



FortiGate® 1000D

High Performance Data Center and Next Generation Firewall for the Enterprise



FortiGate 1000D

Enterprises require a high-speed, high-capacity firewall to stay ahead of ever-increasing network performance requirements as well as continued evolution of the threat landscape, at data center and campus locations.

Eliminate Security Bottlenecks

With 52 Gbps of firewall throughput and low latency, the FortiGate 1000D represents an excellent entry model for small data centers and delivers a high-performance, high-capacity data center firewall. IPv6 parity, 10 GE ports and dramatic increases in VPN performance enable you to keep pace with your evolving network.

Deeper Visibility

At the same time, 8 Gbps of next generation threat prevention performance allows you to run top-rated intrusion prevention, application control and antimalware capabilities for deeper inspection of content, applications, user and device activity. Rich console views and reports together with a flexible policy engine provide the visibility and control to empower employees yet secure your enterprise.

Features & Benefits

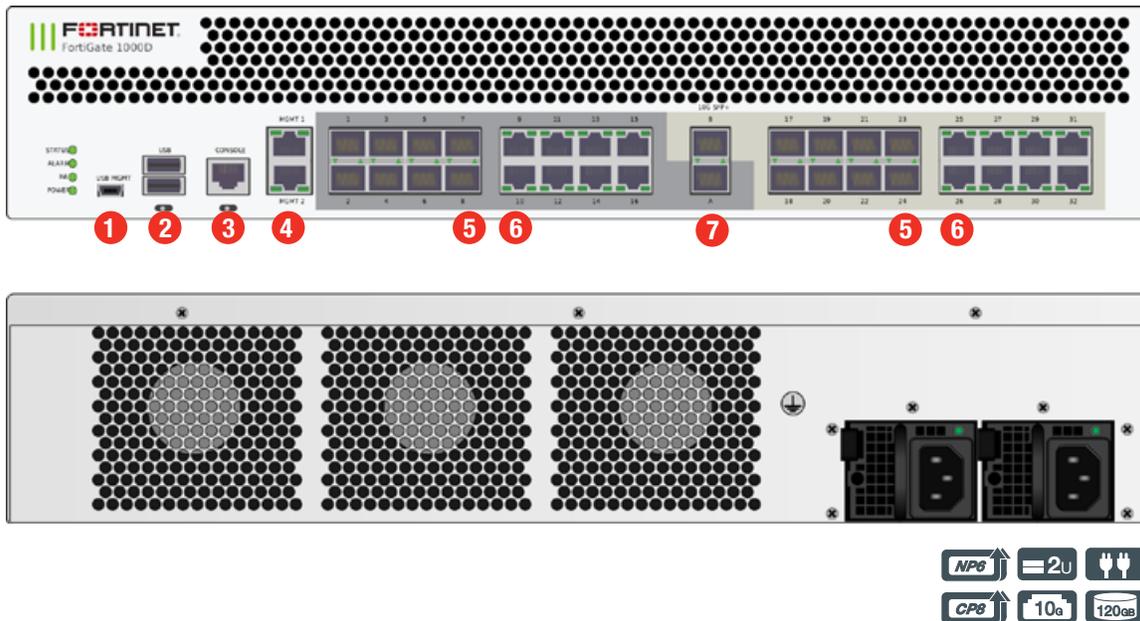
- Industry-leading 5x next generation firewall performance and 10x data center firewall
- NSS Labs Recommended NGFW and NGIPS delivers top-rated protection
- Integrated high port density delivers maximum flexibility and scalability
- Intuitive management interface enables broad and deep visibility and control
- Application control plus identity and device-based policy enforcement provides more granular protection

Highlights

Firewall Performance	IPS Performance	Interfaces
52 Gbps	8 Gbps	Multiple 10 GE SFP+, GE SFP and GE RJ45



HARDWARE



Interfaces

1. USB Management Port
2. USB Ports
3. Console Port
4. 2x GE RJ45 Management Ports

5. 16x GE SFP Slots
6. 16x GE RJ45 Ports
7. 2x 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

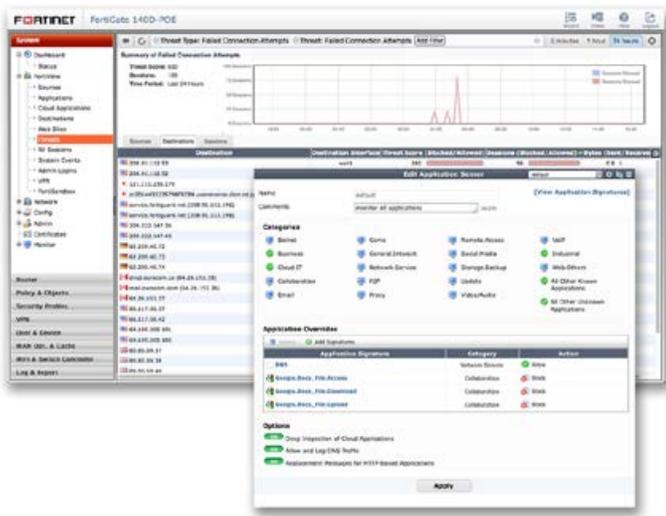
The FortiASIC CP8 content processor works outside of the direct flow of traffic, providing high-speed cryptography and content inspection services including:

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

10 GE Connectivity

High speed connectivity is essential for network security segmentation. The FortiGate 1000D provides 10 GE slots that simplify network designs without relying on additional devices to bridge desired connectivity.

SOFTWARE



FortiOS Management UI — FortiView and Application Control Panel

FortiOS

FortiOS helps you protect your organization against advanced threats, configure and deploy your network security faster and see deep into what's happening inside your network. It enables organization to set up policies specific to types of devices, users and applications with industry-leading security capabilities. FortiOS leverages custom FortiASICs and the Optimum Path Processing architecture of FortiGate to deliver 5 times faster throughput performance. In essence, FortiOS delivers:

- **Comprehensive Security** — Control thousands of applications and stop more threats with NSS Labs Recommended IPS, sandboxing, VB100 certified antimalware and more.
- **Superior Control and Visibility** — Stay in control with rich visibility over network traffic, granular policy control, and intuitive, scalable security and network management.
- **Robust Networking Capabilities** — Optimize your network with extensive switching and routing, high availability, WAN optimization, embedded WiFi controller, and a range of virtual options.



For more information, please refer to the FortiOS data sheet available at www.fortinet.com

SERVICES

FortiGuard™ Security Services

FortiGuard Labs offers real-time intelligence on the threat landscape, delivering comprehensive security updates across the full range of Fortinet's solutions. Comprised of security threat researchers, engineers, and forensic specialists, the team collaborates with the world's leading threat monitoring organizations, other network and security vendors, as well as law enforcement agencies:

- **Real-time Updates** — 24x7x365 Global Operations research security intelligence, distributed via Fortinet Distributed Network to all Fortinet platforms.
- **Security Research** — FortiGuard Labs have discovered over 170 unique zero-day vulnerabilities to date, totaling millions of automated signature updates monthly.
- **Validated Security Intelligence** — Based on FortiGuard intelligence, Fortinet's network security platform is tested and validated by the world's leading third-party testing labs and customers globally.



For more information, please refer to <http://forti.net/guard>

FortiCare™ Support Services

Our FortiCare customer support team provides global technical support for all Fortinet products. With support staff in the Americas, Europe, Middle East and Asia, FortiCare offers services to meet the needs of enterprises of all sizes:

- **Enhanced Support** — For customers who need support during local business hours only.
- **Comprehensive Support** — For customers who need around-the-clock mission critical support, including advanced exchange hardware replacement.
- **Premium Services** — For global or regional customers who need an assigned Technical Account Manager, enhanced service level agreements, extended software support, priority escalation, on-site visits and more.
- **Professional Services** — For customers with more complex security implementations that require architecture and design services, implementation and deployment services, operational services and more.



For more information, please refer to <http://forti.net/care>

SPECIFICATIONS

FORTIGATE 1000D	
Interfaces and Modules	
Hardware Accelerated 10 GE SFP+ Slots	2
Hardware Accelerated GE SFP Slots	16
Hardware Accelerated GE RJ45 Ports	16
GE RJ45 Management / HA Ports	2
USB Ports (Client / Server)	1 / 2
Console Port	1
Onboard Storage	256 GB
Included Transceivers	0
System Performance and Capacity	
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	52 / 52 / 33 Gbps
IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP)	52 / 52 / 33 Gbps
Firewall Latency (64 byte, UDP)	3 µs
Firewall Throughput (Packet per Second)	49.5 Mpps
Concurrent Sessions (TCP)	11 Mil
New Sessions/Second (TCP)	280,000
Firewall Policies	100,000
IPsec VPN Throughput (512 byte)	25 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	20,000
Client-to-Gateway IPsec VPN Tunnels	50,000
SSL-VPN Throughput	3.6 Gbps
Concurrent SSL-VPN Users (Recommended Maximum)	10,000
IPS Throughput	8 Gbps
Antivirus Throughput	3.5 Gbps
CAPWAP Clear-text Throughput (HTTP)	10.5 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 1000D	
Dimensions and Power	
Height x Width x Length (inches)	3.48 x 17.20 x 17.95
Height x Width x Length (mm)	88.5 x 437 x 456
Weight	24.70 lbs (11.20 kg)
Form Factor	Rack Mount, 2 RU
AC Power Supply	100–240V AC, 50–60 Hz
Power Consumption (Average / Maximum)	101 W / 122 W
Current (Maximum)	100V / 5A, 220V / 3A
Heat Dissipation	415.19 BTU/h
Redundant Power Supplies	Yes, Hot swappable
Operating Environment and 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 in proxy mode. IPS performance is measured using 1 Mbyte HTTP files. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1. LAG support and redundant interfaces are limited to certain port configurations, please refer to technical documentation.

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

ORDER INFORMATION

Product	SKU	Description
FortiGate 1000D	FG-1000D	2x 10 GE SFP+ slots, 16x GE SFP slots, 16x GE RJ45 ports, 2x GE RJ45 Management ports, FortiASIC NP6 and CP8 hardware accelerated, 1x 256 GB SSD onboard storage, dual AC power supplies.
Optional Accessories/Spares		
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
Ear Bracket for Rack Mounting, 2 RU	SP-EAR-FG1000D	Ear bracket for rack mounting, 2 RU for FG-1000D
AC Power Supply	SP-FX1000D	AC power supply for FG-1000D and FX-1000D



GLOBAL HEADQUARTERS
Fortinet Inc.
899 Kifer Road
Sunnyvale, CA 94086
United States
Tel: +1.408.235.7700
www.fortinet.com/sales

EMEA SALES OFFICE
120 rue Albert Caquot
06560, Sophia Antipolis,
France
Tel: +33.4.8987.0510

APAC SALES OFFICE
300 Beach Road 20-01
The Concourse
Singapore 199555
Tel: +65.6513.3730

LATIN AMERICA SALES OFFICE
Prol. Paseo de la Reforma 115 Int. 702
Col. Lomas de Santa Fe,
C.P. 01219
Del. Alvaro Obregón
México D.F.
Tel: 011-52-(55) 5524-8480