

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

	FortiGate-3016B	FortiGate-3600A	FortiGate-3810A
<b>Technical Specifications - Appliances</b>			
<b>Total Network Interfaces</b>			
10-GbE Interfaces (Hardware Accelerated)	--	--	0 - 8 <sup>1</sup>
1-GbE SFP Interfaces (Hardware Accelerated)	16 - 20 <sup>1</sup>	2 - 6 <sup>1</sup>	2 - 26 <sup>1</sup>
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
<b>System Performance</b>			
Firewall Throughput (Gbps)	16-20 <sup>1</sup>	6-10 <sup>1</sup>	7-55 <sup>1</sup>
Firewall Throughput (Packets Per Second)	24 M	10 M <sup>1</sup>	73 M <sup>1</sup>
IPSec VPN Throughput	12 Gbps / 15 Gbps <sup>1</sup>	800 Mbps / 3.8 Gbps <sup>1</sup>	1 Gbps / 23 Gbps <sup>1</sup>
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
<b>Dimensions</b>			
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
<b>Environment</b>			
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
<b>Compliance</b>			
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).

IPS performance is measured base on NSS like test methodology with 44K HTTP files.

<sup>1</sup> 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/SMTPS  
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/SMTPS, 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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