



# FVL328

## ProSafe™ High-Speed VPN Firewall with 8-port 10/100 Mbps Switch

### 100 VPN Tunnels for Encrypted Remote Access

- *Help is there when you need it! NETGEAR provides 24x7 technical\* support in English, with selected local language support during office hours.*

- Drive down the total cost of your network with NETGEAR's FVL328 ProSafe High-Speed VPN Firewall. For little more than the price of a typical NAT router, you get a completely equipped high-performance, broadband-capable Virtual Private Network (VPN) firewall. A low cost device that's high on security, this true firewall provides Denial of Service (DoS) protection and Intrusion Detection using Stateful Packet Inspection (SPI), URL access and content filtering, logging, reporting, and real-time alerts. It initiates up to 100 IPSec VPN tunnels simultaneously, reducing your operating costs and maximizing the security of your network. With 8 auto-sensing, Auto Uplink™ switched LAN ports and Network Address Translation (NAT) routing, up to 253 users can access your broadband connection at the same time.

### Business - Class Secure

- Initiates up to 100 IPSec VPN tunnels simultaneously, allowing for secured connections to branch offices and your "on-the-go" mobile workforce. Network Address Translation (NAT) routing enables shared access to your broadband connection, and transparent routing allows for customized network configuration. Includes Web page URL content filtering and 168-bit 3DES IPSec encryption capability. Sends you e-mail notification of network activity – reporting and tracking of hacker attempts – as well as real-time alerts. A high-powered 150 MHz CPU ensures speedy data traffic.

### Thoroughly Protected

- Takes care of all your security needs, with True Firewall using Stateful Packet Inspection (SPI) and Intrusion Detection features, Denial of Service (DoS) attack protection, and VPN pass-through for extra security. SYSLOG and reporting enable thorough network monitoring. IKE authentication provides peace of mind against unauthorized VPN network access.

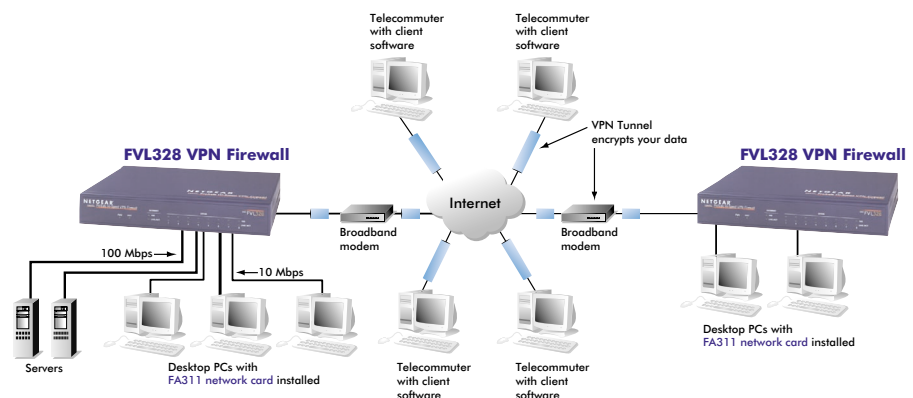
### Easy To Use

- Smart Wizard connects to your ISP quickly; the user-friendly Web-based configuration screen and Install Assistant reduce setup time. Remote administration capability makes it simple to connect to multiple sites. This well-built firewall has an integrated 8-port 10/100 Mbps switch and is compatible with Windows, UNIX, Macintosh, and Linux O/S. It comes with an Ethernet cable (up to \$15 in value), and Auto Uplink™ on the LAN ports eliminates the need for crossover cables.

### Flexible & Durable

- Make a VPN connection to other VPN devices or connect through client software.\* Support for DHCP (client and server) as well as PPPoE allows for easy, widespread deployment. The rugged metal unit houses advanced, high-quality chip sets, and NETGEAR's tested and proven technology is backed by a 3-year warranty.

### Typical Network Setup



## Package Contents

- FVL328 ProSafe Firewall
- Power adapter
- Ethernet cable
- Installation Guide
- Resource CD-ROM
- Warranty/Support information card

## System Requirements

- Cable, DSL, Satellite or Wireless Broadband modem and Internet service
- Ethernet connectivity from Broadband modem
- Network card for each connected PC
- Network Software (e.g. Windows)
- Internet Explorer 5.0 or higher OR
- Netscape Navigator 4.7 or higher

## NETGEAR Related Products

### For connecting computers:

- Fast Ethernet PCI Adapter for desktops (FA311)
- Fast Ethernet Adapter for notebooks (FA511)
- Fast Ethernet USB Adapter (FA101 or FA120)



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## Technical Specifications

### Physical Interfaces:

- **LAN ports:** Eight (8) 10/100 Mbps auto-sensing, Auto Uplink RJ-45 ports (one Cat 5 UTP cable included)
- **WAN port:** 10/100BASE-T Ethernet RJ-45 port to connect to any Broadband modem, such as DSL or cable

### Security Features:

- **Firewall:** Stateful Packet Inspection (SPI) to prevent notorious Denial of Service (DoS) attacks, Intrusion Detection System (IDS) including logging, reporting and e-mail alerts, address, service and protocol, Web URL content filtering, prevent replay attack (reassemble attack). Advanced features include block Java/URL/ActiveX based on extension
- **VPN Functionality:** One Hundred (100) dedicated VPN tunnels, Manual key and IKE Security Association (SA) assignment with pre-shared key and RSA/DSS signatures, key life and IKE lifetime time settings, perfect forward secrecy (Diffie-Hellman groups 1 and 2 and Oakley support), operating modes (Main, Aggressive, Quick)
- **IPsec support:** IPsec-based 56-bit (DES) or 168-bit (3DES) encryption algorithm, MD5 or SHA-1 hashing algorithm, AH/AH-ESP support, PKI features with X.509 v.3 certificate support, remote access VPN (client-to-site), site-to-site VPN, IPsec NAT traversal (VPN pass-through), tunnel or transport operating mode
- **Mode of Operation:** Network Address Translation (NAT) transparent routing, static routing, unrestricted users per port
- **IP Address Assignment:** Static IP address assignment, internal DHCP server on LAN, DHC client on WAN, PPPoE client support

### Performance Features:

- **Throughput:** 50+Mbps WAN-to-LAN throughput, 15+Mbps 3DES (168 bit) VPN tunnel
- **IP addressing:** DHCP (client and server)
- **Routing:** RIP v1, RIPv2 (Static Routing, Dynamic Routing)
- **VPN/Security:** IPsec (ESP, AH), MD5, SHA-1, DES, 3DES, IKE

### Management Features:

- **Administration Interface:** Web graphic user interface, user name and password protected; Smart Wizard and Auto Detect for basic parameter settings; remote management support authenticated through IP address or IP address range, and password; secure sockets layer (SSL) support; config changes/upgrades through web GUI
- **Configuration and Upgrades:** Upload and download configuration settings, firmware upgradable flash memory
- **Logging:** WELF-based logging format, SYSLOG, e-mail alerts

### Protocol Support:

- **Network:** IP routing, TCP/IP, UDP, ICMP, PPPoE
- **IP addressing:** DHCP (client and server)
- **Routing:** RIP v1, RIPv2 (Static Routing, Dynamic Routing)
- **VPN/Security:** IPsec (ESP, AH), MD5, SHA-1, DES, 3DES, IKE

### User Support:

LAN: Up to 253 users

### RFC Support:

PPTP client and server	(RFC 2637)
IPSec tunnel mod	(RFC 2401)
Authentication Header Protocol	(RFC 2402)
HMAC-MD5-96	(RFC 2403)
HMAC-SHA1-96	(RFC 2404)
DES-CBC Cipher algorithm	(RFC 2405)
Encapsulation Security Payload Protocol	(RFC 2406)
Domain of Interpretation	(RFC 2407)
Internet Security Association and Key Management Protocol (ISAKMP)	(RFC 2408)
Oakley	(RFC 2412)
DHCP server	(RFC 2131)
DHCP client	(RFC 2131)
IP routing (RIP1, RIP2)	(RFC 2453)
NAT (many-to-one)	(RFC 1631)
Compression Control Protocol	(RFC 1974)
IP Control Protocol	(RFC 1332)
PPPoE	(RFC 2516)
Certificate Request Message Format	(RFC 2511)

### Functions:

Smart Wizard to automatically detect ISP Address type (static, dynamic, PPPoE), Port Range Forwarding, Exposed Host (DMZ), Enable/Disable WAN Ping, DNS Proxy, MAC Address Cloning/spoofing, NTP support, URL Content Filtering, E-mail Alerts, DHCP Server (Info and display table), PPPoE login client support, Telstra Bigpond Cable login support, WAN DHCP Client, Diagnostic tools (ping, trace route, other), Port/service blocking, Auto Uplink on switch ports, battery back-up for power failure logging

### Maintenance:

Save/Restore Configuration, Restore Defaults, Upgrades via Web Browser, Display Statistics, Logging, SYSLOG

### Hardware Specifications:

- **Processor:** 150 MHz MIPS32
- **Memory:** 2Mb Flash, 16Mb DRAM
- **Power requirements:** 12VDC, 1.2A, plug is localized to country of sale
- **Dimensions:** H: 1.56" (3.96 cm); W: 10.0" (25.4 cm); D: 9.0" (17.8 cm)
- **Weight:** 2.7 lb. (1.23 kg)

### Environmental Specifications:

- **Operating temperature:** 0 to 40°C (32 to 104°F)
- **Operating humidity:** 90% maximum relative humidity, noncondensing

### Warranty:

- NETGEAR 3 year warranty

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