps your network secure and reliable by ensuring that only safely verified files will reach your desktop.

### SAFELY ACCESS YOUR HOME NETWORK REMOTELY

VPN support allows you to access your home network safely from remote locations. Whether at work, in a hotel, or on the road, connect to your home network with your pre-configured VPN account to conveniently and securely access your data. Cable and DSL users with dynamic IP addresses can take advantage of DDNS services which simplify access to systems with dynamic IP addresses.

### USER-FRIENDLY DESIGN

A user-friendly web interface assists with initial setup and simplifies the configuration of complex security settings. The DFL-160's compact and unobtrusive desktop chassis is easily incorporated into an existing network.

### GIGABIT INTERFACE FOR MAXIMUM THROUGHPUT

A Gigabit Ethernet interface ensures high-speed performance and facilitates interoperability with existing network hardware. The DFL-160 can carry out IPS and Antivirus scanning functions simultaneously without degrading firewall and VPN performance. The firewall is able to perform with a much higher throughput than comparable antivirus-capable UTM firewalls.

### VIRUS SCANNING

Updates from respected partner Kaspersky Labs™ provide the DFL-160 with prompt and reliable antivirus signatures. Viruses and malware can be effectively blocked before they reach workstations on the network.

### INTRUSION DETECTION AND PREVENTION

An IPS database includes security information from a global sensor-grid as well as exploit data for zero-day attack prevention. The DFL-160 delivers high quality IPS signatures by constantly creating and optimizing NetDefend™ SOHO signatures via the D-Link Auto-Signature Sensor System. Without overloading existing security appliances, these signatures ensure a high ratio of detection accuracy and the lowest ratio of false positives.

### DYNAMIC WEB CONTENT FILTERING

Web Content Filtering allows administrators to monitor, manage, and control the material that enters the network. The DFL-160 makes use of multiple global index servers with millions of URLs and real-time information. Using policies and explicit black/white lists, administrators can allow or disallow access to specified websites.

## UNIFIED THREAT MANAGEMENT

Unified Threat Management (UTM) features provide a reliable defense against a diverse assortment of Internet threats. The DFL-160 maintains separate databases for Intrusion Prevention, Antivirus, and Web Content Filtering. D-Link's NetDefend™ SOHO UTM subscription service ensures that these three databases remain consistent, accurate, and up-to-date.

**Endeavor**  
Security, Inc.

### INTRUSION PREVENTION

Endeavor Security is the leading provider of signatures for use in Secure Web, UTM, IPS and Policy Gateway devices. Its FirstLight knowledgebase (SAME) has over 16,000 Signatures and supports more vendor devices than any other service. FirstLight uses a web xml soap service to deliver constant updates. Endeavor uses its Active Malware Protection global honeygrid, patent-pending algorithms and technical analysts, to produce over 500 signatures per month.

**KASPERSKY** Lab

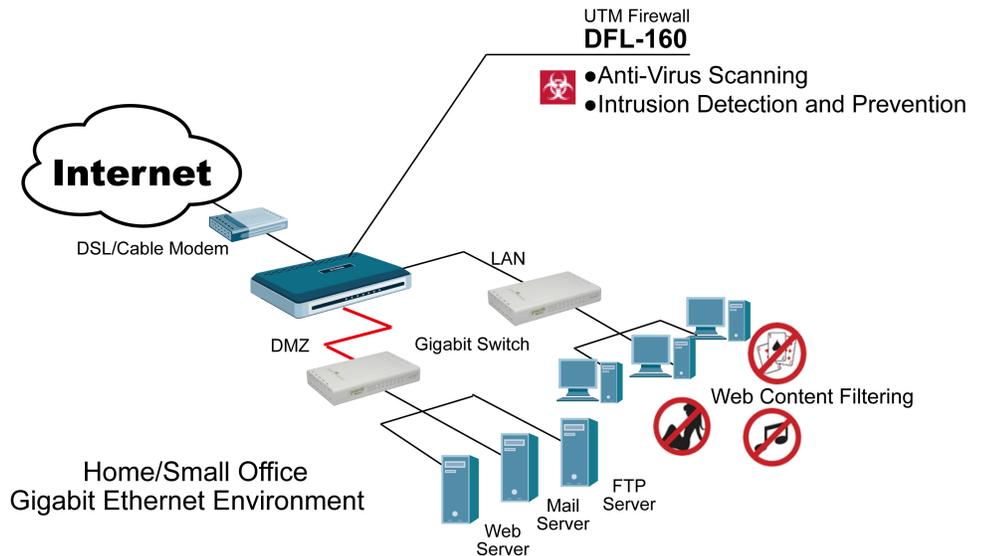
### ANTIVIRUS SCANNING

Kaspersky Lab delivers the world's most immediate protection against IT security threats, including viruses, spyware, crimeware, hackers, phishing, and spam. Kaspersky Lab provides superior detection rates and the industry's fastest outbreak response time for home users, SMBs, large enterprises and mobile computing. Kaspersky Lab products protect more than 200 million users worldwide and its technology is trusted by leading security professionals.

**CONTENTKEEPER**  
CONTENTKEEPER TECHNOLOGIES

### CONTENT FILTERING

ContentKeeper Technologies specializes in scalable, fault-tolerant enterprise-strength web gateway security solutions to help organizations monitor, manage, control and secure network resources. Employing a unique, patented technology Closed Loop Collaborative Filtering™, ContentKeeper's revolutionary Internet content filter offers simplicity and manageability without compromising performance.



### WHAT THIS PRODUCT DOES

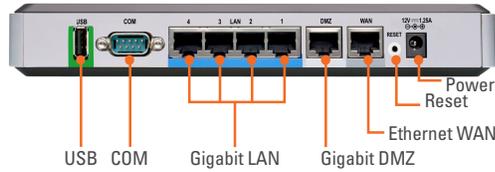
The D-Link DFL-160 NetDefend™ SOHO Unified Threat Management (UTM) Firewall provides a barrier between your home network and the Internet. The firewall prevents outside access to vulnerable ports and software security holes and actively scans incoming files for viruses and malware. VPN functions allow secure access to the firewalled network from remote locations. D-Link Green Technology allows the

### CONSERVE ENERGY

The DFL-160 implements D-Link Green Technology which includes power-saving features such as Cable Length Detection and Power Saving Mode. Power levels are automatically adjusted based on the length of connected cables. Ports with no link are automatically powered down, drastically reducing the amount of power used for that port. In addition, the firewall's power adapter is certified by ENERGY STAR®. On an average, ENERGY STAR® compliant adapters are 30% more efficient than conventional models.

### PROTECT THE ENVIRONMENT

The DFL-160 complies with RoHS (Restriction of Hazardous Substances) and WEEE (Waste Electrical and Electronic Equipment) directives. RoHS directives restrict the use of specific hazardous materials during the manufacture of electrical and electronic goods. WEEE implements standards for proper disposal and makes use of recyclable packaging to help reduce waste.



## TECHNICAL SPECIFICATIONS

#### HARDWARE

- CPU: Intel IXP435 @ 400MHz
- Flash: 128 MB
- DRAM: 128 MB
- VPN Accelerator

#### PORTS

- 4 x Ethernet LAN (10/100/1000)
- 1 x Ethernet WAN (10/100)
- 1 x Ethernet DMZ (10/100/1000)
- 1 x DB-9 RS-232 Console Port
- 1 x USB 2.0

#### PERFORMANCE AND CAPACITY

- Firewall Performance: 70 Mbps
- 3DES/AES Performance: 25 Mbps
- IDP/Antivirus Performance: 15 Mbps
- Current Session: 6,000
- Policies: 300
- Supported Users: Unrestricted

#### FIREWALL MODE OF OPERATION

- Layer 3 mode: Route Mode, NAT Mode
- Layer 2 mode: Transparent Mode
- Network Address Translation (NAT)
- Port Address Translation (PAT)
- Port Forwarding
- Time-Scheduled Policies Configuration

#### VIRTUAL PRIVATE NETWORK (VPN)

- IPSec Protocol: ESP
- IPSec Mode: Tunnel Mode, Transport Mode
- Encryption Method: DES/3DES/AES/Twofish/Blowfish/CAST-128/NULL
- Site to Site VPN, Remote Access VPN for IPSec
- Up to 30 Dedicated VPN Tunnels
- IKE

#### MODE: MAIN MODE

- Authentication Algorithm: MD5, SHA-1
- Support PPTP/L2TP/IPSec VPN Server
- PPTP Server Supports MPPE Encryption
- XAUTH Authentication Support
- Key Management: Pre-share Key
- IPSec NAT Traversal (NAT-T)
- Prevents Replay Attack

\* Performance based on RFC 2544

\*\* Functions available via future firmware upgrade

#### IP ASSIGNMENT & ROUTING

- Static IP Address
- PPPoE for xDSL, PPTP Client for xDSL, DHCP Client for WAN interface
- Internal DHCP Server

#### NETWORKING

- IP Multicast: IGMP v3 Routing and Forwarding (Compatible with v1 and v2)
- DDNS Client: D-Link DDNS, DynDNS.org
- Supports ALG (Application Layer Gateway) HTTP, FTP, POP3, SMTP, TFTP

#### SYSTEM MANAGEMENT

- Web UI Interface
- SNTP and UDP Time Synchronization
- Supports D-Link NTP Server

#### USER AND DEVICE ADMINISTRATION

- Multi-level User Permission Control (Administrator and Read-Only)
- Software Upgrade, Configuration Backup/Restore from Web UI

#### USER AUTHENTICATION

- Built-in User Database: 250 Users

#### LOGGING AND MONITORING

- Internal Log Capacity: 500 Records
- Log Viewer
- VPN Tunnel Monitor
- E-mail Notification for IDP Log
- Supports External Syslog Server
- Supports 2 Log Receivers
- Separate Internal Logging for IDP, AV, WCF

#### BANDWIDTH MANAGEMENT \*

- Guaranteed Bandwidth
- Maximum Bandwidth
- Priority-Bandwidth Utilization

#### INTRUSION DETECTION AND PREVENTION SYSTEM (IDP)

- NIDS Pattern Auto Update
- DoS, DDoS Attack Protection
- Detects Nimda and CodeRed Attacks

- Attack Alarm Via E-mail Notification

#### ANTIVIRUS PACKET INSPECTION

- Supported Protocol: HTTP, FTP, SMTP, POP3
- Antivirus over VPN
- Protocol/Port Configurable
- Scanning of all MIME Types
- Decompression Explosion Protection
- Supported Compression File Formats: ZIP, GZIP
- Scan Exclusion Control

#### DYNAMIC WEB CONTENT FILTERING

- HTTP Web URL Filter
- Over 30 Web Content Categories

#### E-MAIL SECURITY \*\*

- Supported Protocol: SMTP
- Sender/Recipient E-mail Address Blacklist/Exempt List Filtering
- MIME Header Check for File Extensions Filtering
- E-mail Rate Protection
- E-mail Size Protection
- Antispam
  - Real-Time DNSBL/Open Relay Database Server
  - Weight-based DNS Blacklist
  - Customized Spam Tag Information in E-mail Subject
  - Forward Blocked E-mails

#### LEDS

- Power, Status, WAN, DMZ
- 4 x LAN (Link/Action/Speed)

#### OPERATING TEMPERATURE

- 0° to 50°C

#### OPERATING HUMIDITY:

- 5% to 95% (Non-condensing)
- Power Consumption: < 20W

#### DIMENSIONS:

- 220mm (L) x 150mm (W) x 32.5mm (H)
- Weight: 480g



D-Link Corporation

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