D-Link®
Building Networks for People

High-Performance Integrated Firewalls

For Business Network Security

- **Integrated Firewall/VPN Appliance**
- **Proactive Network Security**
- **Increase Network Efficiency & Utilization**
- **Multiple User-Configurable Ethernet/Gigabit Interfaces**
- **Powerful Firewall & VPN Data Encryption Performance**
- **Unrestricted User Support**

FEATURES

Integrated Functions
- Firewall Protection
- Proactive Security With Zone-Defense Mechanism
- Content Filtering/Intrusion Detection
- Parental Access Control
- User Authentication
- Instant Message/P2P Blocking
- Denial of Service (DoS) Protection
- Virtual Private Network (VPN) Security
- Bandwidth Management

Content Filtering
- URL/E-Mail Filtering
- Java Script/Active X/Cookie Filtering
- IM/P2P Program Filtering

Fault Tolerance
- WAN Traffic Fail-Over
- Active/Passive Modes for High Availability *

Bandwidth Management
- WAN Traffic Bandwidth Management
- Multi-WAN Interfaces for Traffic Load Sharing/Load Balancing
- Policy-Based Routing

Hardware
- Powerful Firewall Engines
- Multiple User-Configurable Ports
- High-Speed Gigabit Interfaces *

Setup & Management
- Installation Wizard for Quick Setup
- Easy Web-Based Configuration/Management
- Command Line Interface (CLI)
- Logging and Real-Time Monitoring
- Centralized Management **

*   For DFL-1600 and DFL-2500 only
** Used in conjunction with D-Link Central Management Device
    (DFL-1600 and DFL-2500 only)

NETDEFEND™

With businesses becoming increasingly network-dependent, your investment in a reliable network security solution becomes crucial. D-Link NetDefend presents you a series of powerful next-generation business-class network security solutions. NetDefend addresses your growing concerns over network security, hacker attacks, virus threats and increasing privacy demands. Each firewall in this series can offer you a high return on investment through robust security features, flexible configuration and maximum network protection.

D-Link NetDefend firewalls provide you with the assurance of a dedicated network security solution, with integrated functions including firewall, load balance, fault tolerance, Zone-Defense, content filtering, user authentication, instant message and peer-to-peer application blocking, Denial of Service (DoS) protection and Virtual Private Network (VPN) secure remote connection. These devices meet the security and remote access needs of business that demands high performance at competitive prices. Advanced features are integrated and packed into a single housing to provide your network administrators with an all-in-one business-class level security solution.

To minimize any impact of a disaster on an entire network, D-Link NetDefend firewalls include a special feature called Zone-Defense -- a mechanism that operates seamlessly with D-Link LAN switches to perform proactive network security. Zone-Defense automatically quarantines infected computers on the network and prevents them from flooding your network with malicious traffic.
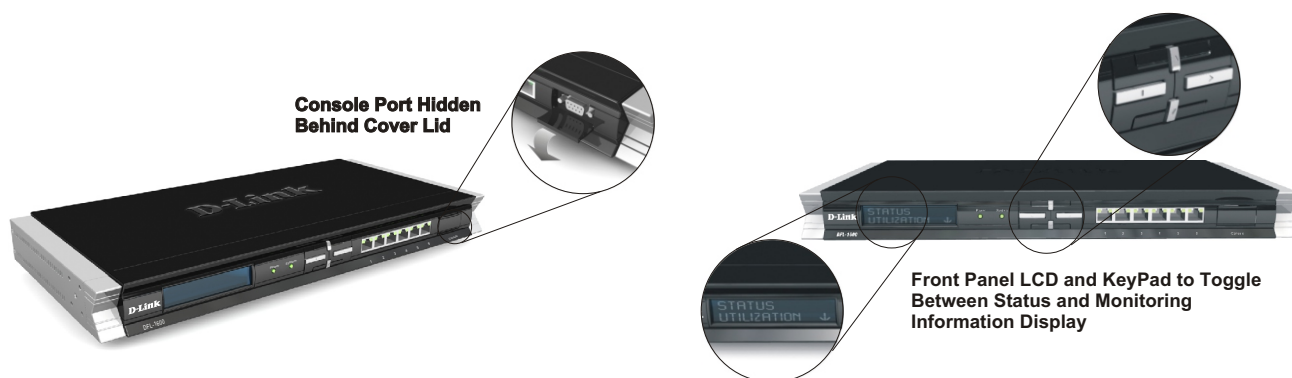
Within an industrial chassis, D-Link NetDefend firewalls pack up an impressive set of hardware that includes high-speed processors, large databases and firewall power to handle up to a million concurrent sessions. These firewalls come with multiple user-configurable interfaces, including high-speed Gigabit ports, for flexible, scalable and bottleneck-free network deployments linking your different workgroups and enterprises together.

All firewalls in this series can be remotely managed via a web-based interface or through a dedicated VPN connection. They include flexible features to monitor and maintain a healthy and secure network, such as e-mail alerts, system log and real-time statistics. These features, along with the ability for firmware upgrade, ensure that your firewall can provide and maintain maximum performance and security for your network.

D NETDEFEND™

Console Port Hidden Behind Cover Lid

Front Panel LCD and KeyPad to Toggle Between Status and Monitoring Information Display

3 Distinctive Firewalls

For 3 Different Business Sizes

Depending on your business requirements, you can select a firewall with different processing capabilities and speeds to handle your particular network security needs.

DFL-800 FOR SMALL BUSINESS

- Firewall Throughput: 120Mbps
- VPN Performance: 45Mbps (3DES/AES)
- 2 Ethernet WAN Ports, 7 Ethernet LAN Ports, 1 DMZ Ethernet Port *

DFL-1600 FOR MEDIUM BUSINESS

- Firewall Throughput: 320Mbps
- VPN Performance: 120Mbps (3DES/AES)
- 6 User-Configurable Gigabit Ports

DFL-2500 FOR ENTERPRISE

- Firewall Throughput: 600Mbps
- VPN Performance: 210Mbs (3DES/AES)
- 8 User-Configurable Gigabit Ports

* DMZ port is user-configurable.

Integrated VPN/Firewall Functions

Complete Range of Firewalls for Workgroups & Enterprises
A complete range of firewalls designed to meet different criteria for workgroups' and enterprises' infrastructures, information security needs, total costs of ownership and performance requirements.
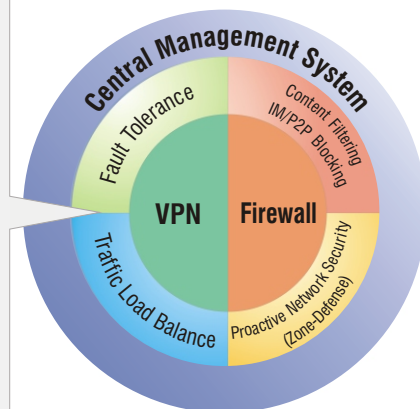
Next-Generation User Interfaces
Extreme ease of use and humanized vision embedded in next-generation networking products. NetDefend firewalls make extensive use these features to render your configuration and management tasks as simple as a child's play.

High-Speed Gigabit Interfaces
Multiple user-configurable interfaces, including high-speed Gigabit ports, for flexible, scalable and bottleneck-free network deployments linking different small/medium-sized workgroups and enterprises together.
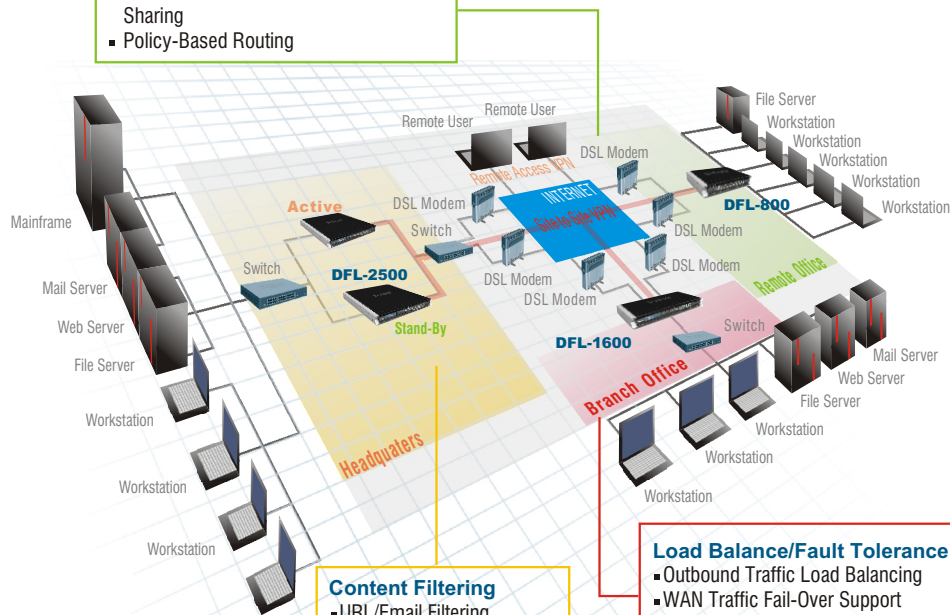
Proactive Network Security
Minimal disaster impact on your entire network. NetDefend firewalls feature a Zone-Defense mechanism that operates seamlessly with your D-Link LAN switches to perform proactive network security. NetDefend firewall can also block IM/P2P programs and filter contents to increase the efficiency and utilization of your network.

Central Management System

Fault Tolerance
Content Filtering IM/P2P Blocking
VPN Firewall
Traffic Load Balance
Proactive Network Security (Zone-Defense)

Effective Bandwidth Management
- Traffic Bandwidth Management
- Multi-WAN Interfaces for Traffic Load Sharing
- Policy-Based Routing

Remote User
Remote User
Remote User
File Server
Workstation
Workstation
Workstation
Workstation
Workstation
DSL Modem
Remote Access VPN
INTERNET
Speed-up VPN
DFL-800
Mainframe
Active
DSL Modem
Switch
DSL Modem
DSL Modem
Remote Office
Switch
DFL-2500
DSL Modem
DSL Modem
Mail Server
Stand-By
DFL-1600
Switch
Web Server
Mail Server
File Server
Web Server
Workstation
File Server
Branch Office
Workstation
Workstation
Headquaters
Workstation
Workstation

Content Filtering
- URL/Email Filtering
- Java Script/Active X/Cookie Filtering
- IM/P2P Program Filtering

Load Balance/Fault Tolerance
- Outbound Traffic Load Balancing
- WAN Traffic Fail-Over Support
- Active/Passive Modes for High Availability

Specification Chart

		DFL-800	DFL-1600	DFL-2500
Interfaces	Multiple User-Configurable Ports	2 Ethernet WAN Ports 1 DMZ Ethernet Port *** 7 Ethernet LAN Ports	6 User-Configurable Gigabit Ports	8 User-Configurable Gigabit Ports
System Performance ****	Firewall Throughput	120Mbps	320Mbps	600Mbps
	VPN Throughput	45Mbps	120Mbps	210Mbps
	Concurrent Sessions	25,000	400,000	1,000,000
	Policies	1,000	2,500	4,000
Firewall System	PPPoE	√	√	√
	Transparent Mode	√	√	√
	NAT, PAT	√	√	√
	Dynamic Routing Protocol	OSPF	OSPF	OSPF
	H.323 NAT Traversal	√	√	√
	Time-Scheduled Policies	√	√	√
	Application Layer Gateway (ALG)	√	√	√
	Proactive Network Security	Zone-Defense	Zone-Defense	Zone-Defense
Networking	DHCP Server/Client	√	√	√
	DHCP Relay	√	√	√
	Policy-Based Routing	√	√	√
	IEEE 802.1q VLAN	√	√	√
	IP Multicast *	IGMP, IGMP Snooping	IGMP, IGMP Snooping	IGMP, IGMP Snooping
Virtual Private Network (VPN)	Encryption Methods (DES/3DES/AES/Twofish/Blowfish/CAST-128)	√	√	√
	Dedicated VPN Tunnels	300	1,200	2,500
	PPTP/L2TP Server	√	√	√
	Hub and Spoke	√	√	√
	IPSec NAT Traversal	√	√	√
System Management	Console Interface	RS-232	RS-232	RS-232
	Web-Based User Interface	HTTP, HTTPS	HTTP, HTTPS	HTTP, HTTPS
	Command Line/SSH	√	√	√
	Firmware Upgrade/Config.			
	Backup/Restore	√	√	√
	Trust Host for Remote Management	√	√	√
	Central Management System **	√	√	√
User Authentication	Built-in Database	√	√	√
	External Database			
	▪ RADIUS	√	√	√
	▪ LDAP *	√	√	√
	▪ Active Directory	√	√	√
	IP and MAC Binding	√	√	√
	XAUTH for IPSec Authentication	√	√	√
Logging and Monitoring	Internal Log	√	√	√
	External Log	Syslog Server	Syslog Server	Syslog Server
	Email Notification	√	√	√
	Event Log and Alarm	√	√	√
	SNMP	SNMP v1, v2c	SNMP v1, v2c	SNMP v1, v2c
Traffic Load Balance	Outbound Load Balancing *	√	√	√
	Server Load Balancing	√	√	√
	Load Balance Algorithms	3 Types	3 Types	3 Types
	Traffic Redirect at Fail-Over	√	√	√
Bandwidth Management	Policy-Based Traffic Shaping	√	√	√
	Guaranteed Bandwidth	√	√	√
	Maximum Bandwidth	√	√	√
	Priority Bandwidth	√	√	√
High Availability (HA)	WAN Fail-Over	√	√	√
	Active/Passive Modes	-	√	√
	Device Failure Detection	-	√	√
	Link Failure Detection	-	√	√
	FW/VPN Session Sync.	-	√	√
Intrusion Detection (IDS)	Automatic Pattern Update	√	√	√
	DoS, DDoS Protection	√	√	√
	Attack Alarm via Email	√	√	√
Content Filtering	HTTP Type	URL, Keyword	URL, Keyword	URL, Keyword
	Script Type	Java, Cookie, ActiveX, VB	Java, Cookie, ActiveX, VB	Java, Cookie, ActiveX, VB
	Email Type *	Black List, Keyword	Black List, Keyword	Black List, Keyword
IM/P2P Blocking	Instant Message Support *	MSN Messenger, Yahoo Messenger,	MSN Messenger, Yahoo Messenger,	MSN Messenger, Yahoo Messenger,
	Peer to Peer Support *	SoftEther, Skype, eMule	SoftEther, Skype, eMule	SoftEther, Skype, eMule

*   Available in future firmware upgrade
**   Used in conjunction with D-Link Central Management Device
***   DMZ port is user-configurable
**** Maximum performance based on RFC 2544 (for firewall).
      Actual performance may vary depending on network conditions
      and activated services

Software Features

Firewall System
- Proprietary firewall system kernel, providing more security than open source-based firewalls
- Stateful Packet Inspection
- Zone-Defense with seamless integration with D-Link LAN switches
- Content filtering and Intrusion Detection
- Time-scheduled policy-based routing and bandwidth management

Virtual Private Network (VPN)
- DES/3DES/AES/Twofish/Blowfish/CAST-128 encryption
- IKE v.2 and X.509 v.3 authentication
- PPTP/L2TP/IPSec pass-through
- VPN keep alive/Hub and Spoke

Routing and IP Assignment
- IP alias
- DHCP Server/Client/Relay/over IPSec
- OSPF dynamic routing protocol
- HTTP, FTP, SMTP, H.323, SIP*** Application Layer Gateway
- IEEE 802.1q tag-based VLAN

User Authentication
- Local database, external database with RADIUS/LDAP/Active Directory
- Run-time user authentication
- Multiple authentication servers' simultaneous operation
- IP and MAC address binding

Bandwidth Management
- Guaranteed/Maximum/Priority bandwidth control
- Outbound traffic load balancing ***
- Policy-based bandwidth management

Traffic/Device Fault Tolerance
- WAN interface fail-over
- Active/passive modes for High Availability *

Logging and Reporting
- Device management via HTTP, HTTPS and SSH***
- SNMP v.1, v.2 and SNMP traps***
- Real-time system monitoring and event log/alert
- Built-in LCM module for sample configuration *
- Supports Central Management System **

*   Available on DFL-1600 and DFL-2500 only
** Used in conjunction with D-Link Central Management Device
*** Available in future firmware upgrade

Physical & Environmental

	DFL-800	DFL-1600	DFL-2500
Power Input	External Power Adapter	Internal Universal Power Supply	Internal Universal Power Supply
Dimensions	280 x 214 x 44 mm Desktop Size	440 x 254 x 44 mm 19-inch Standard Rack-Mount Width, 1U Height	440 x 454 x 44 mm 19-inch Standard Rack-Mount Width, 1U Height
Operating Temperature	0° to 60°C		
Storage Temperature	-20° to 70°C		
Operating Humidity	5% to 95% non-condensing		
EMI	FCC Class B CE Class B C-Tick	FCC Class A CE Class A	FCC Class A CE Class A
Safety	TUV UL LVD (EN60950)	UL LVD (EN60950)	UL LVD (EN60950)

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