# FORTINET®

# 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.

### *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.

## 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. |

**ICSA**labs CERTIFIED FIREWALL-CORPORATE

**ICSA**labs CERTIFIED IPSEC-BASIC

**ICSA**labs CERTIFIED ANTI-VIRUS

**ICSA**labs CERTIFIED NETWORK IPS

**FortiCare**
Worldwide 24x7 Support
support.fortinet.com

**FortiGuard**
Threat Research & Response
www.fortiguard.com

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# ARCHITECTURE

## Chassis

The chassis enables the flexible system to scale effortlessly and with little disruptions by allowing hot swapped blades to be added 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 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 virtual systems (VDOMs) within the cluster.

## Networking Blades

Up to two networking blades may be installed on a FortiGate 5060, FortiGate 5140B and FortiGate 5144C on 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.
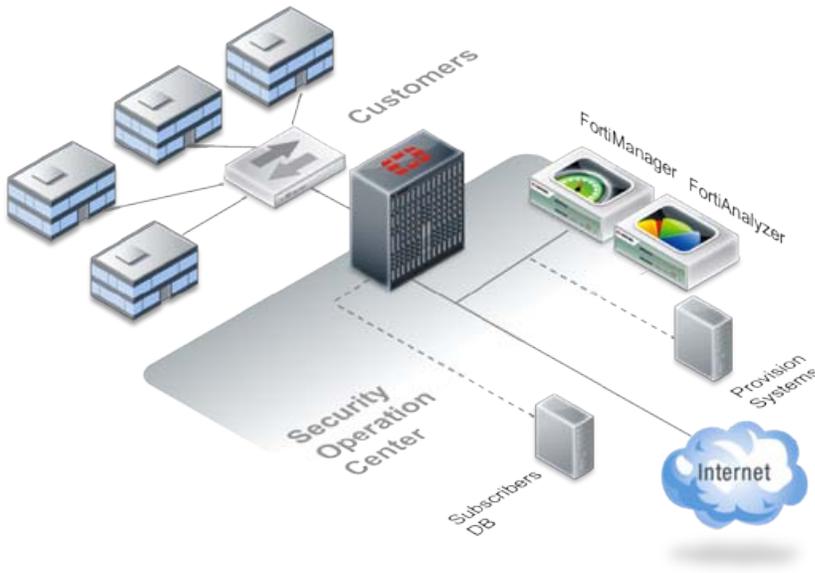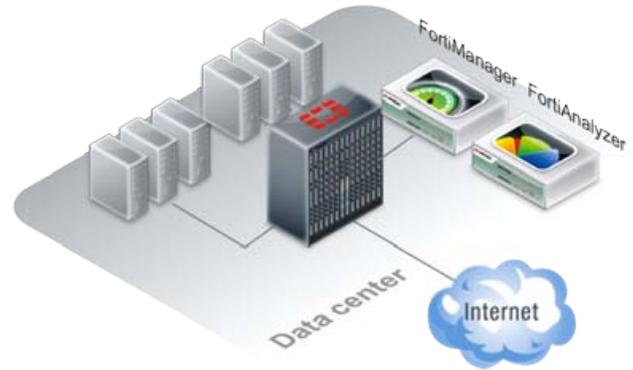
## MSSP Core Security

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 Virtual Domains (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.
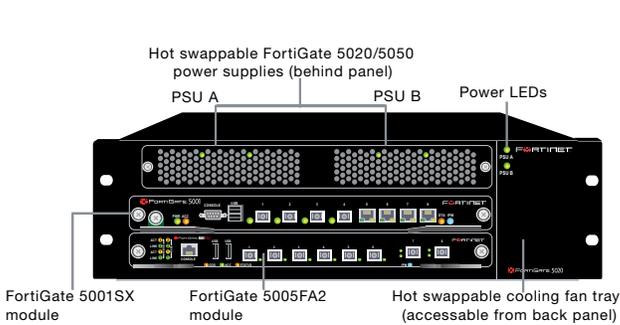
## Carrier-Graded Security

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.
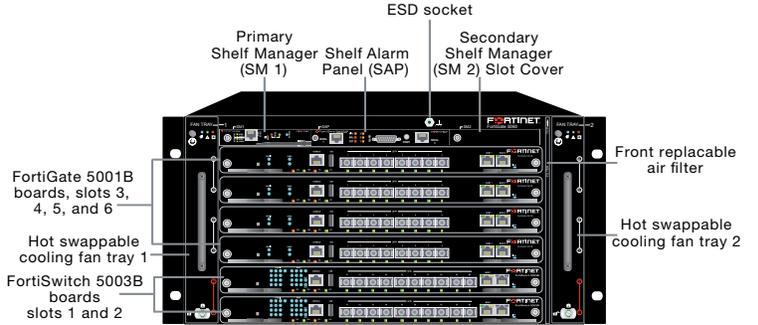
3
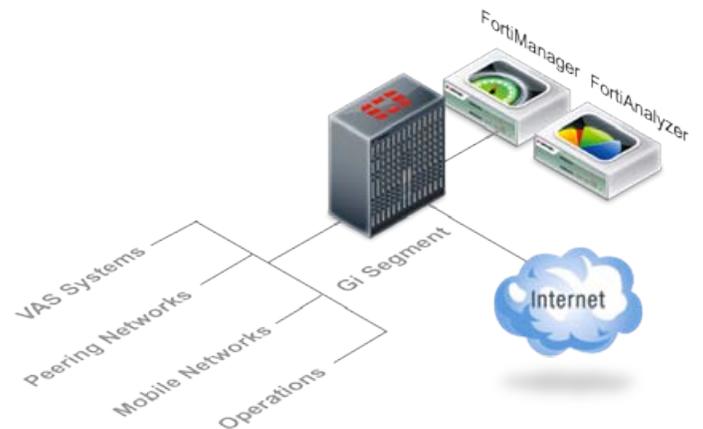
# CHASSIS

## FortiGate 5020

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



Hot swappable FortiGate 5020/5050 power supplies (behind panel)

PSU A    PSU B    Power LEDs

FortiGate 5001SX module    FortiGate 5005FA2 module    Hot swappable cooling fan tray (accessable from back panel)
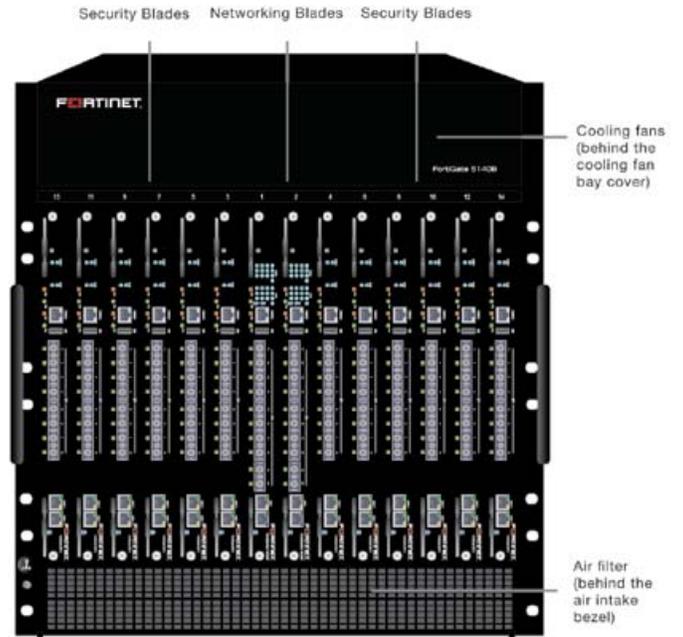
## FortiGate 5060

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.



ESD socket

Primary Shelf Manager (SM 1)    Shelf Alarm Panel (SAP)    Secondary Shelf Manager (SM 2) Slot Cover

FortiGate 5001B boards, slots 3, 4, 5, and 6

Hot swappable cooling fan tray 1

FortiSwitch 5003B boards slots 1 and 2

Front replacable air filter

Hot swappable cooling fan tray 2

## 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.



Security Blades    Networking Blades    Security Blades

Cooling fans (behind the cooling fan bay cover)

Air filter (behind the air intake bezel)

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## *AdvancedTCA™ (ATCA)-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.**
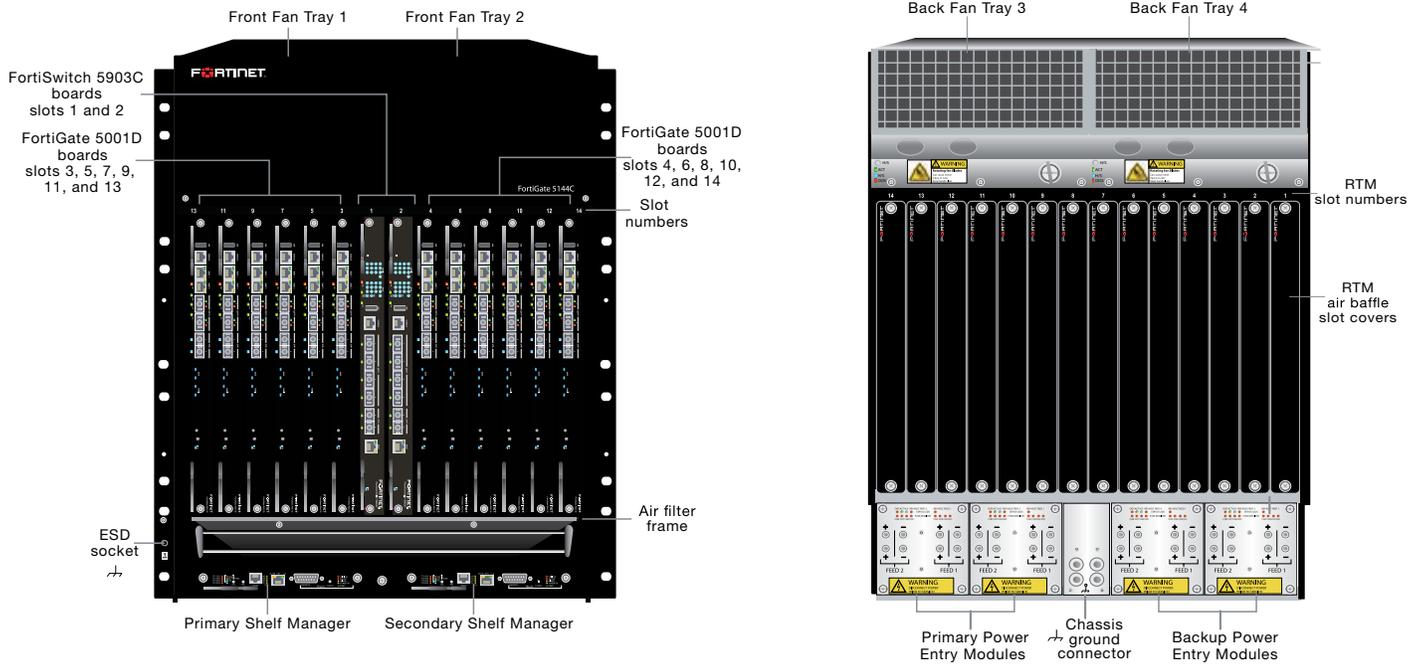
    *  Available options depending on chassis models
    ** Available on 5060 and 5140B

# CHASSIS

## FortiGate 5144C

Next Generation 13U 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 |
| Weight | 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[1] | DC/AC[1] | DC/AC[1] |
| Chassis Only Power Consumption (Maximum) *** | – | 350 W | 530 W | 960 W |
| Heat Dissipation (Maximum) *** | – | 1194 BTU/h | 1808 BTU/h | 3,276 BTU/h |
| Operating 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 | -13–158°F (-35–70°C) | 23–131°F (-5–55°C) | -13–158°F (-35–70°C) | -13–158°F (-35–70°C) |
| Humidity | 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 | | |

[1] Optional FortiGate 5053B Power Supply Shelf used to provide AC power to the FortiGate
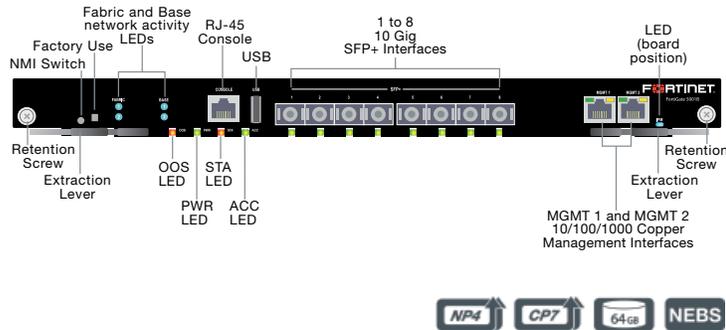
** Based on fully populated FortiGate 5001D

*** Please refer to respective Chassis Guide for computation of total power requirement.
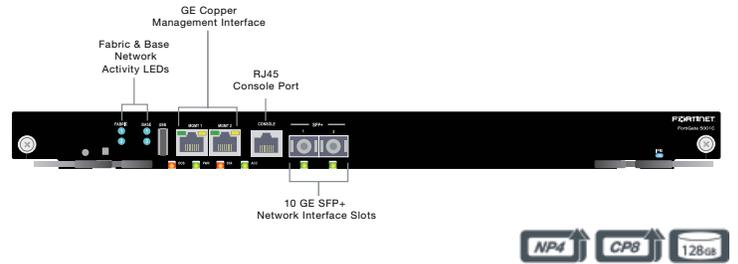
# SECURITY BLADE

## FortiGate 5001B

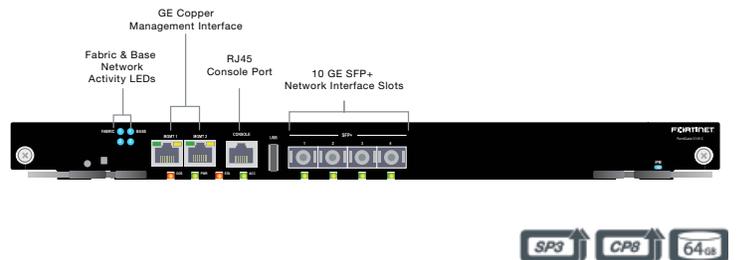Security blade ideal for basic firewalling using NP4.



## 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.



### Powered by FortiASIC

- FortiGate® consolidated security appliances are purpose-built 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
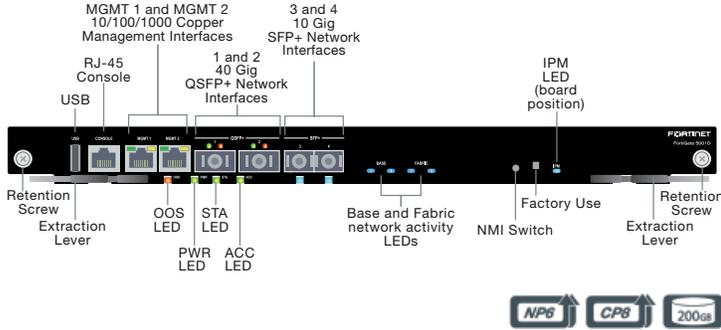- Up to 10 million sessions of searching and dynamic network address translation (DNAT)

## Security Processor

- Offload CPU for firewall, VPN and flow-based UTM processing
- Accelerates IPv6 Firewalling
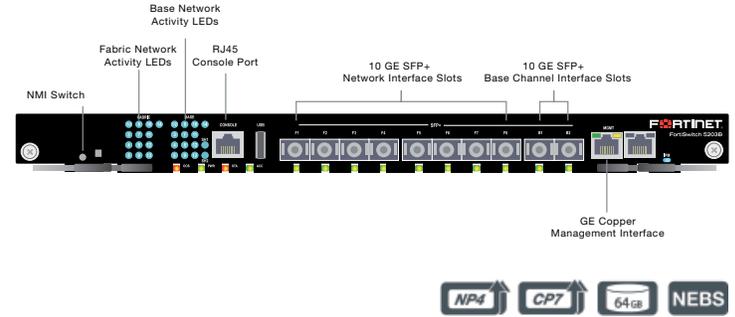
# SECURITY BLADE

## FortiGate 5001D

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

## 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* |
|---|---|---|---|---|---|
| **Interfaces and Storage** | | | | | |
| 40 GE QSFP+ Ports | – | – | – | 2 | – |
| 10 GE SFP+ Ports | 8 | 2 | 4 | 2 | 10 |
| GE RJ45 Ports | 2 | 2 | 2 | 2 | 1 |
| RJ45 Console Port | 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 |
| Local Storage | 64 GB | 128 GB | 64 GB | 200 GB | 64 GB |
| **Syetem 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 |
| Firewall Latency (64 byte UDP packets) | 4 μs | 4 μs | 7 μs | 3 μs | 4 μs |
| Firewall Throughput (Packets Per Second) | 60 Mpps | 60 Mpps | 15 Mpps | 67.5 Mbpps | 60 Mpps |
| Concurrent Sessions (TCP) | 20 Mil | 29.5 Mil | 10 Mil | 23 Mil | 20 Mil |
| New Sessions/Sec (TCP) | 170,000 | 210,000 | 235,000 | 565,000 | 170,000 |
| Maximum Firewall Policies | 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 |
| Gateway-to-Gateway IPsec VPN Tunnels | 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 |
| SSL-VPN Throughput | 1.3 Gbps | 3.6 Gbps | 1.3 Gbps | 6.5 Gbps | 1.3 Gbps |
| Concurrent SSL-VPN Users (Recommended Maximum) | 20,000 | 20,000 | 25,000 | 25,000 | 20,000 |
| IPS Throughput | 7.8 Gbps | 12 Gbps | 9.4 Gbps | 18 Gbps | 7.8 Gbps |
| Antivirus Throughput (Proxy Based / Flow Based) | 2 / 2.5 Gbps | 3 / 4 Gbps | 2 / 5 Gbps | 5.6 / 13 Gbps | 2 / 2.5 Gbps |
| Virtual Domains (Default / Maximum) | 10 / 500 | 10 / 500 | 10 / 500 | 10 / 500 | 10 / 500 |
| Maximum Number of FortiTokens | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Maximum Number of FortiAPs | 1,024 | 1,024 | 1,024 | 1,024 | 1,024 |
| **Power and Environment** | | | | | |
| Power Consumption (Average / Maximum) | 194 / 233 W | 187 / 225 W | 197 / 236 W | 189 / 226 W | 210 / 250W |
| Heat Dissipation (Average) | 795 BTU/h | 768 BTU/h | 805 BTU/h | 774 BTU/h | 853 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) |
| 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) |
| Humidity | 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-Tick, VCCI, CE, UL/cUL, CB, ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN | | | |
| NEBS Certified | Yes | – | – | – | Yes |

\* 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.
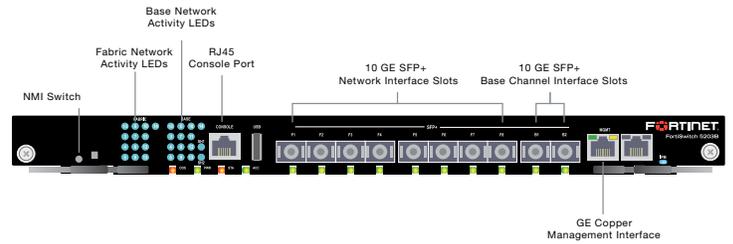
# NETWORKING BLADE

## FortiSwitch 5003B

Basic L2 switching blade for aggregating security blades within a chassis.
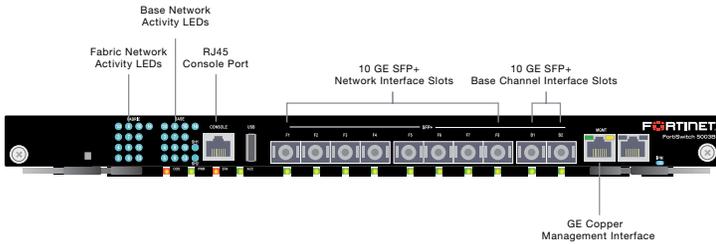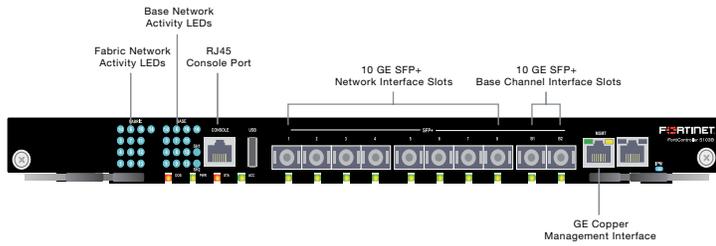
## FortiSwitch 5203B

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.

|  | FortiSwitch 5003B | FortiSwitch 5203B* | FortiController 5103B |
|---|---|---|---|
| **Interfaces** | | | |
| Fabric Channel Interfaces | 8x 10 GE SFP+ | 8x 10 GE SFP+ | 8x 10 GE SFP+ |
| Base Channel Interfaces | 2x 10 GE SFP+ | 2x 10 GE SFP+ | 2x 10 GE SFP+ |
| Management Interfaces | 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 |
| 40 GE Backplane Fabric Support | – | – | – |
| 10 GE Backplane Fabric Support | Yes | Yes | Yes |
| GE Backplane Fabric Support | Yes | Yes | Yes |
| **System Performance** | | | |
| Max Traffic Throughput | 80 Gbps | 80 Gbps | 60 Gbps |
| Max Concurrent Sessions | – | 20 Mil | 110 Million |
| New Sessions/Sec (TCP) | – | 170,000 | 1.26 Million |
| **Power and Environment** | | | |
| Power Consumption (Average / Maximum) | 150 / 180 W | 210 / 250 W | 213 / 255 W |
| Heat Dissipation | 614 BTU/h | 853 BTU/h | 754 BTU/h |
| Operating Temperature | 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) |
| Humidity | 20–90% non-condensing | 20–90% non-condensing | 20–90% non-condensing |
| **Compliance** | | | |
| Certifications | FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cUL, CB | | |

* Operating in Distribution Mode

# CLUSTERING OPTIONS

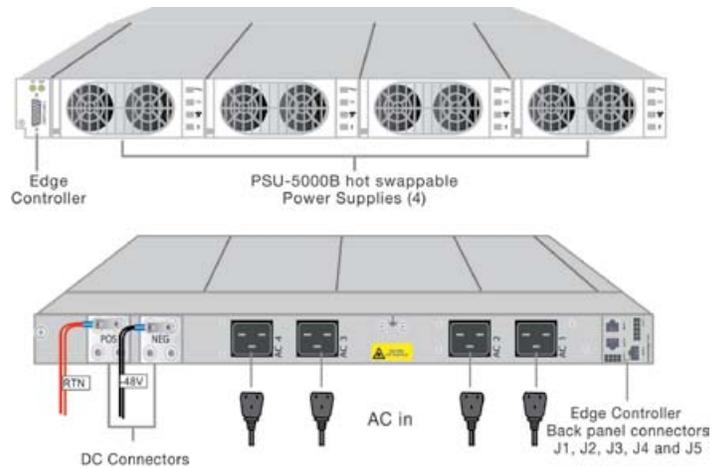## FortiGate 5000 Series Clustering

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, IPS, and so on. 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 Clustering (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 | FCTL-5103B |
| **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
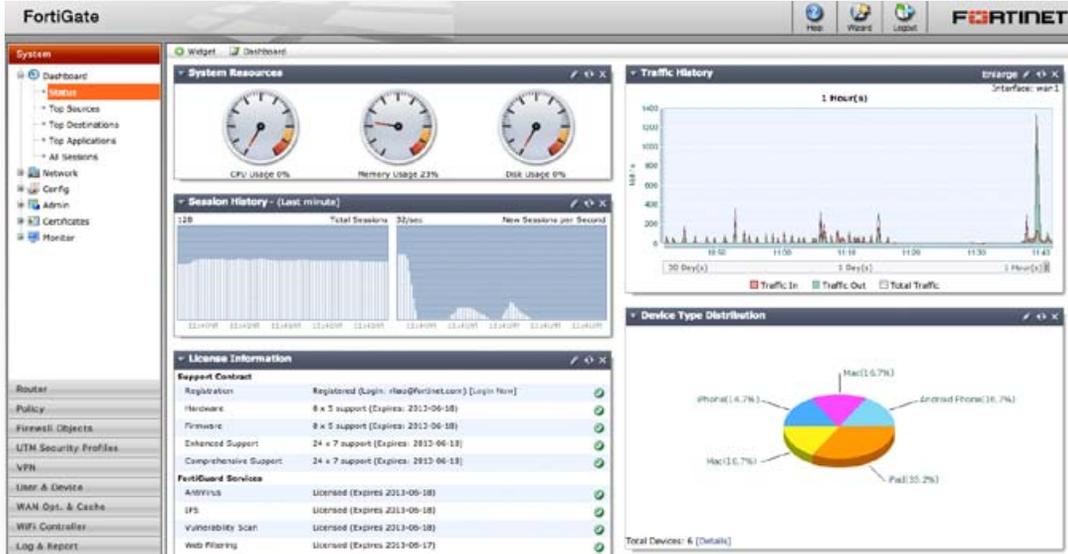


FortiOS Dashboard — Single Pane of Glass Management

## 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.

## 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.

## 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.

## Robust Virtual Systems

FortiOS Virtual Domains (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.

## 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 trucks, port aggregation and one-arm sniffer mode.

# SOFTWARE FEATURES

## 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.

## 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.

## 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.

## 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.

## 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.

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## *More Features with FortiCarrier Software License*

- MMS Security — MMS AV, bulk Email detection and filtering, MMS Address Translation, DLP archiving

- GTP Security — GTP Firewall, protocol anomaly protection, identity filtering, anti-overbilling

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

# ORDER INFORMATION

| Product | SKU | Description |
|---|---|---|
| **Chassis** | | |
| FortiGate 5020 Chassis | FG-5020AC | 2-slot chassis with fan and 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 | 6-slot chassis with fan trays, power entry modules, shelf alarm panel and 1 shelf manager |
| 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 | 14-slot chassis with fan, 1 shelf manager card, no AC power supply included (DC powered) |
| 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 40 G Dual-Dual-Star fabric backplane and radial IPMB buses, 4 PEMs, 4 fan units, 2 shelf FRU data modules, 1 shelf manager, 13 front and 14 RTM air baffles, and 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 FG5000 series, AC power supply unit, 1,200 Watts max, 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 |
| **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 ports, 8x 10 GE SFP+ Fabric ports and 2x 10 GE SFP+ Base ports |
| **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 |
| 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 |

**FORTINET.**

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