



## FortiGate® 500D

Distributed Enterprise Firewall  
Next Generation Firewall



# FortiGate 500D

### 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 enterprises, Targeted for mid-enterprises, the FortiGate 500D contains superior security inspection functionality, deep visibility and high performance.

### Highlights

	Firewall	IPS	NGFW	Threat Protection	Interfaces
	Enterprise Traffic Mix				
FG-500D	16 Gbps	3.5 Gbps	2.5 Gbps	2 Gbps	Multiple GE RJ45, GE SFP and GE RJ45 Management

Validated Security

One Network OS

Performance

Single Pane of Glass

Universal Platform Support



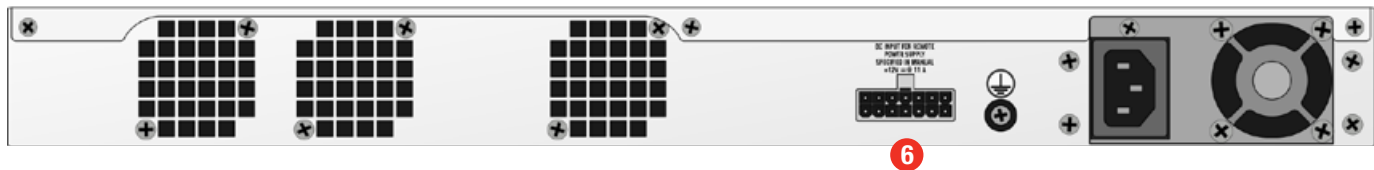
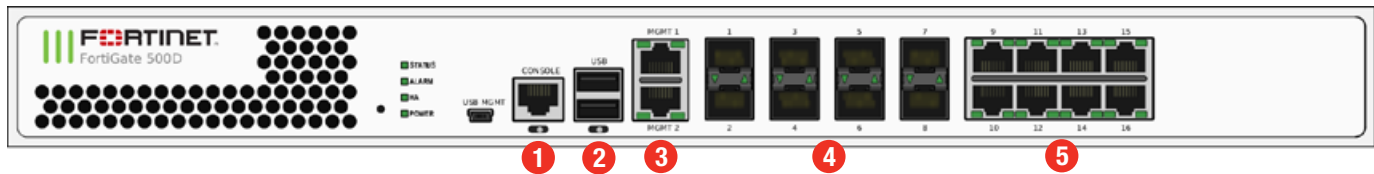
FortiGate appliances, interconnected with the Fortinet Security Fabric, form the backbone of the Fortinet Enterprise Solution

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



# HARDWARE

## FortiGate 500D



### Interfaces

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Console Port (RJ45)</li> <li>2. 2x USB Ports</li> <li>3. 2x GE RJ45 Management Ports</li> </ol> | <ol style="list-style-type: none"> <li>4. 8x GE SFP Slots</li> <li>5. 8x GE RJ45 Ports</li> <li>6. FRPS Connector</li> </ol> |
|---|--|



### 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 well because they rely on general-purpose CPUs, causing a dangerous performance gap.
- FortiASIC processors provide the performance needed to block emerging threats, met rigorous third-party certifications, and ensure that your network security solution does not become a network bottleneck.

### 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

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

## 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 ICISA 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

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

FORTIGATE 500D	
<b>Interfaces and Modules</b>	
GE RJ45 Interfaces	8
GE SFP Slots	8
GE RJ45 Management Ports	2
USB (Client / Server)	1 / 2
RJ45 Console Port	1
Local Storage	120 GB SSD
Included Transceivers	2x SFP (SX 1 GE)
<b>System Performance and Capacity</b>	
Iv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	16 / 16 / 16 Gbps
Firewall Latency (64 byte, UDP)	3 μs
Firewall Throughput (Packet per Second)	24 Mpps
Concurrent Sessions (TCP)	6 Million
New Sessions/Second (TCP)	250,000
Firewall Policies	10,000
IPsec VPN Throughput (512 byte)	14 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	2,000
Client-to-Gateway IPsec VPN Tunnels	10,000
SSL-VPN Throughput	400 Mbps
Concurrent SSL-VPN Users (Recommended Maximum)	500
IPS Throughput (HTTP / Enterprise Mix) <sup>1</sup>	5.7 / 3.5 Gbps
SSL Inspection Throughput <sup>2</sup>	3 Gbps
Application Control Throughput <sup>3</sup>	4 Gbps
NGFW Throughput <sup>4</sup>	2.5 Gbps
Threat Protection Throughput <sup>5</sup>	2 Gbps
CAPWAP Throughput <sup>6</sup>	10 Gbps
Virtual Domains (Default / Maximum)	10 / 10
Maximum Number of FortiAPs (Total / Tunnel)	512 / 256
Maximum Number of FortiTokens	1,000
Maximum Number of Registered Endpoints	2,000
High Availability Configurations	Active-Active, Active-Passive, Clustering

FORTIGATE 500D	
<b>Dimensions and Power</b>	
Height x Width x Length (inches)	1.73 x 17 x 12.68
Height x Width x Length (mm)	44 x 432 x 322
Weight	10.8 lbs (4.9 kg)
Form Factor	1 RU
Power Consumption (Average / Maximum)	113 W / 202 W
Power Source	100–240V AC, 60–50Hz
Current (Maximum)	110V/4A, 220V/2A
Heat Dissipation	690 BTU/h
<b>Operating Environment and Certifications</b>	
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.

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

## ORDER INFORMATION

Product	SKU	Description
FortiGate 500D	FG-500D	10x GE RJ45 ports, 8x GE SFP slots, FortiASIC NP6 and CP8 hardware accelerated, 120 GB onboard SSD storage.
<b>Optional Accessories</b>		
External Redundant AC Power Supply	FRPS-100	External redundant AC power supply for up to 4 units: FG-300C, FG-310B, FS-348B and FS-448B. Up to 2 units: FG-200B, FG-200D, FG-240D and FG-300D, FG-400D, FG-500D, FG-600D, FHV-500D, FDD-200B, FDD-400B, FDD-600B and FDD-800B
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.



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