

# FortiGate® 600D

**Next Generation Firewall  
Internal Segmentation Firewall**



The FortiGate 600D delivers next generation firewall capabilities for mid-sized to large enterprises, with the flexibility to be deployed at the campus or data center edge and internal segments. Protects against cyber threats with security processor powered high performance, security efficacy and deep visibility.

**Security**

- Protects against known exploits, malware and malicious websites using continuous threat intelligence provided by FortiGuard Labs security services
- Identify thousands of applications including cloud applications for deep inspection into network traffic
- Protects 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, switching, wireless controller and high performance IPsec VPN capabilities to consolidate networking and security functionality
- Enables flexible deployment such as Next Generation Firewall and Internal Segmentation Firewall

**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
- Automatically builds Network Topology visualizations which discover IoT devices and provide complete visibility into Fortinet and Fabric-ready partner products



| Firewall | IPS    | NGFW     | Threat Protection | Interfaces                                    |
|----------|--------|----------|-------------------|---|
| 36 Gbps  | 4 Gbps | 3.8 Gbps | 3 Gbps            | Multiple GE RJ45, GE SFP and 10 GE SFP+ Slots |

Refer to specification table for details

## DEPLOYMENT



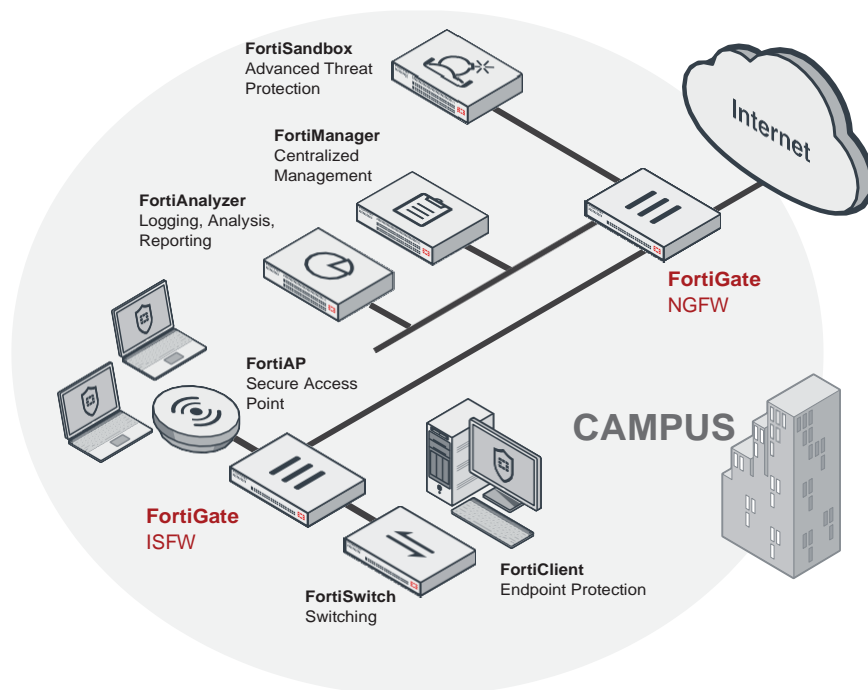
### Next Generation Firewall (NGFW)

- Combines threat prevention security capabilities into single high performance network security appliance
- Reduces complexity by creating campus topology view and providing granular visibility of devices, users and threat information
- Identify and stop threats with powerful intrusion prevention beyond port and protocol that examines the actual content of your network traffic
- Delivers industry's highest SSL inspection performance using industry-mandated ciphers
- Proactively detect malicious unknown threats using integrated cloud-based sandbox service



### Internal Segmentation Firewall (ISFW)

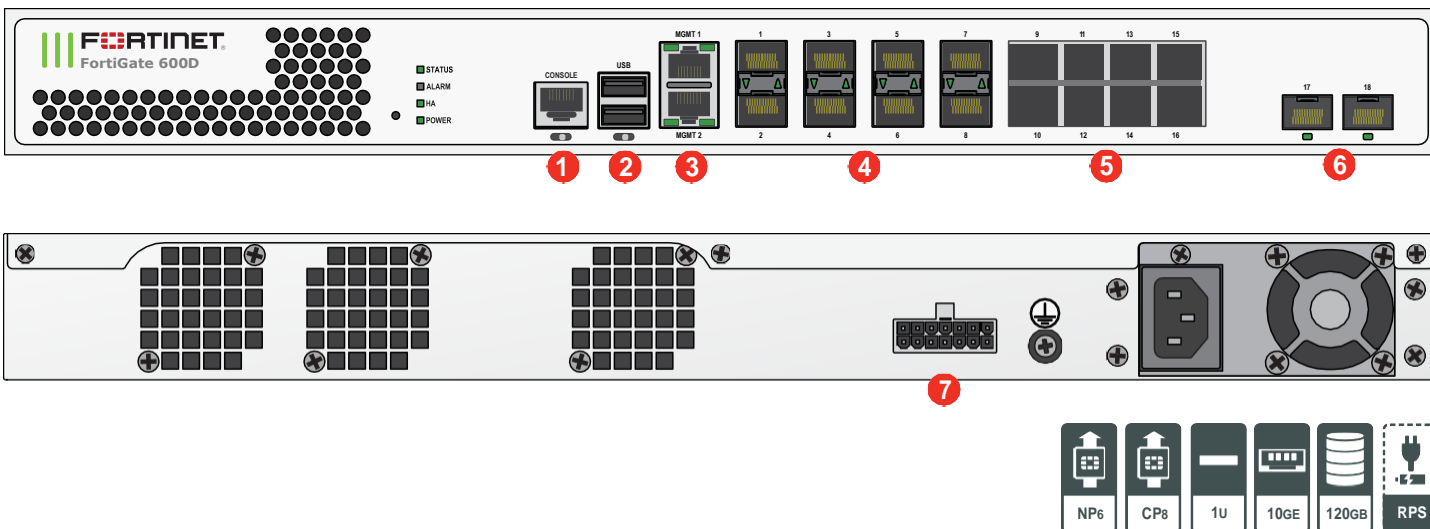
- Segmentation solution for end-to-end protection against threats while meeting compliance requirements
- High port density and accelerated traffic processing capacity, to protect multiple segments without compromising performance.
- Deploy transparently and rapidly into existing environments with minimal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



FortiGate 600D deployment in campus  
(NGFW, ISFW)

# HARDWARE

## FortiGate 600D




### Interfaces

- 1. Console Port
- 2. 2x USB Ports
- 3. 2x GE RJ45 Management Ports
- 4. 8x GE SFP Slots

- 5. 8x GE RJ45 Ports
- 6. 2x 10 GE SFP+ Slots
- 7. FRPS Connector

### Powered by SPU



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

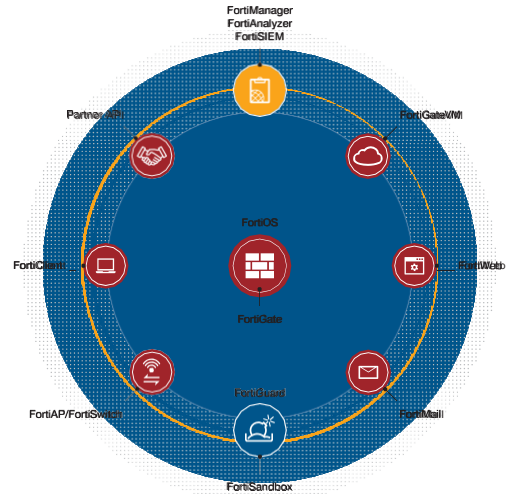
High speed connectivity is essential for network security segmentation. The FortiGate 600D provides 10 GE slots that simplify network designs without relying on additional devices to bridge desired connectivity.

# 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.

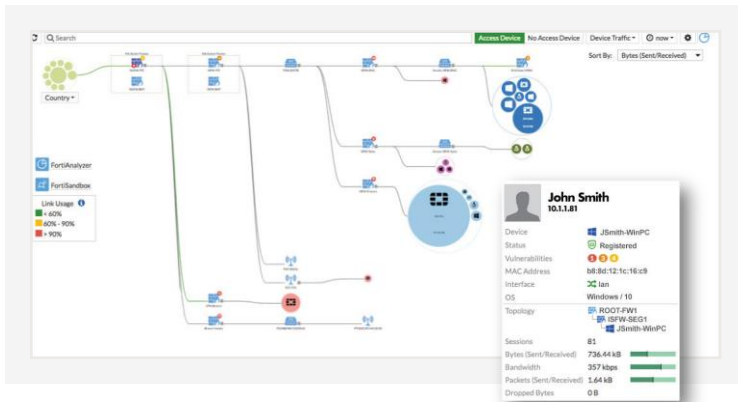
FortiGates are the foundation of Security Fabric, expanding security via visibility and control by tightly integrating with other Fortinet security products and Fabric-Ready Partner solutions.



## 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 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.
- 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 600D  |   |
|---|---|
| <b>Interfaces and Modules</b>                               |   |
| Hardware Accelerated 10GE SFP+ Slots                        | 2   |
| Hardware Accelerated GE SFP Slots                           | 8   |
| Hardware Accelerated GE RJ45 Ports                          | 8   |
| GE RJ45 Management  | 2   |
| USB Ports (Client / Server)                                 | 1 / 2                                     |
| Console Port  | 1   |
| Onboard Storage   | 1x 120 GB SSD                             |
| Included Transceivers                                       | 2 SFP SX                                  |
| <b>System Performance and Capacity</b>                      |   |
| IPv4 Firewall Throughput (1518/512/64 byte, UDP)            | 36/36/24 Gbps                             |
| IPv6 Firewall Throughput (1518/512/86 byte, UDP)            | 36/36/24 Gbps                             |
| Firewall Latency (64 byte, UDP)                             | 3 µs                                      |
| Firewall Throughput (Packet per Second)                     | 36 Mpps                                   |
| Concurrent Sessions (TCP)                                   | 5.5 Million                               |
| New Sessions/Second (TCP)                                   | 270,000                                   |
| Firewall Policies   | 10,000                                    |
| IPsec VPN Throughput (512 byte) <sup>1</sup>                | 20 Gbps                                   |
| Gateway-to-Gateway IPsec VPN Tunnels                        | 2,000                                     |
| Client-to-Gateway IPsec VPN Tunnels                         | 50,000                                    |
| SSL-VPN Throughput  | 2.2 Gbps                                  |
| Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode) | 5,000                                     |
| SSL Inspection Throughput (IPS, HTTP) <sup>3</sup>          | 3.5 Gbps                                  |
| Application Control Throughput (HTTP 64K) <sup>2</sup>      | 9 Gbps                                    |
| CAPWAP Throughput (1444 byte, UDP)                          | 10 Gbps                                   |
| Virtual Domains (Default/ Maximum)                          | 10 / 10                                   |
| Maximum Number of Switches Supported                        | 64  |
| Maximum Number of FortiAPs (Total / Tunnel)                 | 1024 / 512                                |
| Maximum Number of FortiTokens                               | 1,000                                     |
| Maximum Number of Registered Endpoints                      | 2,000                                     |
| High Availability Configurations                            | Active-Active, Active-Passive, Clustering |
| <b>System Performance—Optimal Traffic Mix</b>               |   |
| IPS Throughput <sup>2</sup>                                 | 7 Gbps                                    |
| <b>System Performance—Enterprise Traffic Mix</b>            |   |
| IPS Throughput <sup>2</sup>                                 | 4 Gbps                                    |
| NGFW Throughput <sup>2,4</sup>                              | 3.8 Gbps                                  |
| Threat Protection Throughput <sup>2,5</sup>                 | 3 Gbps                                    |

| FORTIGATE 600D                                  |   |
|---|---|
| <b>Dimensions and Power</b>                     |   |
| Height x Width x Length (inches)                | 1.75 x 17 x 12.68   |
| Height x Width x Length (mm)                    | 44.45 x 432 x 322   |
| Weight  | 11.46 lbs (5.2 kg)  |
| Form Factor                                     | 1 RU  |
| AC Power Supply                                 | 100–240V AC, 60–50 Hz   |
| Power Consumption (Average / Maximum)           | 126 W / 191 W   |
| Current (Maximum)                               | 110V/4A, 220V/2A  |
| Heat Dissipation                                | 650 BTU/h   |
| Redundant Power Supplies                        | Supports FRPS-100   |
| <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                                     | 45 dBA  |
| Operating Altitude                              | Up to 9,843 ft (3,000 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 600D                                       | FG-600D          | 2x10 GE SFP+ slots, 10x GE RJ45 ports, 8x GE SFP slots, SPUNP6 and CP8 hardware accelerated, 120 GB onboard SSD storage.  |
| Optional Accessories/Spares                          | SKU              | Description   |
| 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, 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  |
| 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   |
| 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 |



### 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 |
|--|-------------------|-----|-----------------------|
| FortiCASB SaaS-only Service ^  |                   |     | •                     |
| FortiGuard Industrial Service ^  |                   |     | •                     |
| FortiGuard Security Rating Service* ^  |                   |     | •                     |
| FortiGuard Antispam  |                   | •   | •                     |
| FortiGuard Web Filtering   |                   | •   | •                     |
| FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR*, Virus Outbreak Protection* and FortiSandbox Cloud Service* | •                 | •   | •                     |
| FortiGuard IPS Service   | •                 | •   | •                     |
| FortiCare + FortiGuard App Control Service   | •                 | •   | •                     |

\* Available when running FortiOS 6.0.1 and above ^ With new Q3-2018 SKUs