

# FORTIGATE™ 5050

## High Performance, High Availability Solution for Carrier Grade Networks

FortiGate™ Antivirus Firewalls are dedicated, hardware-based units that deliver complete, real-time network protection services. Based on Fortinet's revolutionary FortiASIC™ Content Processor chip, the FortiGate platforms are the only systems that can detect and eliminate viruses, worms, and other content-based threats without reducing network performance — even

for real-time applications like Web browsing. FortiGate systems also include integrated firewall, content filtering, VPN, intrusion detection and prevention, and traffic shaping functions, making them the most cost effective, convenient, and powerful network protection solutions available.

The FortiGate-5050 system is a carrier class system designed for network core and edge deployment.

FortiGate-5050 systems are configured using a 5-slot FortiGate-5050 chassis outfitted with FortiGate-5001 Antivirus Firewall modules and FortiGate-5003 Switch Blades in flexible combinations that meet varying throughput, redundancy, and interface requirements. The FortiGate-5050 chassis complies with the AdvancedTCA (ATCA) carrier-class specifications, and can accept redundant DC power inputs to ensure high-availability power. FortiGate-5050 system accommodates up to 5 FortiGate-5001 Antivirus Firewall modules, each of which is equipped with the FortiASIC™ Content Processor chip and provides high-performance network and content security services. Each FortiGate-5001 blade has 4 Gigabit Small Form-factor Pluggable (SFP) ports and 4 tri-speed gigabit ethernet ports. FortiGate-5050 systems can be deployed in multi-chassis configurations with the ability to maintain full operation even with multiple power supply, fan, blade, and link failures. The FortiGate-5050 unit is kept up to date automatically by Fortinet's FortiProtect™ Network, which provides continuous updates that ensure protection against the latest viruses, worms, Trojans, and other threats — around the clock, and around the world.



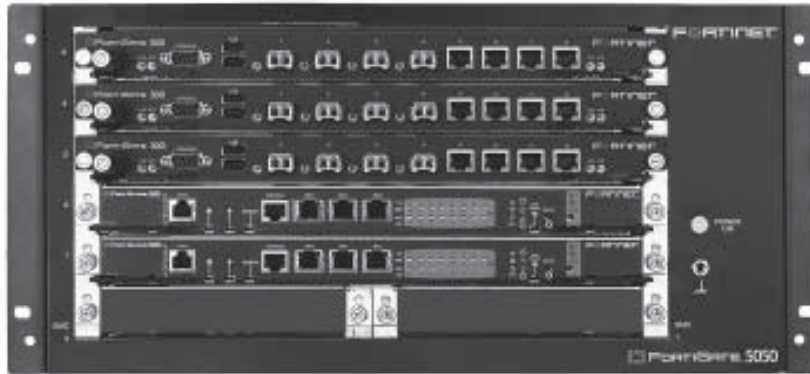
## Product Highlights

- Optimal solution for Large Enterprise, Carriers and Managed Security Service Providers (MSSPs)
- Scans and eliminates viruses and worms from HTTP, SMTP, POP3, IMAP, and FTP traffic without degrading network performance
- Provides complete network protection functionality: network-based antivirus, web content filtering, firewall, VPN, network-based intrusion detection and prevention, traffic shaping, and antispam protection
- “Transparent mode” operation supports highly available architectures and deployments for antivirus and content filtering only in conjunction with existing firewall, VPN, intrusion detection and prevention, or other existing systems
- Supports redundancy at the power, blade, and chassis level
- Reduces exposure to threats by detecting and preventing over 1300 different intrusions, including DoS and DDoS attacks
- VLAN and security zone support provides granular network segmentation into zones with independent security and access control policies
- Real-time system status monitoring lowers the total cost of ownership by providing an easy graphical view of CPU and memory utilization, network and session status, virus and intrusion detection
- Automatically downloads the latest virus and attack database and can accept instant “push” updates from the FortiProtect Network
- Underlying FortiOS™ is ICSA-certified for Antivirus, Firewall, IPSec VPN and Intrusion Detection

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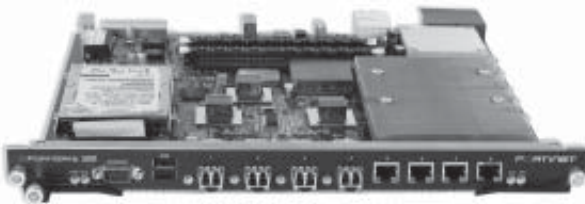
## FortiGate-5050 System Components

FortiGate-5050 Chassis (Front view)



### Scalable capacity

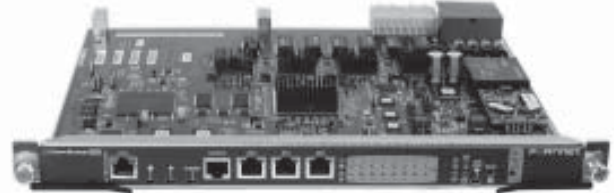
FortiGate-5050 Chassis supports up to 5 FortiGate-5001 modules and as many as 2 FortiGate-5003 switches in flexible configurations to meet a variety of needs for performance and availability



FortiGate-5001 Antivirus Firewall module

### High performance modules

The FortiGate-5001 Antivirus Firewall is a high capacity module with FortiASIC acceleration for real-time content security



FortiGate-5003 Switch Blade

### Flexible switch fabric

FortiBlade-5003 Switch Blades provide redundant connections between FortiGate-5001 blades on the backplane, and 3 external Gigabit interfaces. Two FortiBlade-5003 modules in a chassis enable high-availability failover across chassis

FortiGate-5050 Chassis (Rear view)



### Redundant DC power inputs

Filtered power inputs include local breakers and remote power monitoring

### Optional AC power shelf

The FortiGate-5053 Power Converter allows for AC power inputs, supports 1 + 1 redundant, hot-swappable modules, and up to 3 power supply modules. Mounts above or below the FortiGate-5050 chassis



FortiGate-5053 Power Converter



**Specifications**

**FortiGate-5001 Blade**

**FortiGate-5001 Blade**

**Interfaces**

SFP Ports	4
10/100/1000Base-T Ports	4

**System Performance**

Concurrent sessions	1,000,000
New sessions/second	25,000
Firewall throughput (Gbps)	4Gbps
168-bit Triple-DES throughput (Mbps)	600
Unlimited concurrent users	•
Policies	50,000
Schedules	256

**Antivirus, Worm Detection & Removal**

Scans HTTP, FTP, SMTP, POP3, IMAP, and encrypted VPN Tunnels	•
Block by file size	•

**Firewall Modes**

NAT, PAT, Transparent (bridge)	•
Routing mode (RIP v1, v2)	•
Policy-based NAT	•
VLAN tagging (802.1q)	•
User/Group based authentication	•
H.323 NAT Traversal	•
WINS Support	•

**VPN**

PPTP, L2TP, and IPSec	•
Dedicated tunnels	5000
Encryption (DES, 3DES, AES)	•
SHA-1 / MD5 authentication	•
PPTP, L2TP, VPN client pass through	•
Hub and Spoke VPN architecture	•
IKE certificate authentication (X.509)	•
IPSec NAT Traversal	•
Aggressive mode	•
Replay protection	•
Dead peer detection	•
Interoperability with major VPN vendors	•

**Content Filtering**

URL/keyword/phrase block	•
URL Exempt List	•
Protection profiles	32
Blocks Java Applet, Cookies, Active X	•
FortiGuard™ web filtering support	•

**Dynamic Intrusion Detection and Prevention**

Intrusion prevention for over 1300 attacks	•
Automatic real-time updates from FortiProtect Network	•
Customizable detection signature list	•

**Anti-Spam**

Real-time Blacklist/Open Relay Database Server	•
MIME header check	•
Keyword/phrase filtering	•
IP address blacklist/exempt list	•

**Logging/Monitoring**

Log to remote Syslog/WELF server	•
Graphical real-time and historical monitoring	•
SNMP	•
Email notification of viruses and attacks	•
VPN tunnel monitor	•

**High Availability (HA)**

Active-active/Active-passive HA	•
Stateful failover (FW and VPN)	•
Device failure detection & notification	•
Link status monitor	•
Link failover	•

**Networking**

Multiple WAN link support	•
Multi-zone support	•
Route between zones	•
Policy-based routing	•

**System Management**

Console interface	•
WebUI (HTTPS)	•
Multi-language support	•
Command line interface	•
Secure Command Shell (SSH)	•

**Administration**

Role-based administration	•
Multiple administrators and user levels	•
Upgrades & changes via TFTP & WebUI	•
System software rollback	•

**User Authentication**

Internal database	•
External LDAP/RADIUS database support	•
RSA SecurID	•
Xauth over RADIUS support for IPSec VPN	•
IP/MAC address binding	•

**Traffic Management**

DiffServ setting	•
Policy-based traffic shaping	•
Guaranteed/Maximum/Priority bandwidth	•

**Dimensions (FortiGate-5050 Chassis)**

Height / Width / Length	8.75 inches, 17 inches, 15.5 inches
Weight	26.75 lbs (12.1 kgs)

**Power**

DC input voltage range	48V - 58V
DC input current	25A

**Optional AC Power Shelf (FortiGate-5053 Power Converter)**

AC input voltage	100 to 240VAC
AC input current	10A
Frequency	47 to 63Hz
Power Dissipation	800W max

**Environmental**

Operating Temperature	32 to 104 °F (0 to 40 °C)
Storage Temperature	-13 to 158 °F (-25 to 70 °C)
Humidity	5 to 95% non-condensing

**Regulatory**

FCC Class A Part 15	Pending
CE	Pending
UL	Pending
ICSA Antivirus, Firewall, IPSec, and NIDS	•

# FORTIGATE™ 5050

## Australia

Level 17, 201 Miller Street  
North Sydney 2060  
Australia

Tel: +61-2-8923-2555  
Fax: +61-2-8923-2525

## China

Cyber Tower, Suite B-903  
2 Zhongguancun Nan Ave.  
Hai Dian, Beijing 100086  
China

Tel: +8610-8251-2622  
Fax: +8610-8251-2630

## France

4 Place de la Defense  
92974 Paris La Défense Cedex  
France

Tel: +33-1-4610-5000  
Tech Support: +33-4-9300-8810  
Fax: +33-1-5858-0025

## Germany

Feringapark  
Feringastrasse 6  
85774 München-Unterföhring  
Germany

Tel: +49-(0)-89-99216-300  
Fax: +49-(0)-89-99216-200

## Hong Kong

Room 3206, 32/F  
Convention Plaza - Office Tower  
1 Harbour Road, WanChai  
Hong Kong

Tel: +852-3171-3000  
Fax: +852-3171-3008

## Japan

Kokusai Tameike Building 6F  
2-12-10 Akasaka, Minato-ku  
Tokyo 107-0052  
Japan

Tel: +81-3-5549-1640  
Fax: +81-3-5549-1641

## Korea

27th Floor  
Korea World Trade Center  
159 Samsung-Dong  
Kangnam-Ku  
Seoul 135-729  
Korea

Tel: +82-2-6007-2007  
Fax: +82-2-6007-2703

## Taiwan

18F-1, 460 SEC.4  
Xin-Yi Road  
Taipei, Taiwan, R.O.C.

Tel: +886-2-8786-0966  
Fax: +886-2-8786-0968

## United Kingdom

1 Farnham Road  
Guildford, Surrey GU2 4RG  
United Kingdom

Tel: +44-(0)-1483-549061  
Fax: +44-(0)-1483-549165

## United States

920 Stewart Drive  
Sunnyvale, CA 94085  
USA

Tel: +1-408-235-7700  
Fax: +1-408-235-7737  
Email: sales@fortinet.com