

# FortiGate®-5001A

Large Enterprises  
Higher Education  
Service Providers / Carriers

Datasheet

## Modern Threats to IT Networks

Threats against today's networked assets are complex, with targeted attacks that aim to impact business by penetrating systems, stealing confidential information, creating denial of service conditions, or causing costly network outages. The increases in server density within the data center, primarily from server virtualization technologies, combined with the increased adoption of 10-Gigabit Ethernet networks, only compound the challenge of providing effective network security. Point-based security appliances fall short of addressing the security and performance requirements of large networks due to increases in threat complexity and lack of integration among defense mechanisms. The FortiGate®-5000 series multi-threat security platform addresses both security and performance needs by integrating multi-threat protection into purpose-built hardware that effectively blocks multiple threats while maintaining network continuity, even at 10-Gigabit speeds.

## Next Generation FortiGate-5000 Series Security

FortiGate-5000 series multi-threat security systems provide essential network defenses that keep networks running smoothly and securely by integrating multiple security services into a modular and extensible chassis-based platform. The FortiGate-5001A is a high-performance security blade that integrates: enterprise firewall, Virtual Private Network (VPN), intrusion prevention, antivirus/antimalware, Web filtering, antispam, and application control features. The FortiGate-5001A offers flexible network interface options, including optional hardware-accelerated Gigabit and 10-Gigabit Ethernet support. With three chassis models of varying capacity and an array of network security modules, large enterprises and service providers can easily grow the capacity of the FortiGate-5000 series system as the business grows or security requirements change.



FortiGate-5001A (FG-5001A-DW)



FortiGate-5001A (FG-5001A-SW)



ADM-XB2 Module  
(2-Port 10-Gigabit Hardware Accelerated Ethernet)



ADM-FB8 Module  
(8-Port Gigabit Hardware Accelerated Ethernet)



ASM-FB4 Module  
(4-Port Gigabit Hardware Accelerated Ethernet)



ASM-S08 Module  
(80GB Hard Drive)

### Key Problems

### Solutions

Threats are constantly evolving, with threats against IT systems operating at the network and content levels.

The FortiGate-5000 series provides complete threat protection that addresses multiple threats within a single solution. With the flexible FortiGate security policy model, users can adapt to changing security requirements without requiring changes in hardware or software components.

Data centers require space saving, highly modular, and serviceable networking and security systems.

To keep mission critical applications available, FortiGate-5000 series are fully modular, chassis-and-blade based systems with complete high-availability capabilities, backplane fabric interconnects between blades, and hot swappable components for added redundancy, including blade modules, power supplies, and fan trays.

10-Gigabit Ethernet networks require high-performance security systems which will not introduce latency.

The FortiGate-5000 series provides a scalable platform that is 10-Gigabit Ethernet ready—delivering multi-gigabit security while maintaining ultra-low latency for time-sensitive applications.

Virtualized server farms need virtualized security solutions to reduce physical space, power, and cost.

The FortiGate-5000 Series includes support for high-density virtual domains (VDM) that can segment network security by customer, business unit, or nearly any type of network segmentation required.

## FortiGate Multi-Threat Security Solutions

FortiGate multi-threat security solutions provide an integrated set of security services in a single, easy-to-manage platform that is capable of supporting a wide range of deployment scenarios. FortiGate systems provide essential security services, with fully integrated: firewall, VPN, intrusion prevention, antivirus/antispam, Web filtering, antispam, and application control. To ensure that the security effectiveness of the FortiGate solutions remains at the highest levels possible, Fortinet offers FortiGuard® subscription services that include: antivirus updates, intrusion prevention updates, an antispam rating service, and a Web filtering rating service. A wide range of hardware models is available for any network size—from the remote office or branch office to the high-speed core or data center.





## Technical Specifications

### FortiGate-5001A

#### Hardware Specifications

Total 10/100/1000 Interfaces (Copper)	2
Maximum Network Interfaces – (Base Unit + AMC Module)	10
AMC Expansion Slot	1 Dual Width (FG-5001A-DW) 1 Single Width (FG-5001A-SW)

#### System Performance

Firewall Throughput – (Base Unit + AMC Module)	13 Gbps
Firewall Throughput – (Base Unit)	2 Gbps
VPN (IPSec) Throughput – (Base Unit + AMC Module)	7 Gbps
VPN (IPSec) Throughput – (Base Unit)	800 Mbps
IPS Throughput – (Base Unit + AMC Module)	4 Gbps
IPS Throughput – (Base Unit)	2 Gbps
Antivirus Throughput*	500 Mbps
Dedicated IPSec VPN Tunnels	64,000
Concurrent Sessions	2,000,000
New Sessions/Sec	50,000
Policies	100,000
Unlimited User Licenses	Yes
High Availability Configurations	Active/Active Active/Passive, Clustering
Virtual Domains (VDOMs)	10 (up to 500 Optional)

#### Dimensions

Height	1.18 in (30 mm)
Width	13.98 in (355 mm)
Length	12.20 in (310 mm)
Weight	7.8 lb (3.54 kg)

Power Required	-40.5 V (DC) to -57 V (DC)
Power Consumption (AVG)	148 W

#### Environment

Operating temperature	32 to 104 deg F (0 - 40 deg C)
Storage temperature	-31 to 158 deg F (-35 to 70 deg C)
humidity	20 to 90% non-condensing
Compliance	FCC Class A Part 15, UL/CB/CUL, CE
Certifications	ICSA Labs: Firewall, IPSec, SSL-TLS, IPS, Antivirus

\* Antivirus performance is benchmarked using HTTP traffic (32 Kbyte Objects)

## FortiGate-5000 Series Chassis



FortiGate-5140

#### FortiGate-5140 Chassis

(As Configured with FortiGate-5001A Blades)

- 14 Available Slots
- High-Availability Backplane
- Dual Switch Blade Support
- Max FW Throughput - 182 Gbps
- VPN Throughput - 98 Gbps
- Concurrent Sessions - 28 Million



FortiGate-5050

#### FortiGate-5050 Chassis

(As Configured with FortiGate-5001A Blades)

- 5 Available Slots
- High-Availability Backplane
- Dual Switch Blade Support
- Max FW Throughput - 65 Gbps
- VPN Throughput - 35 Gbps
- Concurrent Sessions - 10 Million



FortiGate-5020

#### FortiGate-5020 Chassis

(As Configured with FortiGate-5001A Blades)

- 2 Available Slots
- High-Availability Backplane
- Max FW Throughput - 26 Gbps
- VPN Throughput - 14 Gbps
- Concurrent Sessions - 4 Million

## FortiGate-5000 Series Rear Transition Module XB2 (RTM-XB2)



#### RTM-XB2 Fabric Module

- Provides 10-Gigabit Ethernet backplane fabric connectivity to a FortiGate-5001A and FortiSwitch-5003A equipped system
- Includes FortiASIC hardware acceleration
- One required per FortiGate-5001A security blade in a FortiGate/FortiSwitch solution

## FortiGuard Security Subscription Services

- Antivirus
- Intrusion Prevention
- Web Filtering
- Antispam
- Premier Signature Service  
(Includes Antivirus and Intrusion Prevention Updates with additional service level agreements)

## FortiCare Support Services

- 24/7/365 FortiCare Web-based support
- Technical account management service available
- 24-Hour phone support available
- Professional services available
- 1-Year limited hardware warranty



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