



FortiGate® 3815D
Data Center Firewall with
100 GE Interfaces



FortiGate 3815D

FortiGate 3815D and 3815D-DC

Fortinet's FortiGate 3815D and 3815D-DC are also security appliances capable of delivering an unprecedented 300+ Gbps throughput, while also featuring 100 GE interface ports and IPv4 to IPv6 performance parity integral in supporting next generation fabric.

Future-Proofing the Next Generation Data Center

They deliver their breakthrough performance and protection in a compact 3U form factor with four 100 GE interfaces that preserve scarce rack space while maximizing capacity. Powered by the new FortiASIC NP6 processor, the FortiGate 3815D and 3815D-DC allow customers to build 100G data centers without worrying about high speed connectivity or throughput of the core firewall.

Flexible Deployment

The FortiGate 3815D and 3815D-DC give you the flexibility to choose the firewall personality that best fits your requirements at the Edge or Core. You can take advantage of the high port density for physical segmentation of your network, as well as the virtual domains (VDOMs) for virtual segmentation.

Highlights

Firewall Performance	IPS Performance	Interfaces
320 Gbps	30 Gbps	Multiple 100 GE CFP2, 10 GE SFP+ and GE RJ45 Management

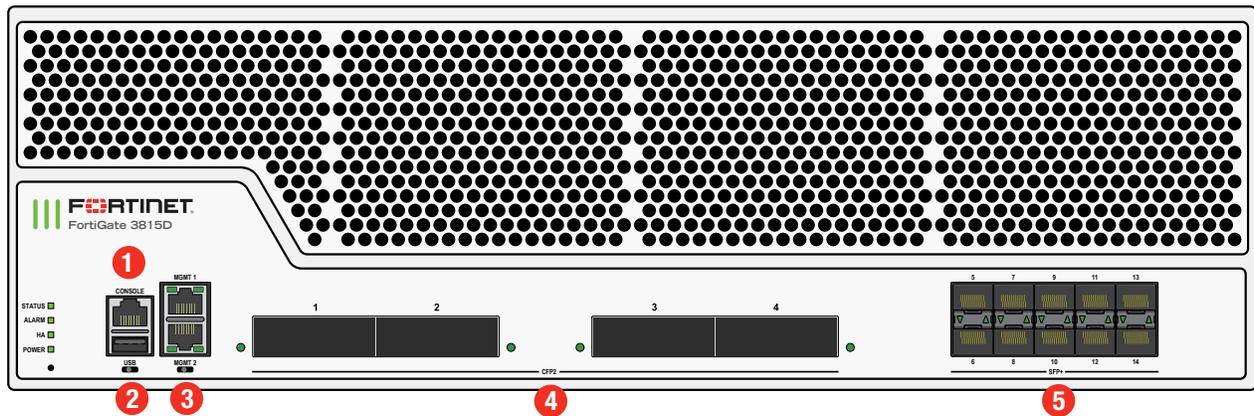
Features & Benefits

- Industry-leading 10x data center firewall offers exceptional throughput and ultra-low latency
- Highly available and Virtual Domain (VDOM) support for multi-tenant data center environment
- Integrated high-speed 10 GE+ port delivers maximum flexibility and scalability
- Intuitive management interface enables broad and deep visibility and control
- NSS Labs Recommended consolidated security delivers top-rated protection



HARDWARE

FortiGate 3815D and 3815D-DC



Interfaces

1. Console Port
2. USB Port
3. 2x GE RJ45 Management Ports

4. 4x 100 GE CFP2 Slots
5. 10x 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 2 microseconds
- VPN, CAPWAP and IP tunnel acceleration
- Anomaly-based intrusion prevention, checksum offload and packet defragmentation
- Traffic shaping and priority queuing

Content Processor

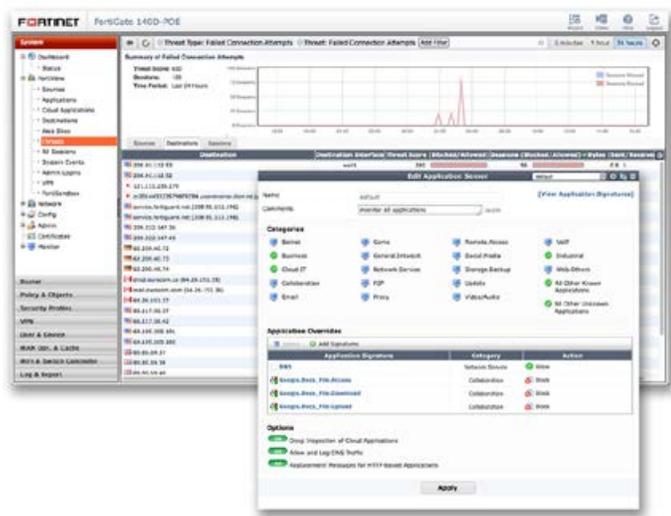
The FortiASIC CP8 content processor works outside of the direct flow of traffic, providing high-speed cryptography and content inspection services including:

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

100 GE Connectivity for Core Infrastructure

High speed connectivity is essential for network security segmentation at the core of data networks. The FortiGate 3815D and 3815D-DC provide 100 GE interfaces, 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

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

FG-3815D and 3815D-DC	
Interfaces and Modules	
100 GE CFP2 Slots	4
10 GE SFP+ Slots	10
GE RJ45 Management Ports	2
USB Ports (Client / Server)	1 / 1
Console Port	1
Internal Storage	960 GB
Included Transceivers	2x SFP+ (SR 10 GE)
System Performance and Capacity	
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	100,000
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	30 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

FG-3815D and 3815D-DC	
Dimensions and Power	
Height x Width x Length (inches)	5.2 x 17.4 x 26.5
Height x Width x Length (mm)	133 x 442 x 673
Weight	59 lbs (26.7 kg)
Form Factor	3 RU
AC Power Supply	100–240V AC, 60–50 Hz
DC Power Supply (FortiGate 3815D-DC)	48–72V DC
Power Consumption (Average / Maximum)	829 W / 1100 W
Current (Maximum)	12@100V, 5A@240V
Heat Dissipation	3754 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

Note: All performance values are "up to" and vary depending on system configuration. IPS performance is measured using 1 Mbyte HTTP files. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1.

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

ORDER INFORMATION

Product	SKU	Description
FortiGate 3815D	FG-3815D	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management Ports, 960 GB SSD on board storage, and dual AC power supplies.
FortiGate 3815D-DC	FG-3815D-DC	4x 100 GE LR4/SR10 CFP2 slots, 10x 10 GE SFP+ slots, 2x GE RJ45 Management Ports, 960 GB SSD on board storage, and dual DC power supplies.
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.
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.



GLOBAL HEADQUARTERS
Fortinet Inc.
899 Kifer Road
Sunnyvale, CA 94086
United States
Tel: +1.408.235.7700
www.fortinet.com/sales

EMEA SALES OFFICE
905 rue Albert Einstein
Valbonne 06560
Alpes-Maritimes, France
Tel: +33.4.8987.0500

APAC SALES OFFICE
300 Beach Road 20-01
The Concourse
Singapore 199555
Tel: +65.6395.2788

LATIN AMERICA SALES OFFICE
Sawgrass Lakes Center
13450 W. Sunrise Blvd., Suite 430
Sunrise, FL 33323
United States
Tel: +1.954.368.9990