FERTINET

FortiGate[®] 3000D

Next Generation Firewall Segmentation Secure Web Gateway IPS Mobile Security



The FortiGate 3000D series delivers high performance next generation firewall (NGFW) capabilities for large enterprises and service providers. With multiple high-speed interfaces, high-port density, and high-throughput, ideal deployments are at the enterprise edge, hybrid data center core, and across internal segments. Leverage industry-leading IPS, SSL inspection, and advanced threat protection to optimize your network's performance. Fortinet's Security-Driven Networking securely integrates with the new generation of cybersecurity solutions.

Security

- Identifies thousands of applications inside network traffic for deep inspection and granular policy enforcement
- Protects against malware, exploits, and malicious websites in both encrypted and non-encrypted traffic
- Prevents and detects against known attacks using continuous threat intelligence from AI-powered FortiGuard Labs security services
- Proactively blocks unknown sophisticated attacks in realtime with the Fortinet Security Fabric integrated AI-powered FortiSandbox

Performance

- Engineered for Innovation using Fortinet's purpose-built security processors (SPU) to deliver the industry's best threat protection performance and ultra-low latency
- Provides industry-leading performance and protection for SSL encrypted traffic including the first firewall vendor to provide TLS 1.3 deep inspection

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

- Application aware routing with in-built SD-WAN capabilities to achieve consistent application performance and the best user experience
- Built-in advanced routing capabilities to deliver high performance with encrypted IPSEC tunnels at scale

Management

- Includes a management console that is effective and simple to use, which provides a comprehensive network of automation & visibility
- Provides Zero Touch Provisioning leveraging Single Pane of Glass Management powered by the Fabric Management Center
- Predefined compliance checklists analyze the deployment and highlight best practices to improve the overall security posture

Security Fabric

- Enables Fortinet and Fabric-ready partners' products to provide broader visibility, integrated end-to-end detection, threat intelligence sharing, and automated remediation
- 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	
80 Gbps	23 Gbps	22 Gbps	13 Gbps	Multiple 10 GE SFP+ Multiple GE SFP and GE RJ45	

Deployment

Next Generation Firewall (NGFW)

- Reduce the complexity and maximize your ROI by integrating threat protection security capabilities into a single highperformance network security appliance, powered by Fortinet's Security Processing Unit (SPU)
- Full visibility into users, devices, applications across the entire attack surface and consistent security policy enforcement irrespective of asset location
- Protect against network exploitable vulnerabilities with Industryvalidated IPS security effectiveness, low latency and optimized network performance
- Automatically block threats on decrypted traffic using the Industry's highest SSL inspection performance, including the latest TLS 1.3 standard with mandated ciphers
- Proactively block newly discovered sophisticated attacks in real-time with Al-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric

Segmentation

- Segmentation that adapts to any network topology, delivering end-to-end security from the branch level to data centers and extending to multiple clouds
- Reduce security risks by improving network visibility from the components of the Fortinet Security Fabric, which adapt access permissions to current levels of trust and enforce access control effectively and efficiently
- Delivers defense in depth security powered by high-performance L7 inspection and remediation by Fortinet's SPU, while delivering third party validated TCO of per protected Mbps
- Protects critical business applications and helps implement any compliance requirements without network redesigns

Secure Web Gateway (SWG)

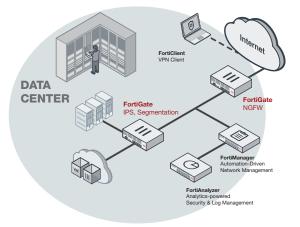
- Secure web access from both internal and external risks, even for encrypted traffic at high performance
- Enhanced user experience with dynamic web and video caching
- Block and control web access based on user or user groups across URL's and domains
- Prevent data loss and discover user activity to known and unknown cloud applications
- Block DNS requests against malicious domains
- Multi-layered advanced protection against zero-day malware threats delivered over the web



- Purpose-built security processors delivering industry validated IPS performance with high throughput and low latency
- Deploy virtual patches at the network level to protect against network exploitable vulnerabilities and optimize network protection time
- Deep packet inspection at wire speeds offers unparalleled threat visibility into network traffic including traffic encrypted with the latest TLS 1.3
- Proactively block newly discovered sophisticated attacks in realtime with advanced threat protection provided by the intelligence services of the Fortinet Security Fabric

Mobile Security for 4G, 5G, and IOT

- Experience high performance networking speeds with FQ, CGAT and accelerated IPv4 and IPv6 traffic, powered by multiple SPUs and 4G SGi LAN and 5G N6 security.
- RAN Access Security with highly scalable and best performing IPsec aggregation and control security gateway (SecGW)
- User plane security enabled by full Threat Protection and visibility into GTP-U inspection
- 4G Signaling security to inspect various protocols such as SCTP, Diameter, GTP-C, SIP and provide protection against attacks
- 4G and 5G cores IoT signaling storm protection
- High-speed interfaces to enable deployment flexibility



FortiGate 3000D deployment in data center (NGFW, IPS, and Intent-based Segmentation)

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Hardware

FortiGate 3000D

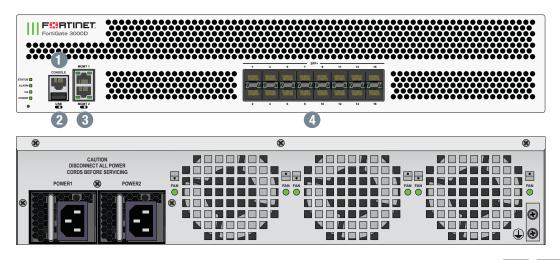


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Interfaces

- 1. Console Port
- 2. USB Management Port

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

- 3. 2x GE RJ45 Management Ports
- 4. 16x 10G SFP+/GE SFP Slots

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 3000D 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

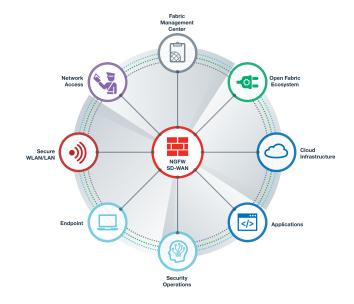
The Security Fabric is the cybersecurity platform that enables digital innovations. It delivers broad visibility of the entire attack surface to better manage risk. It's unified and integrated solution reduces the complexity of supporting multiple- point products, while automated workflows increase operational speeds and reduce response times across the Fortinet deployment ecosystem. The Fortinet Security Fabric overs the following key areas under a single management center:

- Security-Driven Networking that secures, accelerates, and unifies the network and user experience
- Zero Trust Network Access that identifies and secures users and devices in real-time, on and off of the network
- Dynamic Cloud Security that protects and controls cloud infrastructures and applications
- Al-Driven Security Operations that automatically prevents, detects, isolates, and responds to cyber threat

FortiOS

FortiGates are the foundation of the Fortinet Security Fabric—the core is FortiOS. All security and networking capabilities across the entire FortiGate platform are controlled with one intuitive operating system. FortiOS reduces complexity, costs, and response times by truly consolidating next-generation security products and services into one platform.

- A truly consolidated platform with a single OS and pane-of-glass for across the entire digital attack surface.
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives, and ICSA validated security and performance.
- Leverage the latest technologies such as deception-based security.



- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings in addition to true TLS 1.3 support.
- Automatically prevent, detect, and mitigate advanced attacks within minutes with an integrated Al-driven security and advanced threat protection.
- Improve and unify the user experience with innovative SD-WAN capabilities with the ability to detect, contain, and isolate threats with automated segmentation.
- Utilize SPU hardware acceleration to boost network security performance.

Services



FortiGuard[™] Security Services

FortiGuard Labs offer 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.

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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 and forti.net/forticare

Specifications

	FORTIGATE 3000D			
Interfaces and Modules				
10 GE SFP+ / GE SFP Slots	16			
GE RJ45 Management Ports	2			
USB Ports (Server)	1			
Console Port	1			
Internal Storage	1x 480 GB SSD			
Included Transceivers	2x SFP+ (SR 10GE)			
System Performance — Enterprise Traffic Mix				
IPS Throughput ²	23 Gbps			
NGFW Throughput ^{2,4}	22 Gbps			
Threat Protection Throughput ^{2, 5}	13 Gbps			
System Performance and Capacity				
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) ¹	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	30,000			
(Recommended Maximum, Tunnel Mode)				
SSL Inspection Throughput (IPS, avg. HTTPS) ³	15 Gbps			
SSL Inspection CPS (IPS, avg. HTTPS) ³	8,000			
SSL Inspection Concurrent Session (IPS, avg. HTTPS) ³	3.5 Million			
Application Control Throughput (HTTP 64K) ²	40 Gbps			
CAPWAP Throughput (1444 byte, UDP)	22 Gbps			
Virtual Domains (Default / Maximum)	10 / 500			
Maximum Number of FortiSwitches Supported	256			
Maximum Number of FortiAPs (Total / Tunnel Mode)	4,096 / 2,048			
Maximum Number of FortiTokens	20,000			
High Availability Configurations	Active / Active, Active / Passive, Clustering			

	FORTIGATE 3000D			
Dimensions and Power				
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	37.5 lbs (17.0 kg)			
Form Factor	2 RU			
AC Power Supply	100–240V AC, 50–60 Hz			
Power Consumption (Average / Maximum)	310 W / 427 W			
Heat Dissipation	1457 BTU/h			
Redundant Power Supplies	Yes, Hot Swappable			
Operating Environment and Certifications				
Operating Temperature	32-104°F (0-40°C)			
Storage Temperature	-31-158°E (-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 values use an average of HTTPS sessions of different cipher suites.

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.

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Order Information

Product	SKU	Description
FortiGate 3000D	FG-3000D	16x 10 GE SFP+ slots, 2x GE RJ45 Management, SPU NP6 and CP8 hardware accelerated, 480 GB SSD onboard storage, and dual AC power supplies.
Optional Accessories		
Rack Mount Sliding Rails	SP-FG3040B-RAIL	Rack mount sliding rails for FG-1000C/-DC, FG-1200D, FG-1500D, FG-3040B/-DC, FG-3140B/-DC, FG-3240C/-DC, FG-3000D, FG-3100D, FG-3200D, FG-3700D/-DC, FG-3700DX, FG-3810D 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.

Bundles



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	360 Protection	Enterprise Protection	UTM	Threat Protection
FortiCare	ASE 1	24x7	24x7	24x7
FortiGuard App Control Service	•	•	•	•
FortiGuard IPS Service	•	•	•	•
FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	٠
FortiGuard Web Filtering Service	•	•	•	
FortiGuard Antispam Service	•	•	•	
FortiGuard Security Rating Service	•	•		
FortiGuard Industrial Service	•	•		
FortiCASB SaaS-only Service	•	•		
FortiConverter Service	•			
SD-WAN Cloud Assisted Monitoring ²	•			
SD-WAN Overlay Controller VPN Service ²	•			
FortiAnalyzer Cloud ²	•			
FortiManager Cloud ²	•			

1. 24x7 plus Advanced Services Ticket Handling 2. Available when running FortiOS 6.2



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