

## FortiGate 1000D

### The Fortinet Enterprise Firewall Solution

The Fortinet Enterprise Firewall Solution delivers end-to-end network security with one platform, one network security operating system and unified policy management with a single pane of glass — for the industry's best protection against the most advanced security threats and targeted attacks.

### One Enterprise Firewall Solution across the Extended Enterprise

The FortiGate family of network appliances represents the industry's broadest range of enterprise firewall platforms. FortiGate is based on FortiASIC, a purpose-built integrated architecture that provides extremely high throughput and exceptionally low latency, while delivering industry-leading security effectiveness and consolidation which is routinely validated by independent real-world tests. Targeted for large enterprises, the FortiGate 1000D delivers high NGFW and SSL inspection performance along with high port density and dual power supply for maximum flexibility.

### Highlights

	Firewall	IPS	NGFW	Threat Protection	Interfaces
	Enterprise Traffic Mix				
FG-1000D	52 Gbps	4.2 Gbps	5 Gbps	3 Gbps	Multiple 10 GE SFP+, GE SFP and GE RJ45

### FortiGate® 1000D

Next Generation Firewall  
Internal Segmentation Firewall  
Data Center Firewall



Validated  
Security



One Network  
OS



Performance



Single Pane  
of Glass



Universal Platform  
Support

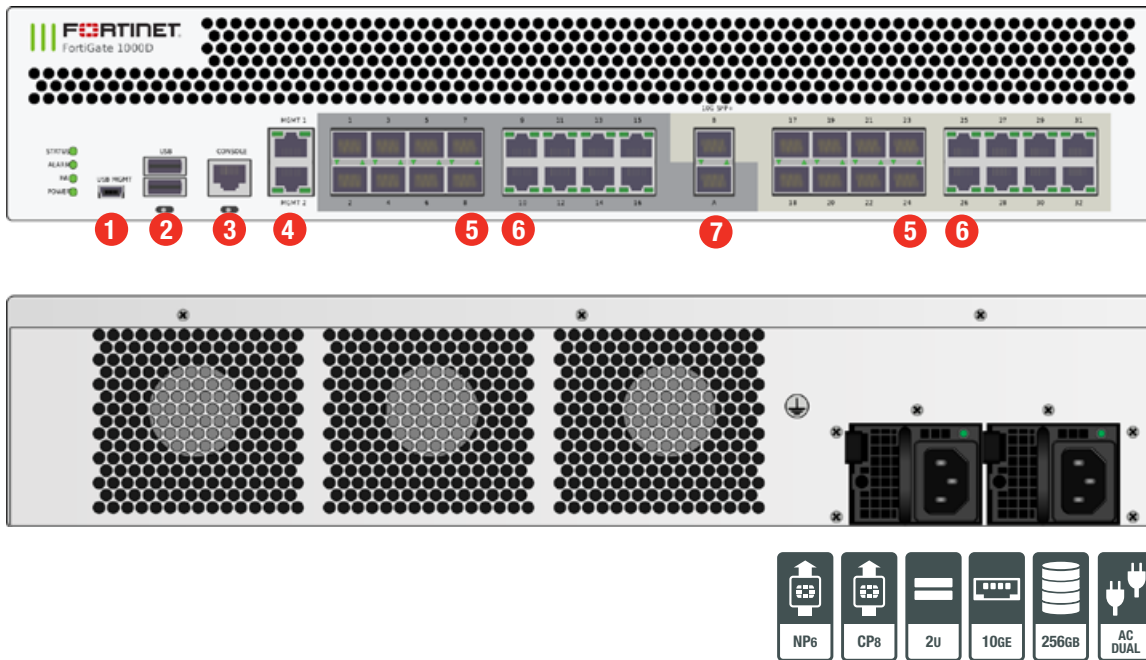


FortiGate appliances, interconnected  
with the Fortinet Security Fabric,  
form the backbone of the  
Fortinet Enterprise Solution

[forti.net/sf](https://forti.net/sf)



# 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.

# FortiOS

The screenshot displays the FortiGate GUI's 'Applications' section. The top panel features a line graph showing traffic volume over time, with a peak around 18:00. The bottom panel shows a bubble chart of application traffic, with HTTPBROWSER being the largest category, followed by ST/Stream, and various other protocols like HTTP, HTTPS, and FTP.

- A truly consolidated platform with one OS for all security and networking services for all FortiGate platforms.
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives and ICSA validated security and performance.
- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings.
- Detect, contain and block advanced attacks automatically in minutes with integrated advanced threat protection framework.
- Solve your networking needs with extensive routing, switching, WiFi, LAN and WAN capabilities.
- Activate all the ASIC-boosted capabilities you need on the fastest firewall platform available.



For more information, please refer to the FortiOS data sheet available at [www.fortinet.com](http://www.fortinet.com)

## SERVICES

## FortiGuard™ Security Services

- **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.

## FortiCare™ Support Services

- **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.
- **Advanced 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.



## Enterprise Bundle

FortiGuard Labs delivers a number of security intelligence services to augment the FortiGate firewall platform. You can easily optimize the protection capabilities of your FortiGate with the FortiGuard Enterprise Bundle. This bundle contains the full set of FortiGuard security services plus FortiCare service and support offering the most flexibility and broadest range of protection all in one package.

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 (HTTP / Enterprise Mix) <sup>1</sup>	8 / 4.2 Gbps
SSL Inspection Throughput <sup>2</sup>	4 Gbps
Application Control Throughput <sup>3</sup>	8 Gbps
NGFW Throughput <sup>4</sup>	5 Gbps
Threat Protection Throughput <sup>5</sup>	3 Gbps
CAPWAP Throughput <sup>6</sup>	11 Gbps
Virtual Domains (Default / Maximum)	10 / 250

FORTIGATE 1000D	
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
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; USGv6/IPv6

Note: All performance values are “up to” and vary depending on system configuration. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1. 1. IPS performance is measured using 1 Mbyte HTTP and Enterprise Traffic Mix. 2. SSL Inspection is measured with IPS enabled and HTTP traffic, using TLS v1.2 with AES256-SHA. 3. Application Control performance is measured with 64 Kbytes HTTP traffic. 4. NGFW performance is measured with IPS and Application Control enabled, based on Enterprise Traffic Mix. 5. Threat Protection performance is measured with IPS and Application Control and Malware protection enabled, based on Enterprise Traffic Mix. 6. CAPWAP performance is based on 1444 byte UDP packets. 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-FXX1000D	AC power supply for FG-1000D and FXX-1000D



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