

FortiGate® 1500D

High Performance Next Generation/ Edge Firewall for the Enterprise



Every day you're on the lookout for sophisticated attacks designed to penetrate your organization and steal valuable information. At the same time, you need to increase network speeds and capacities to accommodate the proliferation of consumer-grade applications and devices. To adequately defend against threats across such a broad range of applications and devices — without slowing down your network — you need a high performance next generation/edge firewall (NGFW) appliance for deep inspection, visibility and control.

Breakthrough Performance

The FortiGate 1500D high performance next generation/edge firewall delivers best-in-class performance with an exceptional 80 Gbps of firewall and 11 Gbps of next generation threat protection. Custom hardware, including the latest FortiASIC™ NP6 processors, and the consolidated security features of the FortiOS™ 5 network security platform make the difference in enabling protection of your applications and network without affecting availability or performance.

Deeper Visibility

With powerful intrusion prevention, application control and antimalware intelligence, the FortiGate 1500D allows you to look deeper into your content, applications, user and device behavior. Rich console views and reports together with a flexible policy engine provide the visibility and control you need to empower employees yet secure your enterprise.

Key Features & Benefits

Next Generation Threat Protection	Intrusion prevention, application control and antimalware provide superior visibility and protection over traditional firewalls.
High Performance Next Generation Firewall	Up to 11 Gbps IPS performance for today's demanding networks.
Custom FortiASIC NP6 Processors	The latest in purpose-built processors enable best-in-class performance and superior cost per gigabit protected.
High Speed, High Density Ports	8x 10 GE and 16x GE ports support evolving network requirements and avoid security bottlenecks.
Actionable Console and Reporting	Provides administrators and executives the visibility they need to define and enforce appropriate policies.

Next Generation Visibility and Control

- Powerful application and threat inspection
- Breakthrough performance, and superior cost per gigabit protected
- User- and device-based views and policies
- Freedom to add more functions like Advanced Threat Protection and Secure Web Gateway
- FortiOS 5, the most complete, battle-tested set of security functions to protect your network and data



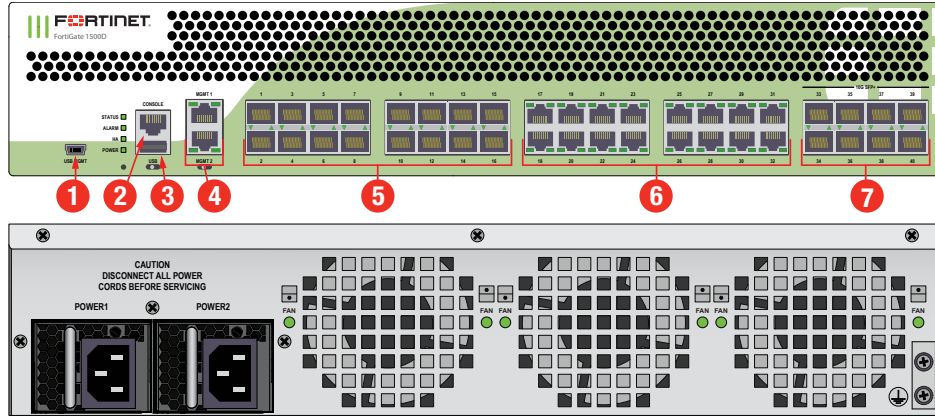
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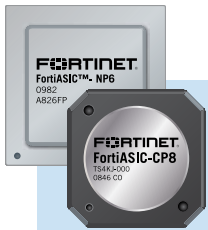
HARDWARE

FortiGate 1500D



Interfaces

1. USB Management Port
2. Console Port
3. USB Port
4. 2x GE RJ45 Management Ports
5. 16x GE SFP Slots
6. 16x GE RJ45 Ports
7. 8x 10 GE SFP+ Slots



Powered by
FortiASICs

- Custom FortiASIC™ processors deliver the power you need to detect malicious content at multi-Gigabit speeds
- Other security technologies cannot protect against today's wide range of content- and connection-based threats because they rely on general-purpose CPUs, causing a dangerous performance gap
- FortiASIC processors provide the performance needed to block emerging threats, meet rigorous third-party certifications, and ensure that your network security solution does not become a network bottleneck

Network Processor

Fortinet's new, breakthrough FortiASIC NP6 network processor works inline with FortiOS functions delivering:

- Superior firewall performance for IPv4/IPv6, SCTP and multicast traffic with ultra-low latency down to 3 microseconds
- VPN, CAPWAP and IP tunnel acceleration
- Anomaly-based intrusion prevention, checksum offload and packet defragmentation
- Traffic shaping and priority queuing

Content Processor

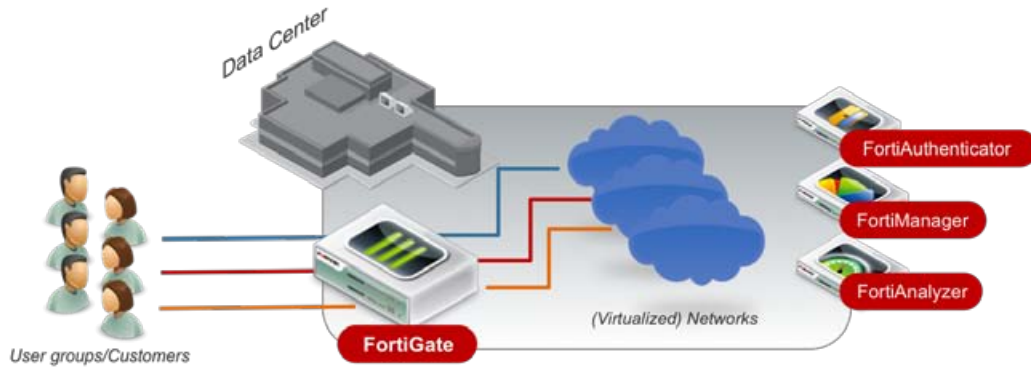
The FortiASIC CP8 content processor works outside of the direct flow of traffic, providing high speed cryptography and content inspection services including:

- Signature-based content inspection acceleration
- Encryption and decryption offloading

10 GE Connectivity for Core Infrastructure

High speed connectivity is essential for network security segmentation at the core of data networks. The FortiGate 1500D provides high 10 GE port densities, simplifying network designs without relying on additional devices to bridge desired connectivity.

DEPLOYMENT



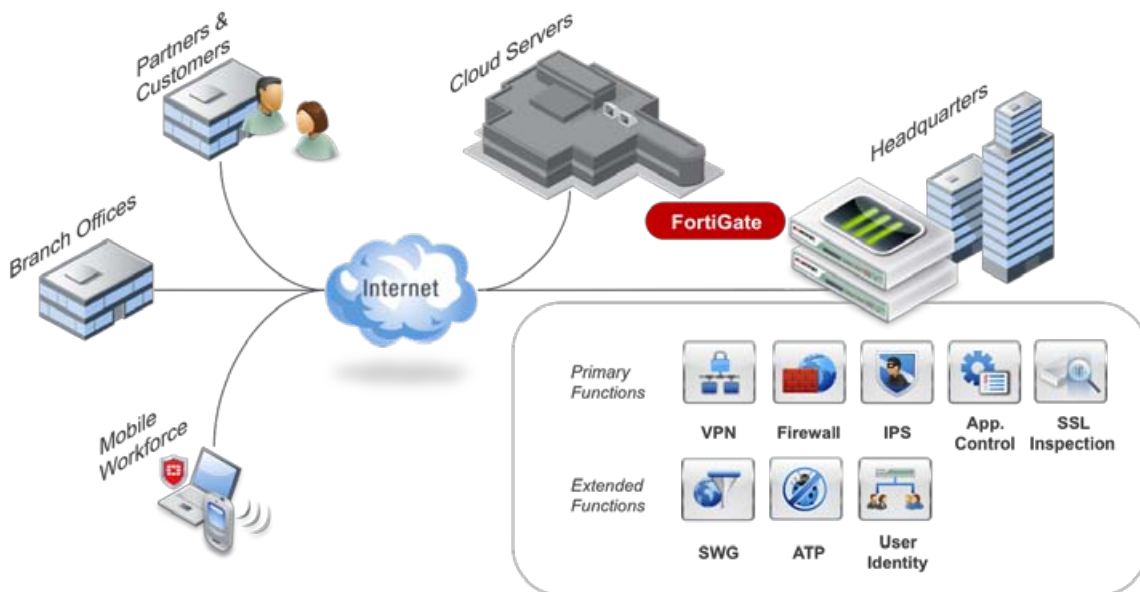
FortiGate deployed as data center core firewall

Data Center Core Firewall

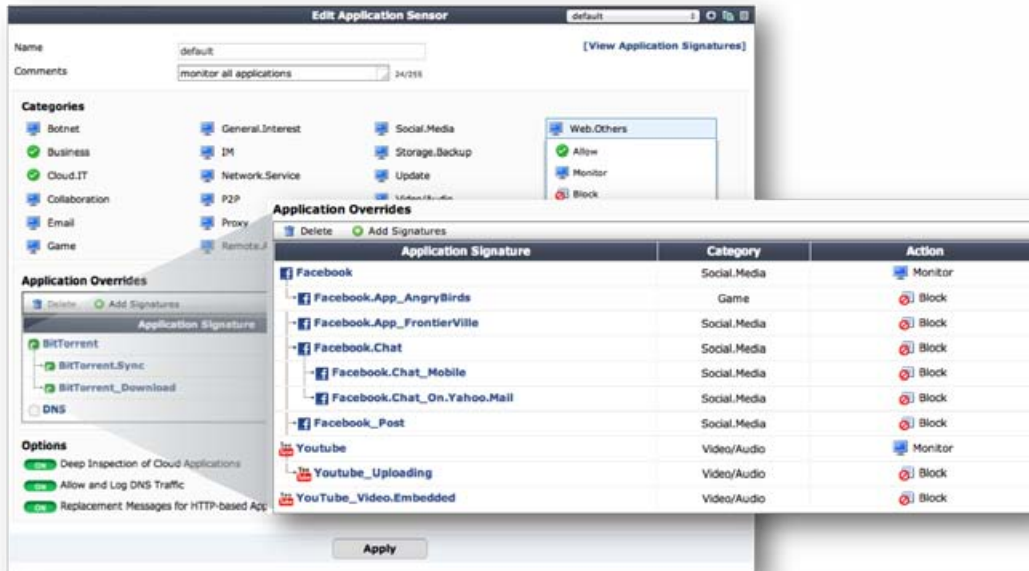
Organizations deploying the NP (Network Processor) 6 powered FortiGate 1000 Series firewalls at their data center will enjoy superior protection and performance with industry-leading, high capacity firewall technologies that deliver exceptional throughput and ultra-low latency, enabling the security, flexibility, scalability and manageability expected on a core platform. These firewalls come with numerous high speed 40 GE and 10 GE interfaces which are ideal for segmenting network physically. Running on the latest FortiOS, these platform are virtualization and cloud-ready. They support next generation data center architectures, multi-tenant requirements, provide APIs for rapid orchestration and easy integration with third-party ecosystems.

Mid-Enterprise Edge Firewall

Fortinet's FortiGate 1000 Series firewalls are perfect for growing large enterprises with their agile and high performance network security capabilities. These FortiGates not only deliver protection exceeding expectations, they are suitable for consolidating other security components. This allows organizations to significantly reduce TCOs and simplifies the network. Unlike other NGFWs (Next Generation Firewalls), the FortiGates are powered by FortiASICs which provide security without compromises performance. They run on the World's most advanced security operating systems that meet each organizations unique requirements. Advanced features such as integrated endpoint control and token server help organizations to rapidly deploy enhanced security to their mobile workforce while device-based policies aid to implement BYOD securely.



FortiGate deployed as mid-enterprise edge firewall



Powerful application control with granular settings

Proven with Industry Validation

Third-party industry certifications, as well as real-world effectiveness and performance tests assure quality and providing you best-of-breed protection.

Ease of Use

FortiOS lowers operational costs and reduces IT staff workload. Single pane of glass management and centralized analysis ensure consistent policy creation and enforcement while minimizing deployment and configuration challenges.

In-depth Visibility and Reporting

Through FortiView, a collection of flexible widget-based views with drill-down capabilities, FortiOS allows administrators to quickly visualize and understand recent network activities and threat situations.

Detailed logs offer deep insights to sessions that passed through the FortiGate while comprehensive reports help organizations to trend network usage accurately.

Powerful Policy Management

Two types of policy management views — global and section view — are available to suit your preferences. Policy objects can easily be edited, duplicated or moved from the policy table. Robust management features include policy object search, tagging, sorting and filtering.

With FortiManager integration, you have the ability to set up sophisticated policy implementation and provisioning workflows to meet compliance or operational requirements. The FortiManager also offers a logging and reporting module that simplifies and reduces TCO.

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 can simplify identity-based implementations and provide a seamless user authorization experience with single sign-on capabilities. FortiOS has strong PKI and certificate-based authentication services while also integrating an internal two-factor authentication server for additional security.

To tackle security for today's prevalent use of personal devices, FortiOS offers state-of-the-art device identification capabilities that empower organizations to set up more intelligent security policies.

Granular Application Control

Advanced application control with ability to control discrete functions lets you define and enforce policies for thousands of applications running across networks regardless of port or the protocol used for communication.

Highly Effective IPS

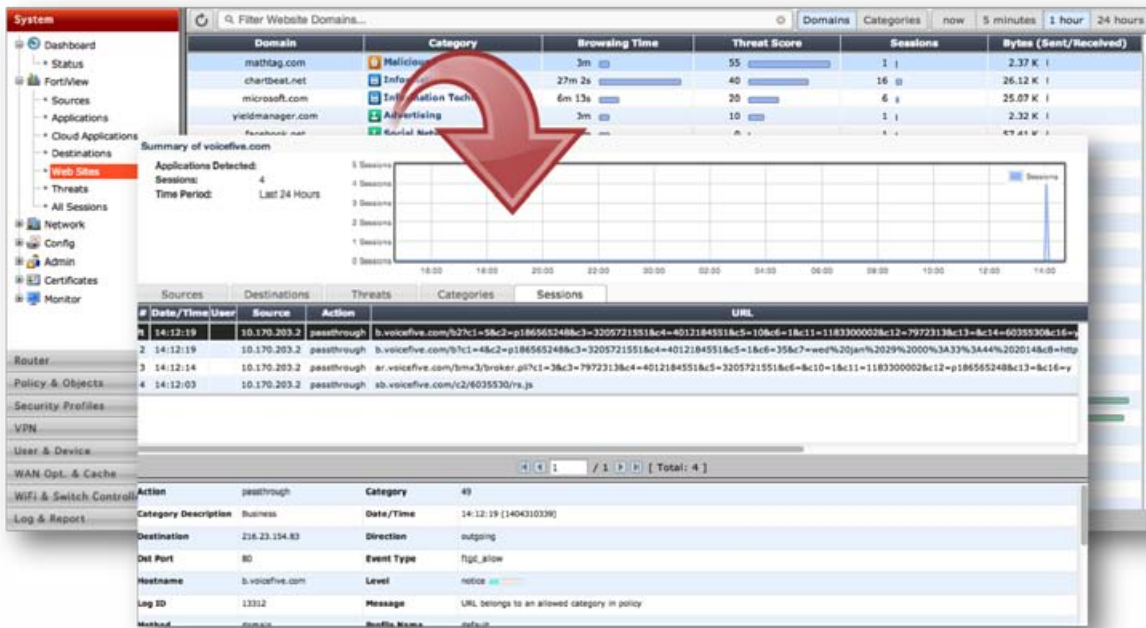
Over 8,000 IPS signatures enable you to stop attacks that have evaded most conventional firewalls. Additionally, FortiOS also offers behavior-based heuristics settings that recognize zero-day threats for which no signature has been created.

FEATURES

Beyond Next Generation Firewall Capabilities

Our Secure Web Gateway capabilities allow you to prevent end users from unknowingly visiting malicious sites, shield them from inappropriate material out on the Internet, and maintain a safe and productive work environment. Real-time dashboards provide administrators visibility into end user activity while rich reporting keeps executives up to date. An advanced policy engine gives you the tools you need — such as time-based quotas, user overrides and more — to implement balanced policies.

Recognizing that despite all of the latest security controls, targeted threats may still slip through, organizations have the opportunity to add an additional layer of inspection, focused on advanced threat detection in complement to established threat prevention. Often referred to as “sandboxing” or breach detection, Fortinet offers on-premise and cloud-based options to extend your next generation firewall.



FortiView — real-time query widget with drill-down panels

FortiGuard Security Services and FortiCare Support

- **Cutting Edge Security Expertise**

Our team of over 200 security researchers, vast data collection and state-of-the-art analysis systems across the globe examining the latest cyber-criminal activities and techniques to deliver real-time protection for your organization. With high marks attained by third-party evaluations, customers are assured of quality and credible security updates against the evolving sophisticated or targeted threats.

- **World-Class Support**

It is critical to keep your network running properly and be able to resolve issues quickly. Our large team of knowledgeable and responsive technical support engineers, together with comprehensive self-help resources are always ready to assist you in time of critical needs. In addition, Fortinet also offers a variety of support offerings that cater to your organization and project requirements.

SPECIFICATIONS

FORTIGATE 1500D	
Interfaces & Modules	
Hardware Accelerated 10 GE / GE SFP+ Slots	8
Hardware Accelerated GE SFP Slots	16
Hardware Accelerated GE RJ45 Ports	16
GE RJ45 Management / HA Ports	2
USB Ports (Client / Server)	1 / 1
Console Port	1
Onboard Storage	240 GB
Included Transceivers	2x SFP+ (SR 10GE)
System Performance & Capacity	
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	80 / 80 / 55 Gbps
IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP)	80 / 80 / 55 Gbps
Firewall Latency (64 byte, UDP)	3 µs
Firewall Throughput (Packet per Second)	82.5 Mpps
Concurrent Sessions (TCP)	12 Mil
New Sessions/Sec. (TCP)	250,000
Firewall Policies	100,000
IPsec VPN Throughput (512 byte)	50 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	20,000
Client-to-Gateway IPsec VPN Tunnels	50,000
SSL-VPN Throughput	4 Gbps
Concurrent SSL-VPN Users (Recommended Maximum)	10,000
IPS Throughput	11 Gbps
Antivirus Throughput (Proxy Based / Flow Based)	4.3 / 13 Gbps
CAPWAP Clear-text Throughput (HTTP)	12.30 Gbps
Virtual Domains (Default / Maximum)	10 / 250
Maximum Number of FortiAPs (Total / Tunnel)	4,096 / 1,024
Maximum Number of FortiTokens	5,000
Maximum Number of Registered Endpoints	8,000
High Availability Configurations	Active-Active, Active-Passive, Clustering

FORTIGATE 1500D	
Dimensions & Power	
Height x Width x Length (inches)	3.5 x 17.24 x 21.81
Height x Width x Length (mm)	89 x 438 x 554
Weight	32.5 lbs (14.7 kg)
Form Factor	Rack Mount, 2 RU
AC Power Supply	100-240V AC, 47-63 Hz
Power Consumption (Average / Maximum)	338 / 406 W
Current (Max)	110V / 8A, 220V / 4A
Heat Dissipation	1,385 BTU/h
Redundant Power Supplies	Yes, Hot swappable
Operating Environment & Certifications	
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-31–158°F (-35–70°C)
Humidity	20–90% non-condensing
Operating Altitude	Up to 7,400 ft (2,250 m)
Compliance	FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cUL, CB
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN

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. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1.

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

ORDER INFORMATION

Product	SKU	Description
FortiGate 1500D	FG-1500D	8x 10 GE SFP+ slots, 16x GE SFP slots, 18x GE RJ45 ports (including 16x FortiASIC-accelerated ports, 2x management/HA ports), 240 GB SSD onboard storage.
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, long range for all systems with SFP+ and SFP/SFP+ 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 SFP+ active direct attach cable, 10m / 32.8 ft	SP-CABLE-ADASFP+	10 GE SFP+ active direct attach cable, 10m / 32.8 ft for all systems with SFP+ and SFP/SFP+ slots.
Rack mount sliding rails	SP-FG3040B-RAIL	Rack mount sliding rails for FG-1000C/-DC, FG-1500D, FG-3040B/-DC, FG-3140B/-DC, FG-3240C/-DC, 3700D and 3950B/-DC.
AC power supply	SP-FG1240B-PS	AC power supply for FG-1240B, FG-1500D, FG-3040B and FG-3140B.



GLOBAL HEADQUARTERS

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