



## FortiGate® 1500D

High Performance Next Generation/Edge Firewall for the Enterprise



# FortiGate 1500D

FortiGate 1500D and 1500D-DC

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 and 1500D-DC high performance next generation/edge firewalls deliver 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.

### Highlights

Firewall Performance	IPS Performance	Interfaces
80 Gbps	11 Gbps	Multiple 10 GE SPF+, GE SFP and GE RJ45

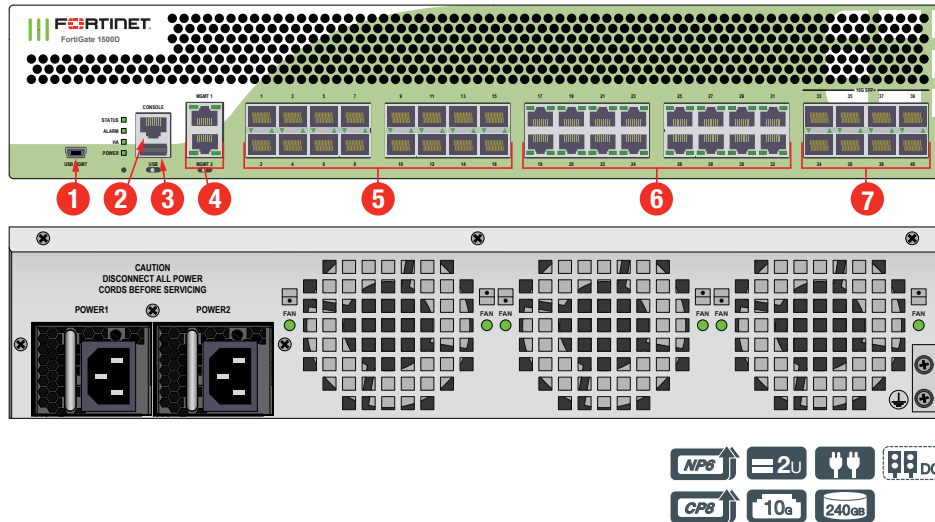
### Features & Benefits

- 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



# HARDWARE

## FortiGate 1500D and 1500D-DC



### 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

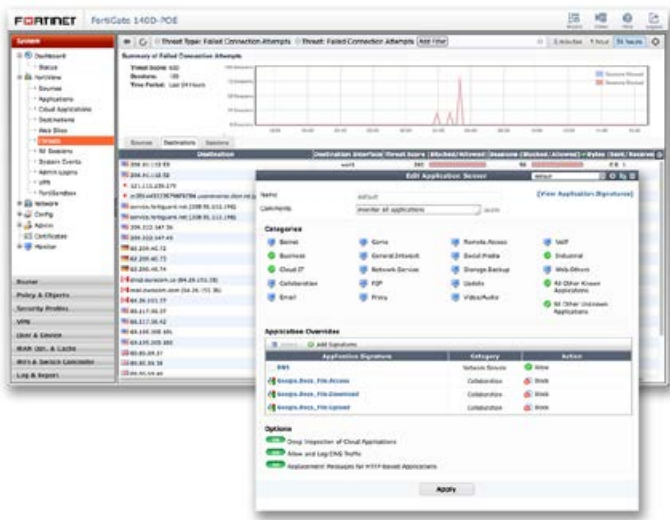
The FortiASIC CP8 content processor works outside of the direct flow of traffic, providing high-speed cryptography and content inspection services including:

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

### 10 GE Connectivity

High speed connectivity is essential for network security segmentation at the core of data networks. The FortiGate 1500D and FG-1500D-DC provide high 10 GE port densities, simplifying 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](http://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 1500D and 1500D-DC	
<b>Hardware Specifications</b>	
Hardware Accelerated 10 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)
<b>System Performance</b>	
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/Second (TCP)	300,000
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	4.3 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 and 1500D-DC	
<b>Dimensions</b>	
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	32.50 lbs (14.70 kg)
Form Factor	Rack Mount, 2 RU
<b>Power</b>	
AC Power Supply	100–240V AC, 47–63 Hz
DC Power Supply (FG-1500D-DC)	40.5–57V DC
Maximum Current	110V / 8A, 220V / 4A
Power Consumption (Average / Maximum)	338 / 406 W
Heat Dissipation	1,385 BTU/h
Redundant Power Supplies	Yes, Hot swappable
<b>Environment</b>	
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-31–158°F (-35–70°C)
Humidity	15–90% non-condensing
Operating Altitude	Up to 7,400 ft (2,250 m)
<b>Compliance</b>	
	FCC Part 15 Class A, C-Tick, VCCI, CE, UL/cUL, CB
<b>Certifications</b>	
	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. Antivirus Throughput is measured in proxy mode.

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 ports, 2x management/HA ports), FortiASIC NP6 and CP8 hardware accelerated, 240 GB SSD onboard storage, dual AC power supplies.
FortiGate 1500D-DC	FG-1500D-DC	8x 10 GE SFP+ slots, 16x GE SFP slots, 18x GE RJ45 ports (including 16x ports, 2x management/HA ports), FortiASIC NP6 and CP8 hardware accelerated, 240 GB SSD onboard storage, dual DC power supplies.
<b>Optional Accessories</b>		
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.
DC power supply	SP-FG1500D-DC-PS	DC power supply for FG-1500D-DC.



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