

# FortiGate® 3100D

FG-3100D and 3100D-DC

**Next Generation Firewall  
Internal Segmentation Firewall  
Data Center Firewall and IPS  
Carrier-Class Firewall**



The FortiGate 3100D series delivers high performance threat protection for mid-sized to large enterprises and service providers, with the flexibility to be deployed at the Internet or cloud edge, in the data center core or internal segments. The multiple high-speed interfaces, high port density, industry-leading security efficacy and high throughput of the 3100D series keeps your network connected and secure.

## Security

- Protects against known exploits, malware and malicious websites using continuous threat intelligence provided by FortiGuard Labs security services
- Protect against unknown attacks using dynamic analysis and provides automated mitigation to stop targeted attacks

## Performance

- Delivers industry's best threat protection performance and ultra-low latency using purpose-built security processor (SPU) technology
- Provides industry-leading performance and protection for SSL encrypted traffic

## Certification

- Independently tested and validated best security effectiveness and performance
- Received unparalleled third-party certifications from NSS Labs, ICSA, Virus Bulletin and AV Comparatives

## Networking

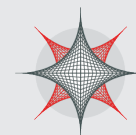
- Delivers extensive routing, high-speed interfaces, and high performance VPN capabilities to address performance and connectivity needs of large-scale data center and cloud applications
- Enables flexible deployment modes that fit into organizations' evolving network infrastructure

## Management

- Single Pane of Glass with Network Operations Center (NOC) view provides 360° visibility to identify issues quickly and intuitively
- Predefined compliance checklist analyzes the deployment and highlights best practices to improve overall security posture

## Security Fabric

- Enables Fortinet and Fabric-ready partners' products to collaboratively integrate and provide end-to-end security across the entire attack surface



Firewall	IPS	NGFW	Threat Protection	Interfaces
80 Gbps	22 Gbps	18 Gbps	13 Gbps	Multiple 10 GE SFP+   Multiple GE SFP and GE RJ45

Refer to specification table for details

## DEPLOYMENT



### Next Generation Firewall (NGFW)

- Security gateway to the Internet for enterprises
- Enforce security policies with granular control and visibility of users and devices for thousands of discrete applications
- Identify and stop threats with powerful intrusion prevention beyond port and protocol that examines the actual content of your network traffic



### Internal Segmentation Firewall (ISFW)

- Segmentation solution for end-to-end protection against threats while meeting compliance requirements
- High port density and accelerated traffic processing capacity, to protect multiple segments without compromising performance
- Deploy transparently and rapidly into existing environments with minimal disruption



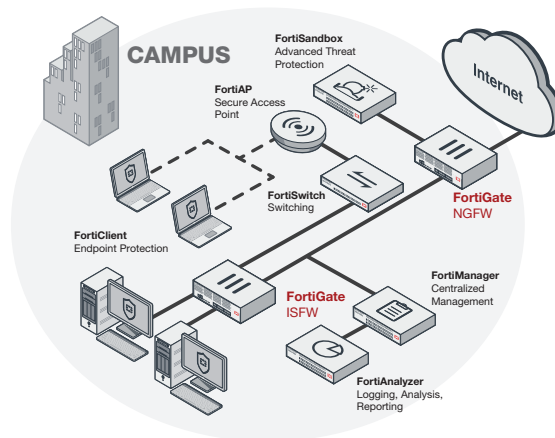
### Data Center Firewall and IPS (DCFW-IPS)

- High availability, high throughput and low latency firewall for data center edge and core
- High session scale for accommodating large network and user traffic for Internet and cloud-facing data centers
- High-speed interfaces for future-proof connectivity while compact size contributes to greener data centers
- Performance optimized IPS engine to detect and deter latest known and zero day threats



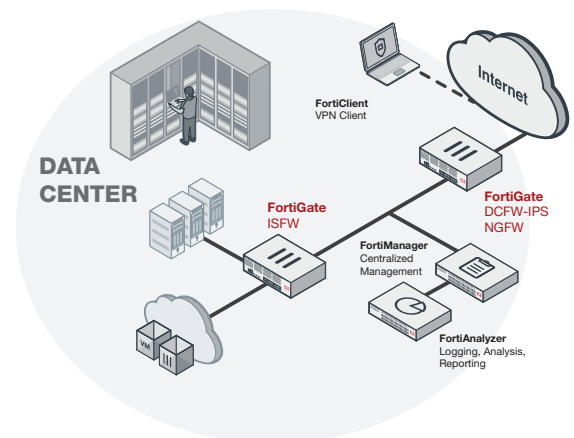
### Carrier-Class Firewall (CCFW)

- Reliable high capacity firewall designed for service providers
- Powered by multiple SPU Network Processors that accelerate processing for both IPv4 and IPv6 traffic
- Supports Carrier License upgrade that unlocks features and protocol support for mobile networks such as GTP and SCTP
- High-speed interfaces for future-proof connectivity



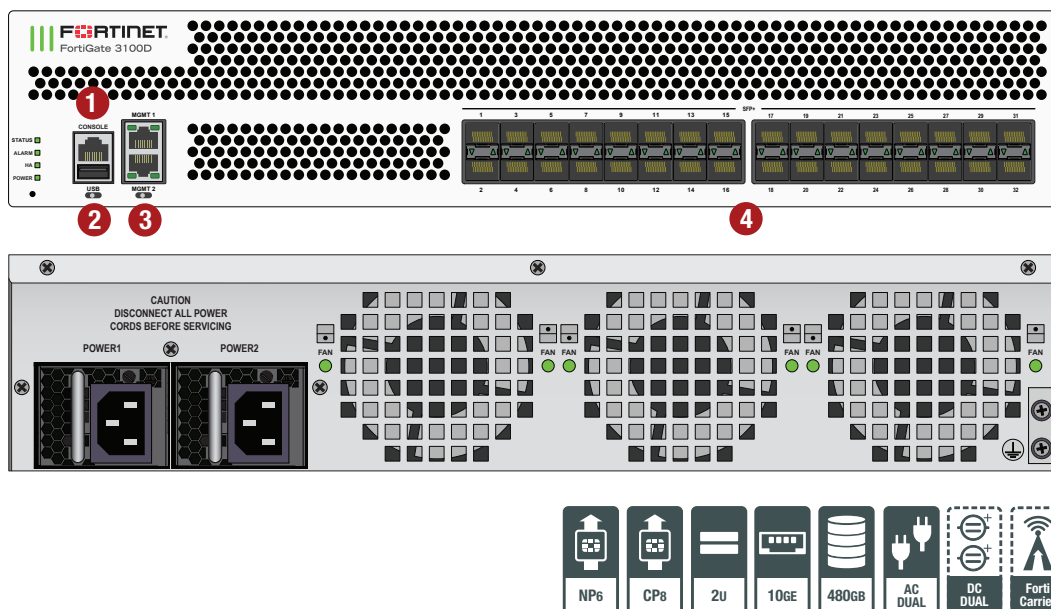
FortiGate 3100D deployment in large campus networks (NGFW, ISFW)

FortiGate 3100D deployment in data center (DCFW-IPS/NGFW, ISFW)



## HARDWARE

### FortiGate 3100D/-DC



### Interfaces

- |                        |                                |
|------------------------|--------------------------------|
| 1. Console Port        | 3. 2x GE RJ45 Management Ports |
| 2. USB Management Port | 4. 32x 10G SFP+/GE SFP Slots   |

### 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

### 10 GE Connectivity for Network Segmentation

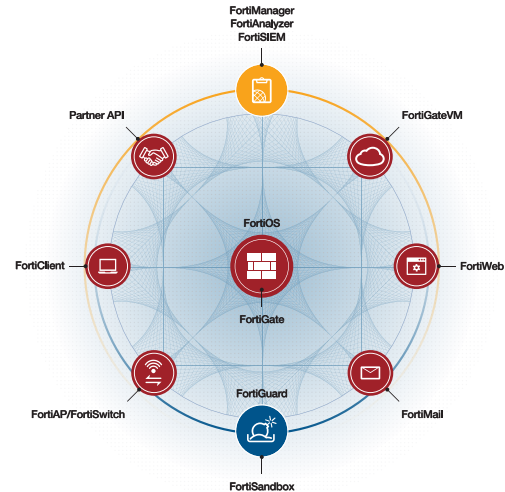
High speed connectivity is essential for network security segmentation at the core of data networks. The FortiGate 3100D provides the highest 10 GE port densities in the market, simplifying network designs without relying on additional devices to bridge desired connectivity.

## FORTINET SECURITY FABRIC

### Security Fabric

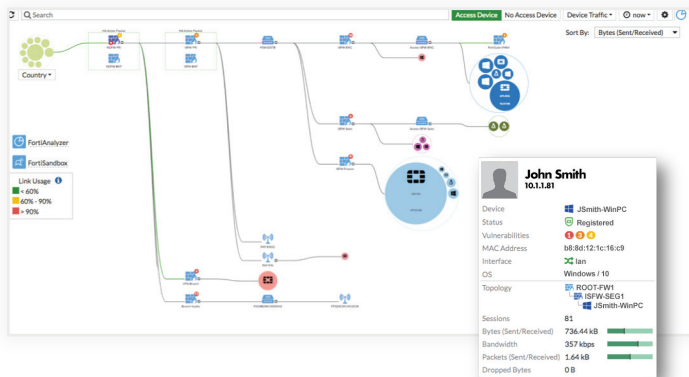
The Security Fabric allows security to dynamically expand and adapt as more and more workloads and data are added. Security seamlessly follows and protects data, users, and applications as they move between IoT, devices, and cloud environments throughout the network.

FortiGates are the foundation of Security Fabric, expanding security via visibility and control by tightly integrating with other Fortinet security products and Fabric-Ready Partner solutions.



### 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.
- Prevent, detect, and mitigate advanced attacks automatically in minutes with integrated advanced threat protection.
- Fulfill your networking needs with extensive routing, switching, and SD-WAN capabilities.
- Utilize SPU hardware acceleration to boost security capability performance.



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 and other network and security vendors, as well as law enforcement agencies.



### 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.



For more information, please refer to [forti.net/fortiguard](http://forti.net/fortiguard) and [forti.net/forticare](http://forti.net/forticare)

## SPECIFICATIONS

FORTIGATE 3100D AND 3100D-DC	
<b>Interfaces and Modules</b>	
10 GE SFP+ / GE SFP Slots	32
GE RJ45 Management Ports	2
USB Ports (Client / Server)	1 / 1
Console Port	1
Internal Storage	480 GB
Included Transceivers	2x SFP+ (SR 10 GE)
<b>System Performance and Capacity</b>	
Firewall Throughput (1518 / 512 / 64 byte, UDP)	80 / 80 / 50 Gbps
IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP)	80 / 80 / 50 Gbps
Firewall Latency (64 byte, UDP)	3 µs
Firewall Throughput (Packet per Second)	75 Mpps
Concurrent Sessions (TCP)	50 Million
New Sessions/Second (TCP)	400,000
Firewall Policies	200,000
IPsec VPN Throughput (512 byte) <sup>1</sup>	50 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	40,000
Client-to-Gateway IPsec VPN Tunnels	200,000
SSL-VPN Throughput	8 Gbps
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)	30,000
SSL Inspection Throughput (IPS, HTTP) <sup>3</sup>	22 Gbps
Application Control Throughput (HTTP 64K) <sup>2</sup>	40 Gbps
CAPWAP Throughput (1444 byte, UDP)	22 Gbps
Virtual Domains (Default / Maximum)	10 / 500
Maximum Number of Switches Supported	256
Maximum Number of FortiAPs (Total / Tunnel Mode)	4,096 / 1,024
Maximum Number of FortiTokens	5,000
Maximum Number of Registered FortiClients	50,000
High Availability Configurations	Active/Active, Active/Passive, Clustering
<b>System Performance — Optimal Traffic Mix</b>	
IPS Throughput <sup>2</sup>	45 Gbps
<b>System Performance — Enterprise Traffic Mix</b>	
IPS Throughput <sup>2</sup>	22 Gbps
NGFW Throughput <sup>2,4</sup>	18 Gbps
Threat Protection Throughput <sup>2,5</sup>	13 Gbps

FORTIGATE 3100D AND 3100D-DC	
<b>Dimensions and Power</b>	
Height x Width x Length (inches)	3.5 x 17.4 x 21.9
Height x Width x Length (mm)	88 x 442 x 555
Weight	37.69 lbs (17.1 kg)
Form Factor	2 RU
AC Power Supply	100–240V AC, 50–60 Hz
DC Power Supply (FG-3100D-DC)	40.5–57V DC
Power Consumption (Average / Maximum)	337 W / 520 W
Heat Dissipation	1775 BTU/h
Redundant Power Supplies	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	10–90% non-condensing
Noise Level	50 dBA
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.

1. IPsec VPN performance test uses AES256-SHA256.

2. IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

3. SSL Inspection performance test uses TLS v1.2 with AES128-SHA256.

4. NGFW performance is measured with Firewall, IPS and Application Control enabled.

5. Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

## ORDER INFORMATION

Product	SKU	Description
FortiGate 3100D	FG-3100D	32x 10 GE SFP+ slots 10G ports (2 SFP+ SR-type transceivers included), SPU NP6 and CP8 hardware accelerated, 480 GB SSD internal storage, and dual AC power supplies.
FortiGate 3100D-DC	FG-3100D-DC	32x 10 GE SFP+ slots, 2x GE RJ45 Management, SPU NP6 and CP8 hardware accelerated, 480 GB SSD onboard storage, and dual DC power supplies.
Optional Accessories		
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/-DC.
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.
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.
AC Power Supply	SP-FG3600C-PS	AC power supply for FG-3000D, FG-3100D, FG-3200D, FG-3600C and FG-3240C.
DC Power Supply	SP-FG1500D-DC-PS	DC power supply for FG-1500D-DC, FG-3000D-DC, FG-3100D-DC, FG-3200D-DC.



### FortiGuard 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 one of these FortiGuard Bundles.

Bundles	Threat Protection	UTM	Enterprise Protection
FortiSandbox Cloud (plus FortiGuard CDR* and VOP* service)			•
FortiGuard Antispam		•	•
FortiGuard Web Filtering		•	•
FortiGuard Antivirus + Botnet + Mobile AV Service	•	•	•
FortiGuard IPS Service	•	•	•
FortiCare + FortiGuard App Control Service	•	•	•

\* Available when running FortiOS 6.0 and above



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