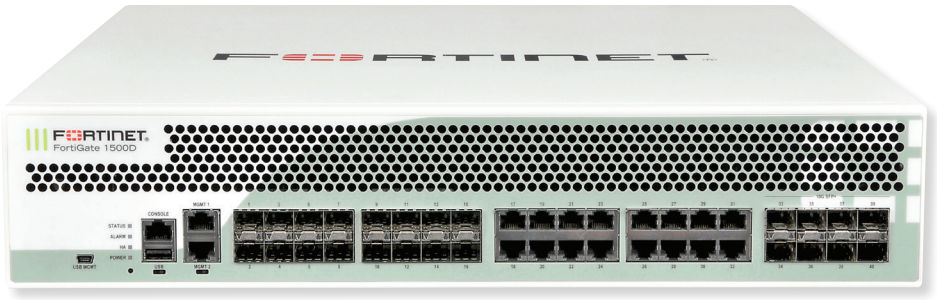
FortiGate® 1500D

FortiGate 1500D, 1500D-DC and 1500DT



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**.

Security Fabric Integration

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

80 Gbps
Firewall

12 Million
Concurrent Sessions

13 Gbps
IPS

7 Gbps
NGFW

5 Gbps
Threat Protection

Multiple GE RJ45, GE SFP and 10 GE SFP+ / GE SFP slots | Variant with 10 GE RJ45

Deployment Modes

Next Generation Firewall
Internal Segmentation Firewall
Data Center Firewall

Hardware Acceleration

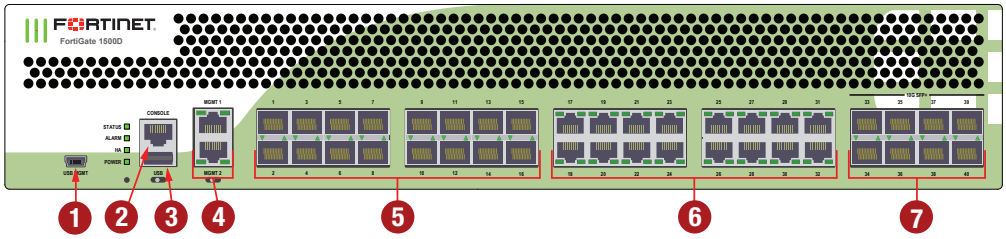
SPU NP6 and CP8

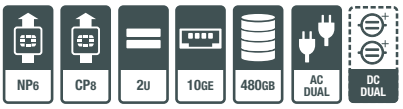
Third-Party Certifications

ICSA labs CERTIFIED ANTI-VIRUS
ICSA labs CERTIFIED FIREWALL - CORPORATE
ICSA labs CERTIFIED IPSEC - BASIC
ICSA labs CERTIFIED SSL VPN
ICSA labs CERTIFIED NETWORK IPS

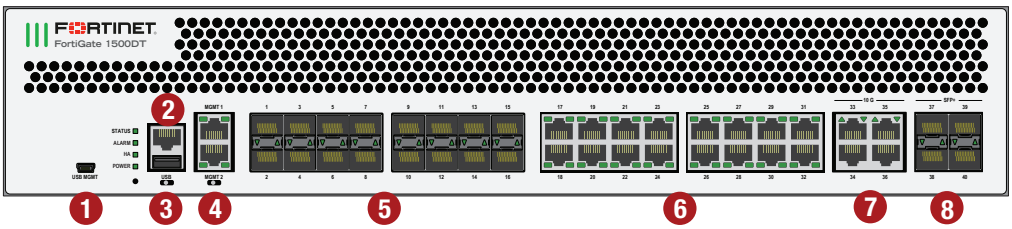
HARDWARE

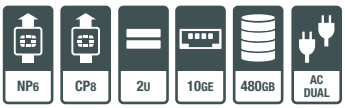
FortiGate 1500D and 1500D-DC





FortiGate 1500DT





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+ / GE SFP (1500D, 1500D-DC)
   4x 10 GE RJ45 Ports (1500DT)
8. 4x 10 GE SFP+ Slots (1500DT)

Powered by SPU

- Custom SPU 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
- SPU 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 SPU 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 2 microseconds
- VPN, CAPWAP and IP tunnel acceleration
- Anomaly-based intrusion prevention, checksum offload and packet defragmentation
- Traffic shaping and priority queuing

Content Processor

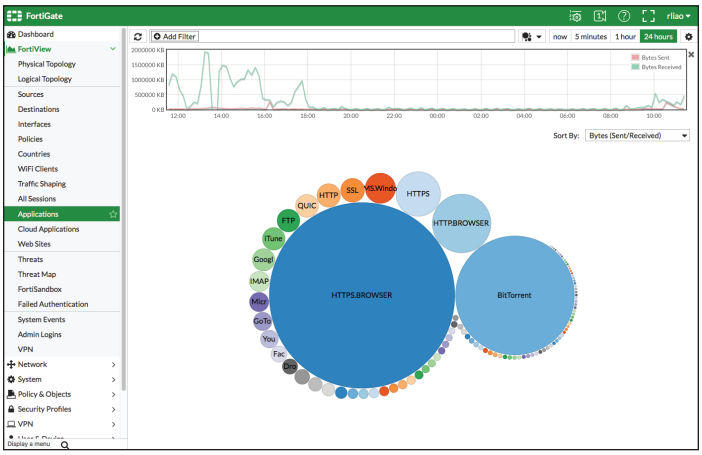
The SPU CP8 content processor works outside of the direct flow of traffic, providing high-speed cryptography and content inspection services including:

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

SOFTWARE

FortiOS

Control all the security and networking capabilities across the entire FortiGate platform with one intuitive operating system. Reduce operating expenses and save time with a truly consolidated next generation security platform.



- 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 SPU-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

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.

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.
- **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

	FG-1500D / 1500D-DC	FG-1500DT
Hardware Specifications		
Hardware Accelerated 10 GE SFP+ / GE SFP Slots	8	4
Hardware Accelerated GE SFP Slots	16	
Hardware Accelerated 10 GE RJ45 Ports	–	4
Hardware Accelerated GE RJ45 Ports	16	
GE RJ45 Management / HA Ports	2	
USB Ports (Client / Server)	1 / 1	
Console Port	1	
Onboard Storage	2x 240 GB	
Included Transceivers	2x SFP+ (SR 10GE)	
System Performance		
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 Million	
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 (HTTP / Enterprise Mix) [1]	15 / 13 Gbps	
SSL Inspection Throughput [2]	10.5 Gbps	
Application Control Throughput [3]	12 Gbps	
NGFW Throughput [4]	7 Gbps	
Threat Protection Throughput [5]	5 Gbps	
CAPWAP Throughput [6]	20 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	

	FG-1500D /1500D-DC	FG-1500DT
Dimensions		
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)	34.39 lbs (15.6 kg)
Form Factor	Rack Mount, 2 RU	
Power		
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	230 / 350 W
Heat Dissipation	1,385 BTU/h	1,193 BTU/h
Redundant Power Supplies	Yes, Hot swappable	
Environment		
Operating Temperature	32–104°F (0–40°C)	
Storage Temperature	-31–158°F (-35–70°C)	
Humidity	15–90% non-condensing	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.

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), SPU NP6 and CP8 hardware accelerated, 480 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), SPU NP6 and CP8 hardware accelerated, 480 GB SSD onboard storage, dual DC power supplies.
FortiGate 1500DT	FG-1500DT	4x 10 GE SFP+ slots, 4x 10 GE RJ45 ports, 16x GE SFP slots, 18x GE RJ45 ports (including 16x ports, 2x management/HA ports), SPU NP6 and CP8 hardware accelerated, 480 GB SSD onboard storage, dual AC power supplies.
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-1200D, FG-1240B, FG-1500D, FG-1500DT, FG-3040B and FG-3140B.
DC power supply	SP-FG1500D-DC-PS	DC power supply for FG-1500D-DC.

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FG-1500D-DAT-R17-201701