

# FortiGate® 3800D Series

FortiGate 3800D/-DC, 3810D/-DC and 3815D/-DC



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.



## Deployment Modes

- Next Generation Firewall
- Internal Segmentation Firewall
- Data Center Firewall
- Carrier-Class Firewall



## Hardware Acceleration

SPU CP8 and NP6



## Third-Party Certifications



**320 Gbps**  
*Firewall*

**95 Million**  
*Concurrent Sessions*



**21 Gbps**  
*IPS*



**17 Gbps**  
*NGFW*



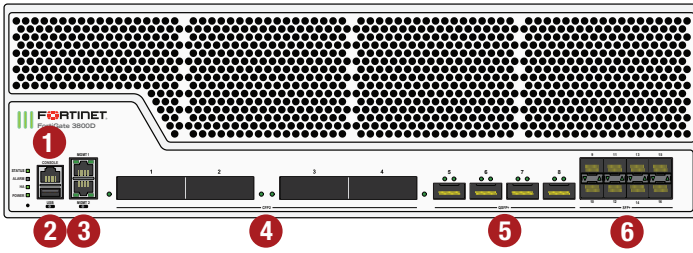
**12 Gbps**  
*Threat Protection*



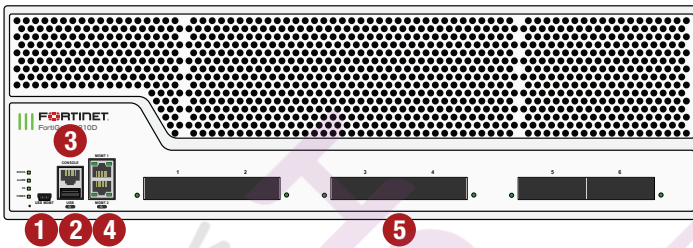
Multiple 100 GE CFP2, 40 GE QSFP+, 10 GE SPF+ and/or Multiple GE SFP/RJ45 depending on variants.

# HARDWARE

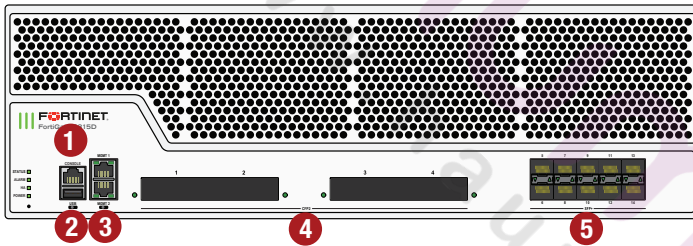
## FortiGate 3800D/-DC



## FortiGate 3810D/-DC

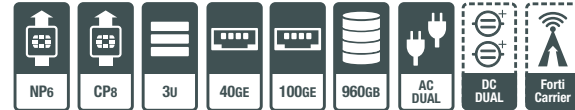


## FortiGate 3815D/-DC



### Interfaces

- |                                |                               |
|--------------------------------|-------------------------------|
| 1. Console Port                | 4. 4x 100 GE CFP2 Slots       |
| 2. USB Port                    | 5. 4x 40 GE QSFP+ Slots       |
| 3. 2x GE RJ45 Management Ports | 6. 8x 10 GE SFP+/GE SFP Slots |



### Interfaces

- |                        |                                |
|------------------------|--------------------------------|
| 1. USB Management Port | 4. 2x GE RJ45 Management Ports |
| 2. USB Port            | 5. 6x 100 GE CFP2 Slots        |
| 3. Console Port        |                                |



### Interfaces

- |                                |                         |
|--------------------------------|-------------------------|
| 1. Console Port                | 4. 4x 100 GE CFP2 Slots |
| 2. USB Port                    | 5. 10x 10 GE SFP+ Slots |
| 3. 2x GE RJ45 Management Ports |                         |



### 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

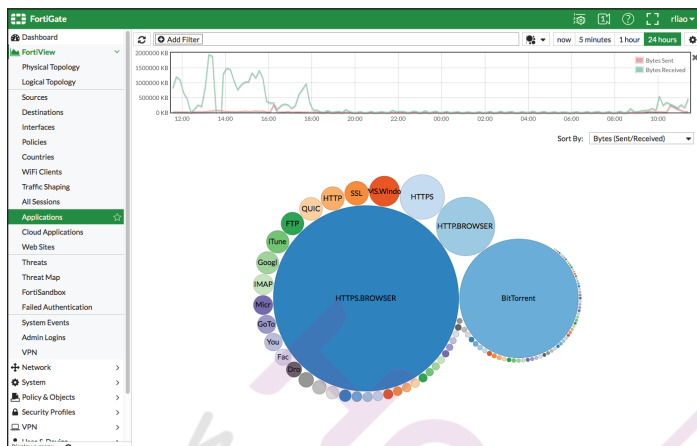
The SPU CP8 content processor works outside of the direct flow of traffic, providing high-speed cryptography and content inspection services including:

- 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-booster 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

	FG-3800D AND 3800D-DC	FG-3810D AND 3810D-DC	FG-3815D AND 3815D-DC
<b>Interfaces and Modules</b>			
100 GE CFP2 Slots	4	6	4
40 GE QSFP+ Slots	4	—	—
10 GE SFP+ Slots	8 (supports GE SFP as well)	—	10
GE RJ45 Management Ports	2	2	2
USB Ports	1	1	1
Console Port	1	1	1
Internal Storage	2x 480 GB	2x 480 GB	2x 480 GB
Included Transceivers	2x SFP+ (SR 10 GE)	NIL	2x SFP+ (SR 10 GE)
<b>System Performance and Capacity</b>			
Firewall Throughput (1518 / 512 / 64 byte, UDP)	320 / 300 / 150 Gbps		
Firewall Latency (64 byte, UDP)	5 µs		
Firewall Throughput (Packet per Second)	262.5 Mpps		
Concurrent Sessions (TCP)	95 Million		
New Sessions/Sec (TCP)	480,000		
Firewall Policies	200,000		
IPsec VPN Throughput (512 byte)	135 Gbps		
Gateway-to-Gateway IPsec VPN Tunnels	40,000		
Client-to-Gateway IPsec VPN Tunnels	64,000		
SSL-VPN Throughput	10 Gbps		
Concurrent SSL-VPN Users (Recommended Maximum)	30,000		
IPS Throughput (HTTP / Enterprise Mix) <sup>1</sup>	75 / 21 Gbps		
SSL Inspection Throughput <sup>2</sup>	23 Gbps		
Application Control Throughput <sup>3</sup>	44 Gbps		
NGFW Throughput <sup>4</sup>	17 Gbps		
Threat Protection Throughput <sup>5</sup>	12 Gbps		
CAPWAP Throughput <sup>6</sup>	22 Gbps		
Virtual Domains (Default / Maximum)	10 / 500		
Maximum Number of FortiAPs (Total / Tunnel Mode)	4,096 / 1,024		
Maximum Number of FortiTokens	5,000		
Maximum Number of Registered FortiClients	20,000		
High Availability Configurations	Active / Active, Active / Passive, Clustering		
<b>Dimensions and Power</b>			
Height x Width x Length (inches)	5.2 x 17.4 x 26.5	5.2 x 17.4 x 26.5	5.2 x 17.4 x 26.5
Height x Width x Length (mm)	133 x 442 x 673	133 x 442 x 673	133 x 442 x 673
Weight	51 lbs (23.0 kg)	59 lbs (26.8 kg)	59 lbs (26.8 kg)
Form Factor	3 RU	3 RU	3 RU
AC Power Supply	100–240V AC, 60–50 Hz	100–240V AC, 50–60 Hz	100–240V AC, 60–50 Hz
DC Power Supply	48–72V DC	48–72V DC	48–72V DC
Power Consumption (Average / Maximum)	536 / 768 W	832 / 1100 W	829 / 1100 W
Current (Maximum)	12A@100V, 5A@240V	12A@100V, 5A@240V	12A@100V, 5A@240V
Heat Dissipation	2621 BTU/h	3754 BTU/h	3754 BTU/h
Redundant Power Supplies	Yes, Hot Swappable	Yes, Hot Swappable	Yes, Hot Swappable
<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 3800D	FG-3800D	4x 100 GE CFP2 slots, 4x 40 GE QSFP+ slots, 8x 10 GE SFP+ slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB onboard storage, and dual AC power supplies.
FortiGate 3800D-DC	FG-3800D-DC	4x 100 GE CFP2 slots, 4x 40 GE QSFP+ slots, 8x 10 GE SFP+ slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB onboard storage, and dual DC power supplies.
FortiGate 3810D	FG-3810D	6x 100 GE LR4/SR10 CFP2 slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB SSD onboard storage, dual AC power supplies.
FortiGate-3810D-NEBS	FG-3810D-NEBS	6x 100 GE LR4/SR10 CFP2 slots, 2x GE RJ45 Management ports, 960 GB SSD onboard storage, dual AC power supplies. NEBS Certified.
FortiGate 3810D-DC	FG-3810D-DC	6x 100 GE LR4/SR10 CFP2 slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB SSD onboard storage, dual DC power supplies.
FortiGate-3810D-DC-NEBS	FG-3810D-DC-NEBS	4x 100 G CFP2 slots, 4x 40 G QSFP+ slots, and 8x 10 G SFP+ slots, 2x GE RJ45 Management, SPU NP6 and CP8 hardware accelerated, 960 GB onboard storage, and dual DC power supplies. NEBS Certified.
FortiGate 3815D	FG-3815D	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB SSD onboard storage, and dual AC power supplies.
FortiGate-3815D-NEBS	FG-3815D-NEBS	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management ports, 960 GB SSD onboard storage, and dual AC power supplies. NEBS Certified.
FortiGate 3815D-DC	FG-3815D-DC	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management ports, SPU NP6 and CP8 hardware accelerated, 960 GB SSD onboard storage, and dual DC power supplies.
FortiGate-3815D-DC-NEBS	FG-3815D-DC-NEBS	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management ports, 960 GB SSD onboard storage, and dual DC power supplies. NEBS Certified.
Optional Accessories		
100 GE CFP2 Transceivers, Short Range	FG-TRAN-CFP2-SR10	100 GE CFP2 transceivers, 10 channel parallel fiber, short range for all systems with CFP2 slots.
100 GE CFP2 Transceivers, Long Range	FG-TRAN-CFP2-LR4	100 GE CFP2 transceivers, long range, over single mode fiber, for all systems with CFP2 slots.
10 GE SFP+ Transceiver Module, Short Range	FG-TRAN-SFP+SR	10 GE SFP+ transceiver module, short 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.
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.
100 GE SR10 to 10x 10 GE Fan Out Cable	FG-CABLE-SR10-SFP+	100 GE SR10 to 10x 10 GE SFP+ 1M fan out cable.
AC Power Supply	SP-FG3800D-PS	AC power supply for FG-3700D, FG-3700D-NEBS, FG-3700DX, FG-3810D and FG-3815D.
DC Power Supply	SP-FG3800D-DC-PS	DC power supply for FG-3700D-DC, FG-3700D-DC-NEBS, FG-3810D-DC, FG-3815D-DC.
Rack Mount Sliding Rails	SP-FG3040B-RAIL	Rack mount sliding rails for FG-1000C/DC, FG-1200D, FG-1500D/DC, FG-3040B/DC, FG-3140B/DC, FG-3240C/DC, FG-3000D/DC, FG-3100D/DC, FG-3200D/DC, FG-3700D/DC, FG-3700DX, FG-3810D/DC and FG-3950B/D.



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