



# FortiGate® 5000-Series Scalable Data Center and Carrier-Graded Security Systems





# FortiGate 5000-Series

# Scalable Data Center and Carrier-Graded Security Systems

FortiGate 5000-series chassis-based security systems use highly-flexible AdvancedTCA™ (ATCA)-compliant architecture that enable the FortiGate 5000-series to protect complex, multi-tenant cloud-based security-as-a-service and infrastructure-as-a-service environments. Purpose-built by Fortinet, the FortiGate 5000-series integrates modular carrier-class hardware components with advanced FortiASIC™ acceleration and consolidated security from the FortiOS™ operating system.

# Consolidated Security Solutions

FortiGate 5000-series appliances give you the ability to deploy a wide range of Fortinet's UTM inspection capabilities, including firewall, IPS, application control, VPN, and web filtering. These features can be scaled as required by adding more security blades. Each system also supports FortiGuard® security subscription services to deliver dynamic, automated updates and ensure up-to-date protection against sophisticated threats. In addition, the devices support a web-based GUI, 'single pane of glass' management console, and on-board reporting.

By consolidating multiple security enforcement technologies into a single system, the FortiGate 5000-series eliminate disparate hardware devices and software solutions, greatly simplifying security gateway implementation and reducing total cost of ownership.

# Key Features & Benefits

Unmatched Performance and Security	ASICs powered security blades with industry's validated security OS deliver outstanding capability for massive networks.
Highly Scalable	Chassis system that allows organizations to add capability when needed.
High Speed Interfaces	Keeping pace with today's network infrastructure and demands with high density 40 Gbps and 10 Gbps connectivity.

# Highly Scalable, Flexible and Unmatched Performance

- Ideal for high-speed service provider, large enterprise or telecommunications carrier network.
- Security blades that are powered by FortiASICs that provide outstanding Firewall, VPN and UTM performance.
- Runs on FortiOS 5 the most powerful security operating system in the world.
- Backed by world class technical support and threat research team.









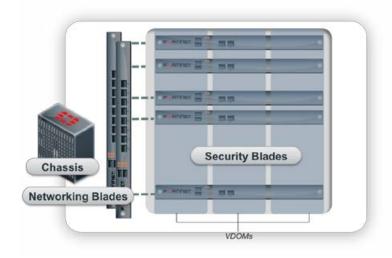




# **ARCHITECTURE**

#### Flexible and Scalable

- Chassis and blades systems that can be configured for various resiliency and network requirements.
- Security blades can be added as demand grows.
- Ease of maintenance and minimum disruption with hot swappable components



#### Chassis

The chassis enables the flexible system to scale effortlessly and with little disruptions by allowing blades to be hot swapped according to desired requirements. The system can also be configured for various resilience designs within the chassis as well as between chassis. The rack mount ATCA chassis provides centralized and redundant power supplies to its blades. With the exception of the FortiGate 5020, the chassis may be powered by either DC or AC with additional power interface. It facilitates backplane communications between the blades which may be used for HA heartbeat and other control and data communications.

The FortiGate 5060, FortiGate 5140B and FortiGate 5144C may house shelf managers that control chassis power allocation, monitor chassis operating parameters, monitor and control chassis cooling, and can signal alerts via alarm module if the chassis encounters problems.

# Security Blades

High performance, ASICs powered security blades run on FortiOS or FortiCarrier which apply access policies and security profiles on the traffic they received from the networking blades via backplane or front panel interfaces. These blades may operate in NAT/route and/or transparent mode. They also support VDOMs within the cluster.

# **Networking Blades**

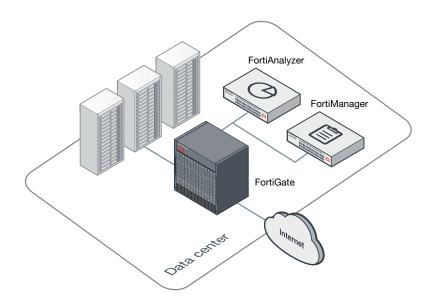
Up to two networking blades may be installed on a FortiGate 5060, FortiGate 5140B and FortiGate 5144C in designated slots. These blades connect the system to the network while connected to the multiple security blades via the chassis's backplane. The networking blade clusters the security blades with traffic distribution.

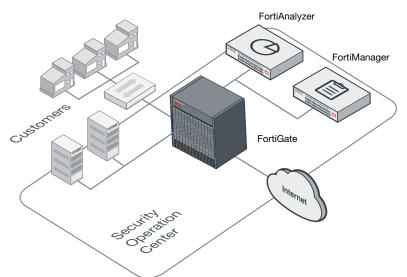
Networking blades can assign security blades into service groups which are isolated clusters coexisting in a single chassis. Two networking blades may either operate as active-passive HA or separately with its own clusters.

#### DEPLOYMENT

#### **Next Generation Perimeter Security**

Firewalls alone aren't enough to block today's blended threats and attacks. Data centers require multi-layered security technologies that examine entire packet flows, from content inspection through reassembly, stopping threats at the perimeter. The FortiGate 5000-series offers this critical functionality without compromising performance and scalability.



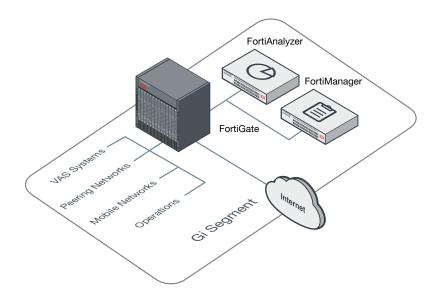


# MSSP Core Security

The FortiGate 5000-series delivers comprehensive security for Managed Security Service Providers (MSSPs). The full suite of ASIC-accelerated security modules allows for customizable features for specific customers, while virtualization features like VDOMs provide up to 6,000 separate security domains. Finally, the full suite of Fortinet integrated management applications — including granular reporting features — offer unprecedented visibility into the security posture of customers while identifying their highest risks.

# Carrier-Graded Security

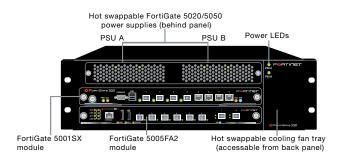
The ATCA chassis and components of the FortiGate 5000-series are ideal for telecommunication operators and service providers with standard-based assurance for reliability and robustness. Its unbeatable high capacity is essential as data networks continue to grow rapidly in the near future.



# **CHASSIS**

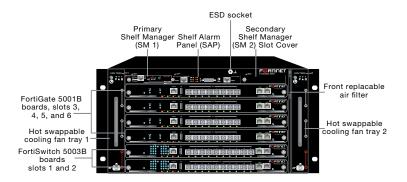
#### FortiGate 5020

Compact 4U chassis that contains two redundant AC power modules and can install one or two FortiGate 5000 security blades.



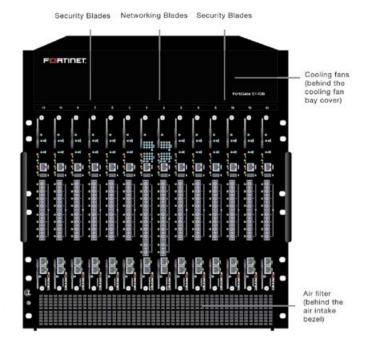
#### FortiGate 5060

Mid-sized 5U 19-inch rack mount ATCA chassis that contains two redundant hot swappable DC Power Entry Modules (PEMs) and can install up to six FortiGate 5000-series blades.



#### FortiGate 5140B

13U 19-inch rack mount ATCA chassis that contains two redundant hot swappable DC Power Entry Modules (PEMs) and can install up to 14 FortiGate 5000-series blades. It also includes four hot swappable front pluggable cooling fan trays.



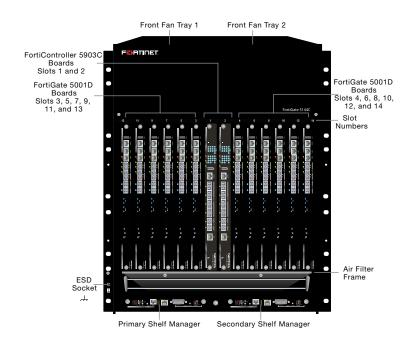
# AdvancedTCA™-compliant Chassis

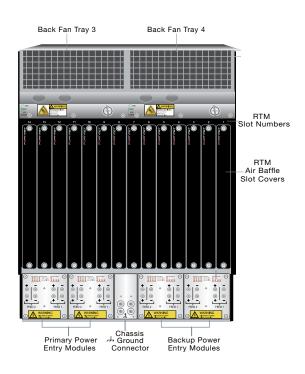
- Based on industry's conforming standards assuring carrier-grade performance, reliability, 99.999% availability and serviceability.
- Redundant fans, power modules and self managers and alarm modules options.\*
- Highly scalable with minimum service disruptions as hot swapped blades may be added to increase capacity with ease.
- Comprehensive management and monitoring facilities via shelf managers and alarm modules.\*\*

# **CHASSIS**

#### FortiGate 5144C

Next Generation 14U 19-inch rack mount ATCA chassis with 40 Gbps Backplane and capable of Dual-Dual-Star topology. It can install up to 14 FortiGate 5000-series blades.





	FortiGate 5020	FortiGate 5060	FortiGate 5140B	FortiGate 5144C	
Hardware Specifications					
Available Slots	2	6	14	14	
High Availability Backplane Fabric	Built-in	Built-in	Built-in	Built-in	
40 Gbps Backplane Support	_	_	_	Yes	
Shelf Manager (Default / Maximum)	_	1/2	1/2	1/2	
Dual Networking Blade Support	No	Yes	Yes	Yes	
Dimensions					
Height x Width x Length (inches)	5.25 x 17 x 15.5	8.86 x 17.64 x 18.82	22.63 x 19 x 22.6	24.44 x 19.06 x 21.63	
Height x Width x Length (cm)	13.3 x 43.2 x 39.4	22 x 44.8 x 47.8	57.5 x 48.3 x 57.4	62.1 x 48.4 x 55.0	
Veight	35.5 lb (16.1 kg)	38 (17.3 kg)	84 lb (38 kg)	108 lb (50 kg)	
Maximum Capacity**					
Firewall Throughput	160 Gbps	480 Gbps	1.12 Tbps	1.12 Tbps	
Power and Environment					
Power Required	AC	DC/AC <sup>1</sup>	DC/AC <sup>1</sup>	DC/AC <sup>1</sup>	
Chassis Only Power Consumption (Maximum) ***	_	350 W	530 W	960 W	
leat Dissipation (Maximum) ***	_	1194 BTU/h	1808 BTU/h	3,276 BTU/h	
perating Temperature	32_104°F (0_40°C)	41-104°F (5-40°C)	32-104°F (0-40°C)	32-104°F (0-40°C)	
storage Temperature		23-131°F (-5-55°C)	-13–158°F (-35–70°C)	-13–158°F (-35–70°C)	
lumidity	5–90% non-condensing	5–85% non-condensing	5–90% non-condensing	5–90% non-condensing	
Compliance					
Certifications	FCC Part 15 Class A, C-Tick, VCCI, CE, BSMI, UL/cUL				

 $<sup>^{\</sup>mbox{\tiny 1}}$  Optional FortiGate 5053B Power Supply Shelf used to provide AC power to the FortiGate

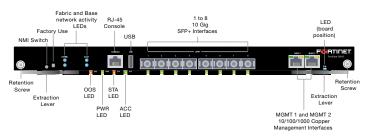
 $<sup>^{\</sup>star\star}$  Based on fully populated FortiGate 5001D

<sup>\*\*\*</sup> Please refer to respective Chassis Guide for computation of total power requirement.

# SECURITY BLADE

#### FortiGate 5001B

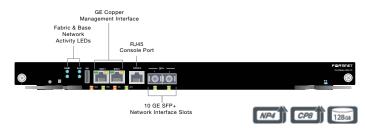
Security blade ideal for basic firewalling using NP4.





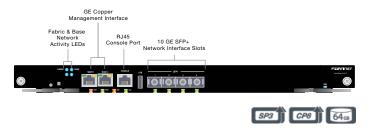
#### FortiGate 5001C

Security blade that is powered by CP8 and NP4 for superior firewall and UTM performance.



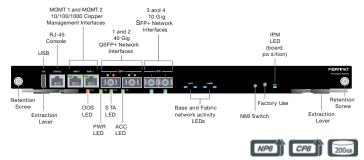
#### FortiGate 5101C

Powered by FortiASIC SP3 to provide unmatched UTM and IPv6 Firewall Performance, most ideal for next generation networks.



#### FortiGate 5001D

Latest purpose-built FortiGate security blade with carrier-class capacity and protection.



#### Security Processor

- Offload CPU for firewall, VPN and flow-based UTM processing
- AccelerateD IPv6 Firewall Performance



# Powered by FortiASIC

 FortiGate® consolidated security appliances are purposebuilt to provide essential security technologies for your network. Powered by FortiASIC custom processors,
 FortiGate platforms deliver unmatched cost/performance for any size network.

# Content Processor: Accelerate computationally intensive tasks

- Accelerates packet content matching with signatures
- High performance VPN bulk data engine
- Key Exchange Processor support high performance IKE and RSA computation
- Message authentication module offers high performance cryptographic engine, used by applications such as WAN optimization and SSL Inspection

# Network Processor: The heart of low latency and high performance traffic processing

- Supports firewall acceleration with large capacity, including multicast traffic
- Provides IPsec ESP encryption/decryption processing at blazing speed
- Scale firewall throughput independent of packet size
- Operates at the interface level to provide an ultra low latency performance
- Up to 10 million sessions of searching and dynamic network address translation (DNAT)

# **SECURITY BLADE**

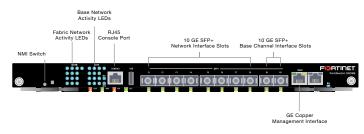
#### FortiController 5902D

Hybrid blade that can operate either as networking or security blade, benefits users who need to scale up UTM performance as traffic grows.

#### MGMT 10/100/1000 Copper Management Interface F1 to F4 40G Fabric Channel QSFP+ Interfaces RJ-45 Console B1 and B2 10G Base Channel SFP+ Interfaces IPM LED (board position) NMI Switch OOS STA Fabric Network Activity LEDs PWR LED ACC LED Factory Use NP6 128<sub>GB</sub>

# FortiSwitch 5203B

Flexible security blade that provides investment protection by transforming into a networking blade when scalability is required.











	FortiGate 5001B	FortiGate 5001C	FortiGate 5101C	FortiGate 5001D	FortiSwitch 5203B*	FortiController 5902D*
Interfaces and Storage						
40 GE QSFP+ Ports	_	_	_	2	_	4
10 GE SFP+ Ports	8	2	4	2	10	2
GE RJ45 Ports	2	2	2	2	1	1
RJ45 Console Port	1	1	1	1	1	1
Included Transceivers	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR
Local Storage	64 GB	128 GB	64 GB	200 GB	64 GB	128 GB
System Performance						
Firewall Throughput (1518 / 512 / 64 byte UDP packets)	40 / 40 / 40 Gbps	40 / 40 / 40 Gbps	40 / 40 / 10 Gbps	80 / 80 / 45 Gbps	40 / 40 / 40 Gbps	80 / 80 / 50 Gbps
Firewall Latency (64 byte UDP packets)	4 μs	4 μs	7 μs	3 µs	4 μs	3 µs
Firewall Throughput (Packets Per Second)	60 Mpps	60 Mpps	15 Mpps	67.5 Mbpps	60 Mpps	75 Mpps
Concurrent Sessions (TCP)	20 Million	29.5 Million	10 Million	23 Million	20 Million	50 Million
New Sessions/Second (TCP)	170,000	210,000	235,000	565,000	170,000	155,000
Maximum Firewall Policies	100,000	100,000	100,000	100,000	100,000	100,000
IPsec VPN Throughput (512 byte packets)	17 Gbps	17 Gbps	22 Gbps	25 Gbps	17 Gbps	15 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	40,000	40,000	40,000	40,000	40,000	40,000
Client-to-Gateway IPsec VPN Tunnels	64,000	64,000	64,000	64,000	64,000	64,000
SSL-VPN Throughput	1.3 Gbps	3.6 Gbps	1.3 Gbps	6.5 Gbps	1.3 Gbps	6.5 Gbps
Concurrent SSL-VPN Users (Recommended Maximum)	20,000	20,000	25,000	25,000	20,000	25,000
IPS Throughput	7.8 Gbps	12 Gbps	9.4 Gbps	18 Gbps	7.8 Gbps	18 Gbps
Antivirus Throughput	2 Gbps	3 Gbps	2 Gbps	5.6 Gbps	2 Gbps	3.8 Gbps
Virtual Domains (Default / Maximum)	10 / 500	10 / 500	10 / 500	10 / 500	10 / 500	10 / 500
Maximum Number of FortiTokens	5,000	5,000	5,000	5,000	5,000	5,000
Maximum Number of Registered FortiClients	20,000	20,000	20,000	20,000	20,000	20,000
Maximum Number of FortiAPs	1,024	1,024	1,024	1,024	1,024	1,024
Power and Environment						
Power Consumption (Average / Maximum)	187 / 225 W	187 / 225 W	197 / 236 W	189 / 226 W	210 / 250 W	223 / 270 W
Heat Dissipation (Average)	768 BTU/h	768 BTU/h	805 BTU/h	774 BTU/h	853 BTU/h	919 BTU/h
Operating Temperature	32-104°F (0-40°C)	32-104°F (0-40°C)	32-104°F (0-40°C)	32-104°F (0-40°C)	32-104°F (0-40°C)	32-104°F (0-40°C)
Storage Temperature	-13–158°F (-25–70°C)	-13-158°F (-25-70°C)	-13–158°F (-25–70°C)	-13–158°F (-25–70°C)	-13-158°F (-25-70°C)	-13-158°F (-25-70°C)
Humidity	20-90% non-condensing	20-90% non-condensing	20-90% non-condensing	20-90% non-condensing	20-90% non-condensing	20-90% non-condensing
Compliance						
Certifications		FCC Part 15 Class A, C-Ti	ck, VCCI, CE, UL/cUL, CB, IC	SA Labs: Firewall, IPsec, IPS,	Antivirus, SSL-VPN	
NEBS Certified	Yes	_	_	_	Yes	Yes

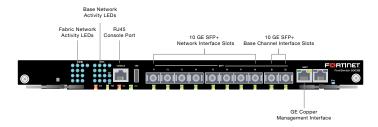
<sup>\*</sup> Operating in Standalone Mode

Note: All performance values are "up to" and vary depending on system configuration. Antivirus performance is measured using 44 Kbyte HTTP files. IPS performance is measured using 1 Mbyte HTTP files. Antivirus Throughput is measured in proxy mode.

# **NETWORKING BLADE**

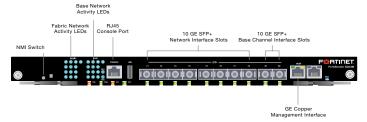
#### FortiSwitch 5003B

Basic L2 switching blade for aggregating security blades within a chassis.



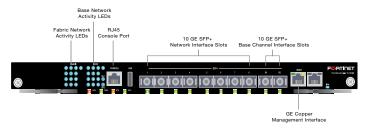
#### FortiSwitch 5203B

Flexible networking blade that can either operate as a standalone full featured FortiGate or in content cluster mode, as a FortiGate unit (weighted) load balancing traffic to one or more security blades.



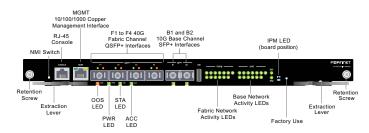
# FortiController 5103B

As a high capacity stateful load balancer, this networking blade distributes sessions to multiple FortiGate security blades using state of the art FortiASIC TP acceleration.



# FortiController 5902D

Hybrid blade that can operate either as networking or security blade, benefits users who need to scale up UTM performance as traffic grows.



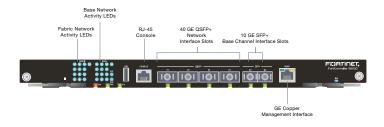
	FortiSwitch 5003B	FortiSwitch 5203B*	FortiController 5103B	FortiController 5902D*	FortiController 5903C	FortiController 5913C
Interfaces						
Fabric Channel Interfaces	8x 10 GE SFP+	8x 10 GE SFP+	8x 10 GE SFP+	4x 40 GE QSFP+	4x 40 GE QSFP+	2x 100 GE CFP2
Base Channel Interfaces	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+	2x 10 GE SFP+
Management Interfaces	1x GE RJ45	1x GE RJ45	1x GE RJ45	1x GE RJ45	1x GE RJ45	1x GE RJ45
Included Transceivers	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR	2x 10 GE SFP+ SR
40 GE Backplane Fabric Support	-	-	_	Yes	Yes	Yes
10 GE Backplane Fabric Support	Yes	Yes	Yes	Yes	Yes	Yes
GE Backplane Fabric Support	Yes	Yes	Yes	-	_	-
System Performance						
Maximum Traffic Throughput	80 Gbps	40 Gbps	60 Gbps	80 Gbps	120 Gbps	200 Gbps
Maximum Concurrent Sessions	-	20 Million	110 Million	50 Million	135 Million	135 Million
New Sessions/Second (TCP)	_	170,000	1.26 Million	155,000	3.2 Million	3.6 Million
Power and Environment						
Power Consumption (Average / Maximum)	150 / 180 W	210 / 250 W	213 / 255 W	223 / 270 W	250 / 400 W	280 / 400 W
Heat Dissipation	614 BTU/h	853 BTU/h	754 BTU/h	919 BTU/h	1360 BTU/h	955 BTU/h
Operating Temperature	32-104°F (0-40°C)		32-104°F (0-40°C)		32-104°F (0-40°C)	32-104°F (0-40°C)
Storage Temperature	-13–158°F (-35–70°C)	-13–158°F (-35–70°C)	-13-158°F (-35-70°C)	-13-158°F (-35-70°C)	-13-158°F (-35-70°C)	-13–158°F (-35–70°C)
Humidity	20–90% non-condensing	20-90% non-condensing	20-90% non-condensing	20–90% non-condensing	20-90% non-condensing	5-90% non-condensing
Compliance						
Certifications	FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cuL, CB					

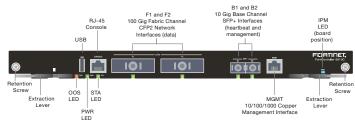
<sup>\*</sup> Operating in Distribution Mode

# **NETWORKING BLADE**

#### FortiController 5903C/5913C

High Performance networking blade that provides 10/40-gigabit fabric and 1-gigabit base backplane channel layer-2 switching in a dual star architecture.





# **CLUSTERING OPTIONS**

# FortiGate 5000-Series Clustering



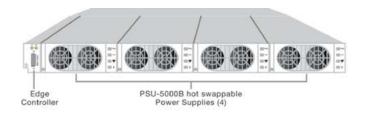
The networking blades, security blades and the chassis together form clusters. This technique load balances network traffic across the cluster, helping to enhance the scalability, reliability, and availability of mission-critical IP-based services, such as firewall, antivirus, web filtering and IPS. It also provides high availability by detecting host failures and automatically redistributing traffic to the hosts within a chassis. Clustering simplifies large scale security gateway deployment as configuration synchronization and firmware upgrades can be executed automatically within the clusters.

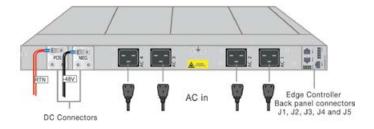
	Content Clustering (CC)	Session-aware Load Balancing Cluster (SLBC)
Clustering Features		
Technology	Modified FortiOS Active-Active HA cluster with Chassis	Intelligent Network load balancing within Chassis
Ideal Use Case	Scaling UTM performance for MSSP	High performance CGN and Internet security gateway for Service Provider
Configuration Synchronization and Firmware Upgrades	Yes	Yes
Session Termination (eg, VPN, Explicit Proxy)	Yes	Yes. On Primary Security Blade
Multi-segmentation	Yes	Limited
High Availability Setup	Intra Chassis	Inter & Intra Chassis
Networking Blades		
Supported Networking Blades	FSW-5203B	FCTRL-5103B, FCTRL-5903C, FCTRL-5913C
Security Blades		
Supported Security Blades	FG-5001B, FG-5001C, FG-5101C, FG-5001D	FG-5001B, FG-5001C, FG-5101C, FG-5001D

# **AC POWER SUPPLIES**

#### FortiGate 5053B and PowerSupplyUnit 5000B

The FortiGate 5053B is a 1U 19-inch rack mount power supply shelf with PSU-5000B hot swappable power supplies to convert AC power to DC power and to supply power to a FortiGate 5000-series chassis.





	Non-redundant			Redundant			
Number of PSUs	1	2	3	4	1+1	2+1	3+1
5053B with PSU-5000B (185–307V AC High Line Input)	2,725 W	5,450 W	8,175 W	10,900 W	2,725 W	5,450 W	8,175 W
5053B with PSU-5000B (100–184V AC Low Line Input, North America, Mexico, Japan, etc.)	1,200 W	2,400 W	3,600 W	4,800 W	1,200 W	2,400 W	3,600 W

#### SOFTWARE FEATURES



FortiOS Dashboard - Single Pane of Glass Management

#### Ease of Use

FortiOS lowers operation costs and reduces IT staff workloads. Physical or virtual FortiGate appliances give you the flexibility to match your security to your environment while enforcing a uniform security policy. Single pane of glass management and centralized analysis ensure consistent policy creation and enforcement while minimizing deployment and configuration challenges.

# Comprehensive Systems Integration

Integration with external systems is possible with wide range of interfacing protocol support and certified solution partners. Network operators can rely on facilities such as SNMP, sFlow and syslog for monitoring purposes. Integration with provisioning systems and custom portals are also possible with Web Service APIs via FortiManager. Scripting using various scripting languages is also supported by manipulating CLI commands.

# **SOFTWARE FEATURES**

# Superior IPS Capabilities

The FortiGuard IPS subscription service provides FortiGate customers with the latest defenses against stealthy network-level threats. With signatures of more than 4000 known threats, it enables FortiGate to stop attacks that evade conventional firewall defenses. It also provides behavior-based heuristics, enabling the system to recognize threats for which no signature has yet been developed.

# Unique Visibility and Control

FortiOS allows greater traffic visibility and more consistent, granular control over users, devices, applications and sensitive data. Dashboard widgets allow administrators to quickly view and understand real-time network activities and threat situations.

#### Robust Virtual Systems

FortiOS VDOMs is a proven method of dividing a FortiGate unit/cluster into two or more virtual units that function as multiple independent units. It has the industry's most comprehensive virtualization capabilities that meet today's complex MSSP deployments.

#### Flexible Role-based Administration

Access profiles can be defined to provide granular access to VDOMs and system functionalities. This is valuable in facilitating enterprise-class or complaint security operation workflows.

#### Identity-Centric Enforcement

FortiOS supports both local and remote authentication services such as LDAP, RADIUS and TACACS+ to identify users and apply appropriate access policies and security profiles accordingly. It may also simplify identity-based implementations and also provide seamless users authorization experience with various single sign-on capabilities. One such application is to retrieve subscriber's information via RADIUS accounting messages and apply appropriate security services dynamically for a managed service provider.

FortiOS has strong PKI and certificate-based authentication services and also integrates an internal two-factor token server for additional security.

# Proven with Industry Validation

FortiGate received the most industry's certifications among its competitions, assuring top-notch feature quality to provide you with air tight security and best-of-breed security protection.

# Powerful Policy Management

It is common in service provider and data center networks to have hundreds, if not thousands of security policies, hence to be able to manage these policies effectively is critical to minimize configuration errors and complexity.

FortiOS has the unique ability to provide two forms of policy management views — Global and Section view helps administrators to choose an option that they are most familiar with or suit their requirements best. It also provides powerful features such as policy object search, tagging, sorting and filtering. Policy objects can easily be edited from the policy table.

With FortiManager integration, customers may also have the ability to setup sophisticated policy implementation and provisioning workflows for compliance or operation requirements. Detailed configuration audit trail is supported and can reside externally for secured storage with FortiAnalyzer.

# **Extensive Network Support**

FortiOS supports numerous network design requirements and interops with other networking devices. This includes support for a wealth of routing, multicasting and network resiliency protocols. Administrators can also configure interfaces for VLANs, VLAN trunks, port aggregation and one-arm sniffer mode.

#### **Broad IPv6 Support**

Maintaining security for both IPv4 and IPv6 traffic will be crucial to the success of mixed networks. Malware and network threats are independent of IPv4 or IPv6. FortiOS is able to use IPv6 security policies to provide access control and UTM protection for IPv6 traffic.

FortiOS has been successfully evaluated as compliant with core protocol and interoperability tests defined by IPv6 Ready Logo Phase 2.

#### More Features with FortiCarrier Software License

- SIP/IMS signaling firewall protects internal infrastructure and service against malicious messages and overload while providing NAT services and redundancy, providing VoIP edge scalability and a platform for managed security services
- MMS security content scanning and protection (keyword blocking, antivirus, file-type blocking, antispam detection) with per-user services provide enhanced end-user security for increased uptime and higher customer satisfaction
- GTP firewall delivers protocol anomaly detection and prevention with multiple filter options for end-toend security

<sup>\*</sup> For complete, up-to-date and detailed feature set, please refer to the Administration Handbook and FortiOS Datasheet.

# **SOFTWARE FEATURES**

#### More Features with FortiCarrier Software License

- SIP/IMS signaling firewall protects internal infrastructure and service against malicious messages and overload while providing NAT services and redundancy, providing VoIP edge scalability and a platform for managed security services
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- GTP firewall delivers protocol anomaly detection and prevention with multiple filter options for end-toend security

# ORDER INFORMATION

Product	SKU	Description		
Chassis				
FortiGate 5020 Chassis	FG-5020AC	4U 2-slot chassis, 1 fan unit, front air baffles, dual AC power supplies		
FortiGate 5020 Power Supply	FG-5020PS	FortiGate 5020/5050 power supply		
FortiGate 5020 Fan Tray	FG-5020FA	Fan tray for FG-5020 chassis		
FortiGate 5060 Chassis	FG-5060-DC	5U 6-slot chassis with Dual Star fabric backplane, 2 PEMs, 2 fan units, 2 shelf FRU data modules, 1 shelf manager, front and RTM air baffles, and 2 pairs DC cables for connecting to FG-5053B power shelves		
FortiGate 5060 Fan Tray	FG-5060FA	Fan tray for FG-5060 chassis		
FortiGate 5060 Shelf Manager	FG-5060SM	Shelf manager for FG-5060 chassis		
FortiGate 5060 Shelf Alarm Panel	FG-5060SAP	Shelf alarm panel for FG-5060 chassis		
FortiGate 5140B Chassis	FG-5140B-DC	13U 14-slot chassis with 40G Dual Star fabric backplane, 2 PEMs, 4 fan units, 2 shelf FRU data modules, 1 shelf manager, front and RTM air baffles, and 2 pairs DC cables for connecting to FG-5053B power shelves		
FortiGate 5140B Fan Tray	FG-5140B-FAN	FG-5140B fan unit		
FortiGate 5140B Shelf Manager	FG-5140B-SM	FG-5140B shelf manager with mezzanine card		
FortiGate 5140B Shelf Alarm Manager	FG-5140B-SAM	Shelf alarm manager for FG-5140B		
FortiGate 5144C Chassis	FG-5144C-DC	14U 14-slot chassis with 40G Dual Dual Star fabric backplane, 4 PEMs, 4 fan units, 2 shelf FRU data modules, 1 shelf manager, front and RTM air baffles, and 4 pairs DC cables for connecting to FG-5053B power shelves		
FortiGate 5144C Shelf Manager	FG-5144C-SM	5144C shelf manager with ShMM-700R mezzanine card and radial IPMB bus		
FortiGate 5144C Fan Tray	FG-5144C-FAN-F	FG-5144C fan tray front		
FortiGate 5144C Fan Tray	FG-5144C-FAN-R	FG-5144C fan tray rear		
FortiGate 5144C Shelf FRU Data Module	FG-5144C-SFRU	FG-5144C shelf FRU data module		
FortiGate 5144C Power Entry Module	FG-5144C-PEM	FG-5144C PEM, power entry module		
FortiGate 5144C Air Filter	FG-5144C-AF	FG-5144C air filter		
FortiGate 5144C Blank Panel	FG-5144C-ABF	5000 front slot blank panel with air baffle (aluminum/plastic)		
FortiGate 5144C Blank Panel	FG-5144C-ABR	5000 RTM slot blank panel with air baffle (aluminum/plastic)		
FortiGate 5053B Power Converter Tray	FG-5053B	AC power converter shelf for high capacity 5000 chassis, supports up to 4 PSU-5000B power supply units, unpopulated		
FortiGate 5000 Series Power Supply Unit	PSU-5000B	Power supply unit for FG-5000 series, AC power supply unit, 1,200 Watts maximum, requires FortiGate 5053B shelf		
Security Blades				
FortiGate 5001B	FG-5001B	Security blade with 8x 10 GE SFP+ slots, 2x GE RJ45 management ports, 64 GB SSD onboard storage		
FortiGate 5001C	FG-5001C	Security blade with 2x 10 GE SFP+ slots, 2x GE RJ45 management ports, 128 GB SSD onboard storage		
FortiGate 5101C	FG-5101C	Security blade with 4x 10 GE SFP+ slots, 2x GE RJ45 ports, 64 GB SSD onboard storage		
FortiGate 5001D	FG-5001D	Security blade with 2x 40 GE QSFP+, 2x 10 GE SFP+/GE SFP slots; 2x GE RJ45 management ports, 200 GB SSD onboard storage		
FortiSwitch 5203B	FS-5203B	Networking blade with 8x 10 GE SFP+ fabric slots, 2x 10 GE SFP+ base slots, 1x GE RJ45 management port		
FortiController 5902D	FCTRL-5902D	Security blade with 4x 40 G QSFP+ fabric ports and 2x SFP+ base ports		
Networking Blades				
FortiSwitch 5003B	FS-5003B	Networking blade with 8x 10 GE SFP+ fabric ports, 2x GE SFP base slots, 1x GE RJ45 management port		
FortiSwitch 5203B	FS-5203B	Networking blade with 8x 10 GE SFP+ fabric slots, 2x 10 GE SFP+ base slots, 1x GE RJ45 management port		
FortiController 5103B	FCTRL-5103B	Networking blade with 1x GE RJ45 port, 8x 10 GE SFP+ fabric ports and 2x 10 GE SFP+ base ports		
FortiController 5902D	FCTRL-5902D	Networking blade with 4x 40 G QSFP+ fabric ports and 2x SFP+ base ports		
FortiController 5903C	FCTRL-5903C	Networking blade with 1x GE RJ45 port, 4x 40 GE SFP+ fabric slots and 2x 10 GE SFP+ base slots		
FortiController 5913C	FCTRL-5913C	Networking blade with 2x 100 GE CFP2 fabric ports and 2x 10 GE SFP+ base ports, includes 2 SR SFP+		

<sup>\*</sup> For complete, up-to-date and detailed feature set, please refer to the Administration Handbook and FortiOS Datasheet.

# **ORDER INFORMATION**

Optional Accessories		
1 GE SFP LX Transceiver Module	FG-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots
1 GE SFP RJ45 Transceiver Module	FG-TRAN-GC	1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+ slots
1 GE SFP SX Transceiver Module	FG-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots
10 GE SFP+ Transceiver Module, Short Range	FG-TRAN-SFP+SR	10 GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots
10 GE XFP Transceiver Module, Short Range	FG-TRAN-XFPSR	10 GE XFP transceiver module, short range for all systems with XFP slots
10 GE SFP+ Transceiver Module, Long Range	FG-TRAN-SFP+LR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots
10 GE XFP Transceiver Module, Long Range	FG-TRAN-XFPLR	10 GE XFP transceiver module, long range for all systems with XFP slots
40 GE QSFP+ Transceivers, Short Range	FG-TRAN-QSFP+SR	40 GE QSFP+ transceivers, short range for all systems with QSFP+ slots
100 GE CFP2 Transceivers, Long Range	FG-TRAN-CFP2-LR4	100 GE CFP2 transceivers, long range, over single mode fiber, for all systems with CFP2 slots
100 GE CFP2 Transceivers, Short Range	FG-TRAN-CFP2-SR10	100 GE CFP2 transceivers, 10 channel parallel fiber, short range for all systems with CFP2 slots
10 GE SFP+ Active Direct Attach Cable	SP-CABLE-ADASFP+	10 GE SFP+ active direct attach cable, 10m / 32.8 ft for all systems with SFP+ and SFP/SFP+ slots



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