

FortiGate®-3000 Series

Multi-Threat Security Appliances



The FortiGate-3000 series of multi-threat security appliances offers unmatched levels of performance, scalability, and security for large enterprise networks. Built from the ground up by Fortinet, the FortiGate-3000 series combines three essential elements to achieve these benefits: custom hardware including FortiASIC™ processors, a modular architecture for future growth, and multi-threat security from the FortiOS™ operating system.

High-Performance Hardware

A FortiGate-3000 system can provide up to 55 Gbps of security inspection performance using the modular and scalable expansion inherent to the system. Using optional high-speed modules such as the ADM-XB2, the FortiGate-3000 system delivers maximum performance for your network. Available expansion options include: additional accelerated interface modules, security processing modules, and local disk-based storage modules. The series is also capable of wire-speed firewall performance at 10-GbE, GbE, and 10/100 link speeds.

Multi-Threat Security

Using the advanced FortiOS operating system, the FortiGate-3000 series appliances effectively neutralize a wide range of security threats facing networks today. Whether the appliances are used as a high-performance firewall or as a comprehensive multi-threat security solution, FortiGate appliances protect assets with some of the most effective security available.

FortiOS 4.0 Software Redefines Networks Security

FortiOS 4.0 is a purpose-built operating system that leverages the power of specialized FortiASIC hardware to offer increased levels of security and performance. Fortinet developed FortiOS 4.0 software solely for the FortiGate multi-threat security platform. FortiOS software enables a comprehensive suite of security services – firewall, VPN, intrusion prevention, antimalware, antispam, web filtering, application control, data loss prevention, vulnerability management, and end point network access control.

The FortiASIC Advantage

FortiASIC processors power FortiGate platforms. With exclusive hardware, the purpose built, high-performance network, security, and content processors use intelligent and proprietary digital engines to accelerate resource-intensive security services.

Features	Benefits
Hardware Accelerated Performance	FortiASIC processors provide assurance that the security device will not become a bottleneck in the network.
Additional Capacity on Demand	AMC expansion slots provide greater flexibility by supporting additional hardware-accelerated ports and localized storage of event data.
Unified Security Architecture	FortiGate multi-threat security provides better protection and lowered costs over multiple point security products.
Centralized Management	FortiManager and FortiAnalyzer centralized management and reporting appliances simplify the deployment, monitoring, and maintenance of your security infrastructure.

	FortiGate-3016B	FortiGate-3600A	FortiGate-3810A
Technical Specifications - Appliances			
Total Network Interfaces			
10-GbE Interfaces (Hardware Accelerated)	--	--	0 - 8 ¹
1-GbE SFP Interfaces (Hardware Accelerated)	16 - 20 ¹	2 - 6 ¹	2 - 26 ¹
Non-Accelerated 10/100/1000 Interfaces	2	8	8
Transceivers Included	4 (SX) / 4 (TX)	2 (SX)	2 (SX)
Advanced Mezzanine Card (AMC) Expansion Slot	1 single-width	1 single-width	2 single-width, 2 double-width
USB Ports	2	2	1
System Performance			
Firewall Throughput (Gbps)	16-20 ¹	6-10 ¹	7-55 ¹
Firewall Throughput (Packets Per Second)	24 M	10 M ¹	73 M ¹
IPSec VPN Throughput	12 Gbps / 15 Gbps ¹	800 Mbps / 3.8 Gbps ¹	1 Gbps / 23 Gbps ¹
IPS Throughput	2 Gbps	3 Gbps	4 Gbps
Antivirus Proxy-based Throughput	300 Mbps	400 Mbps	500 Mbps
Antivirus Flow-based Throughput	650 Mbps	850 Mbps	950 Mbps
Gateway-to-Gateway IPSec VPN Tunnels (System / VDOM)	10,000 / 5,000	10,000 / 5,000	10,000 / 5,000
Client-to-Gateway IPSec VPN Tunnels	64,000	64,000	64,000
Concurrent Sessions	1.1 Million	1.1 Million	2 Million
Unlimited Concurrent Users	Yes	Yes	Yes
New Sessions/Sec	25,000	40,000	40,000
Concurrent SSL-VPN Users (Max)	2,000	3,000	5,000
SSL-VPN Throughput	340 Mbps	340 Mbps	360 Mbps
Firewall Policies (System / VDOM)	100,000	100,000	100,000
Virtual Domains (Max / Default)	250 / 10	250 / 10	250 / 10
Unlimited User Licenses	Yes	Yes	Yes
Redundant Power Supplies (Hot Swappable)	Yes	Yes	Yes
Maximum Time Before Failure	More than 5 years	More than 4 years	More than 5 years
Dimensions			
Height	3.5" (88.9mm) - 2 RU	3.5" (88.9mm) - 2 RU	3.5" (88.9mm) - 2 RU
Width	16.9" (429.3 mm)	16.9" (429.3 mm)	16.9" (429.3 mm)
Length	18.3" (464.8 mm)	16.9" (429.3 mm)	18.5" (469.9 mm)
Weight	26.5 lbs (11.6 kg)	26 lbs (11.8 kg)	36 lbs (16.4 kg)
Rack Mountable	Yes	Yes	Yes
Environment			
AC Power	100 - 240 VAC, 50-60 Hz 8 Amp (Max)	100 - 240 VAC, 50-60 Hz 8 Amp (Max)	100 - 240 VAC, 50-60 Hz 8 Amp (Max)
DC Power	N/A	N/A	-48v (Normal)
Power Consumption (AVG)	168 W	220 W	275 W
Heat Dissipation	574 BTU	751 BTU	1470 BTU
Operating Temperature	32 - 104 deg F (0 - 40 deg C)	32 - 104 deg F (0 - 40 deg C)	32 - 104 deg F (0 - 40 deg C)
Storage Temperature	-13 - 158 deg F (-35 - 70 deg C)	-13 - 158 deg F (-35 - 70 deg C)	-13 - 158 deg F (-35 - 70 deg C)
Humidity	20 to 90% non-condensing	20 to 90% non-condensing	20 to 90% non-condensing
Compliance			
FCC Class A Part 15, UL/CUL, C Tick, VCCI			

All performance values are "up to" and vary depending on system configuration. Antivirus performance is benchmarked using HTTP traffic (32 Kbyte objects).

¹ Higher figure include properties of optional expansion modules.

The FortiGate-3000 series of multi-threat security appliances also include

- Multiple Deployment Modes (Transparent/Routing)
- Integrated Switch Fabric (ISF)
- Advanced Layer-2/3 Routing Capabilities
- WAN Optimization
- Virtual Domains (VDOMs)
- Data Center Traffic Optimization
- Traffic Shaping and Prioritization
- High Availability (Active/Active, Active/Passive, Clustering)
- Multiple Device Authentication Options

MANAGEMENT OPTIONS

- Local Web-Based Management Interface
- Command Line Management Interface (CLI)
- Local Event Logging (Memory / Disk if available)
- Centralized Management (FortiManager Appliance Required)
- Centralized Event Logging (FortiAnalyzer Appliance Required)



FortiGate-3810A Multi-Threat Security Appliance



FortiGate-3600A Multi-Threat Security Appliance



FortiGate-3016B Multi-Threat Security Appliance

FortiGate-AMC Modules

Fortinet accelerated interface modules increase the flexibility of FortiGate® and FortiCarrier™ platforms with 10-Gigabit Ethernet and Gigabit (GbE) Ethernet interface Options. They also provide additional security performance for the platforms, adding wire-speed firewall and near wire-speed IPSec VPN security for traffic traversing the module's ports.

Accelerated Interface Modules

Fortinet accelerated interface modules are available in double-width and single-width Advanced Mezzanine Card (AMC) form factors, providing a range of options to customers with AMC-enabled Fortinet platforms. The AMC standard, also known as AdvancedMC, was developed by the PCI Industrial Computers Manufacturers Group (PICMG), which has over 100 companies building to the specification. The AMC standard has been developed to meet the requirements for the next generation of carrier-grade communications equipment.



ADM-FB8



ADM-XB2



ASM-FB4



ADM-FE8



ADM-XE2



ASM-CE4

(Not supported on the FortiGate-3600A)

Security Processing

Fortinet security processing modules provide multi-gigabit throughput increases for intrusion prevention, firewall, and IP multicast applications. All models are based on the carrier-class Advanced Mezzanine Card™ (AMC) specification used in enterprise-class FortiGate multi-threat security platforms. Fortinet security processing modules work to increase overall system performance by offloading select security applications and network processing functions from the FortiGate host system while maintaining all the benefits of a unified security platform.

Storage

Fortinet all-in-one storage modules extend the capabilities of Fortinet platforms. With FortiGate multi-threat security platforms, the modules provide local storage facilities for security and system events. In addition, they can enable the WAN optimization feature available in FortiOS software version 4.0 or later, which works to accelerate applications commonly affected by slower network connections.

ORDERING INFORMATION	
Product Description	SKU
ASM-FB4, AMC module, single-width, four port SFP accelerated, includes 4 SX SFPs	ASM-FB4
ASM-CE4, AMC module, Single-width, 4 port 10/100/1000 Base-T, accelerated IPS	ASM-CE4
ADM-XB2, AMC module, double-width, two port 10 Gig accelerated, includes 2 SR XFPs	ADM-XB2
ADM-FE8, Security Processing Module accelerates IPS/FW/Multicast, double-width AMC form factor, 8 SFP ports, 2 1000Base-SX SFP transceivers included	ADM-FE8
ADM-XE2, AMC module, double-width, 2 port 10-Gig XFP, accelerated IPS, includes 2 SR XFPs	ADM-XE2
ASM-FB8, AMC module, double-width, 8 port SFP accelerated, includes 4 SX SFPs	ASM-FB8
ADM-XD4, AMC module, Double-width, 4 port 10-GigE SFP+ interfaces, 2 SFP+ transceivers included	ADM-XD4
ASM-S08, AMC module, single-width, 80 GB hard drive	ASM-S08

FortiOS Security Services

FIREWALL

ICSA Labs Certified (Enterprise Firewall)
NAT, PAT, Transparent (Bridge)
Routing Mode (RIP, OSPF, BGP, Multicast)
Policy-Based NAT
Virtual Domains (NAT/Transparent mode)
VLAN Tagging (802.1Q)
User Group-Based Authentication & Scheduling
SIP/H.323 /SCCP NAT Traversal
WINS Support
Granular Per-Policy Protection Profiles
Explicit Proxy Support

VIRTUAL PRIVATE NETWORK (VPN)

ICSA Labs Certified (IPSec)
PPTP, IPSec, and SSL
Dedicated Tunnels
DES, 3DES, and AES Encryption Support
SHA-1/MD5 Authentication
PPTP, L2TP, VPN Client Pass Through
Hub and Spoke VPN Support
IKE Certificate Authentication (v1 & v2)
IPSec NAT Traversal
Automatic IPSec Configuration
Dead Peer Detection
RSA SecurID Support
SSL Single Sign-On Bookmarks
SSL Two-Factor Authentication
LDAP Group Authentication (SSL)

NETWORKING/ROUTING

Multiple WAN Link Support
PPPoE Support
DHCP Client/Server
Policy-Based Routing
Dynamic Routing for IPv4 and IPv6 (RIP, OSPF, BGP, & Multicast for IPv4)
Multi-Zone Support
Route Between Zones
Route Between Virtual LANs (VDMs)
Multi-Link Aggregation (802.3ad)
IPv6 Support (Firewall, DNS, Transparent Mode, SIP, Dynamic Routing, Administrative Access, Management)

ANTIVIRUS

ICSA Labs Certified (Gateway Antivirus)
Includes Antispyware and Worm Prevention
HTTP/HTTPS SMTP/SMTSP
POP3/POP3S IMAP/IMAPS
FTP IM Protocols
Automatic "Push" Content Updates from FortiGuard Network
File Quarantine Support
Block by File Size or Type
IPv6 Support

WEB FILTERING

76 Unique Categories Provided by the FortiGuard Web Filtering Service Categorizes over 2 Billion Web pages
HTTP/HTTPS Filtering
URL/Keyword/Phrase Block
URL Exempt List
Content Profiles
Blocks Java Applet, Cookies, Active X
MIME Content Header Filtering
IPv6 Support

APPLICATION CONTROL

Identify and Control Over 1000 Applications
Control Popular IM/P2P Apps Regardless of Port/Protocol:
AOL-IM Yahoo MSN KaZaa
ICQ Gnutella BitTorrent MySpace
WinNY Skype eDonkey Facebook

HIGH AVAILABILITY (HA)

Active-Active, Active-Passive
Stateful Failover (FW and VPN)
Device Failure Detection and Notification
Link Status Monitor
Link failover
Server Load Balancing

WAN OPTIMIZATION

Bi-Directional / Gateway to Client/Gateway
Integrated Caching and Protocol Optimization
Accelerates CIFS/FTP/MAPI/HTTP/HTTPS/Generic TCP
Requires a FortiGate device with Hard Drive

INTRUSION PREVENTION SYSTEM (IPS)

ICSA Labs Certified (NIPS)
Protection From Over 3000 Threats
Protocol Anomaly Support
Custom Signature Support
Automatic Attack Database Update
IPv6 Support

DATA LOSS PREVENTION (DLP)

Identification and Control Over Sensitive Data in Motion
Built-in Pattern Database
RegEx-based Matching Engine for Customized Patterns
Configurable Actions (block/log)
Supports IM, HTTP/HTTPS, and More
Many Popular File Types Supported
International Character Sets Supported

ANTISPAM

Support for SMTP/SMTSP, POP3/POP3S, IMAP/IMAPS
Real-Time Blacklist/Open Relay Database Server
MIME Header Check
Keyword/Phrase Filtering
IP Address Blacklist/Exempt List
Automatic Real-Time Updates From FortiGuard Network

ENDPOINT COMPLIANCE AND CONTROL

Monitor & Control Hosts with FortiClient Endpoint Security

TRAFFIC SHAPING

Policy-based Traffic Shaping
Differentiated Services (DiffServ) Support
Guarantee/Max/Priority Bandwidth
Shaping via Accounting, Traffic Quotas, and Per-IP

VIRTUAL DOMAINS (VDMs)

Separate Firewall/ Routing Domains
Separate Administrative Domains
Separate VLAN Interfaces
10 VDOM License Standard, Upgradable to More

DATA CENTER OPTIMIZATION

Web Server Caching TCP Multiplexing
HTTPS Offloading

ORDERING INFO

Product Description	SKU
FortiGate-3016B, 16 FortiASIC-accelerated SFP ports (4 SX-type and 4 TX-type transceivers included), 2 10/100/100 non-accelerated ports, 1 single-width AMC slot	FG-3016B
FortiGate-3600A, 8 10/100/1000 ports and 2 SFP FortiASIC-accelerated ports (2 SX-type transceivers included)	FG-3600A
FortiGate-3810A, 8 10/100/1000 ports, 2 SFP FortiASIC-accelerated ports (2 SX-type transceivers included), 2 single-width AMC slots, and 2 double-width AMC slots	FG-3810-E4

FortiGuard® Security Subscription Services deliver dynamic, automated updates for Fortinet products. The Fortinet Global Security Research Team creates these updates to ensure up-to-date protection against sophisticated threats. Subscriptions include antivirus, intrusion prevention, web filtering, antispam, vulnerability and compliance management, application control, and database security services.

FortiCare™ Support Services provide global support for all Fortinet products and services. FortiCare support enables your Fortinet products to perform optimally. Support plans start with 8x5 Enhanced Support with return and replace hardware support or 24x7 Comprehensive Support with advanced hardware replacement. Options include Premium Support, Premium RMA, and Professional Services. All hardware products include a 1-year limited hardware warranty and a 90-day limited software warranty.



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