

FortiGate® 600E Series

FortiGate 600E and 601E

**Next Generation Firewall
Secure SD-WAN**



The FortiGate 600E series delivers next generation firewall capabilities for mid-sized to large enterprises, with the flexibility to be deployed at the campus or enterprise branch. Protect against cyber threats with security processor powered high performance, security efficacy and deep visibility.

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
- Prevent and detect against known and unknown attacks using continuous threat intelligence from AI powered FortiGuard Labs security services

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, ICASA, Virus Bulletin and AV Comparatives

Networking

- Best of Breed SD-WAN capabilities to enable application steering using WAN path control for high quality of experience
- Delivers extensive routing, switching, wireless controller, high-performance, and scalable IPsec VPN capabilities to consolidate networking and security

Management

- Includes management console that’s effective, simple to use, and provides comprehensive network automation & visibility.
- Provides Zero Touch Integration with Security Fabric’s Single Pane of Glass Management
- 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 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
36 Gbps	10 Gbps	9.5 Gbps	7 Gbps	Multiple GE RJ45, GE SFP and 10 GE SFP+ Slots

Refer to specification table for details

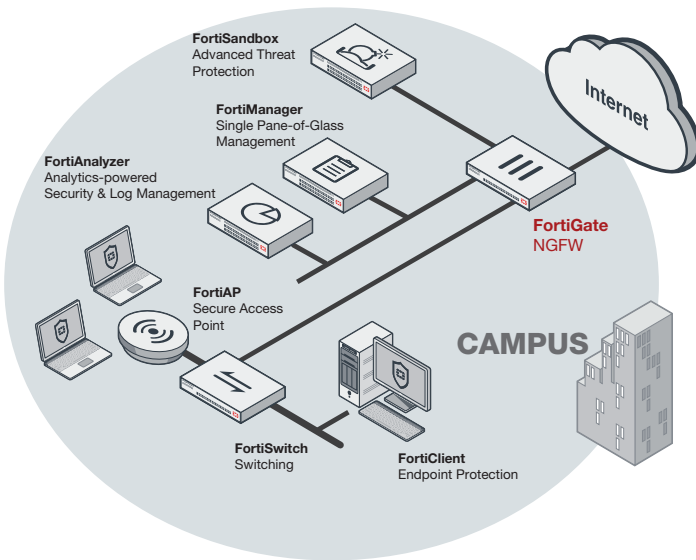
Deployment

Next Generation Firewall (NGFW)

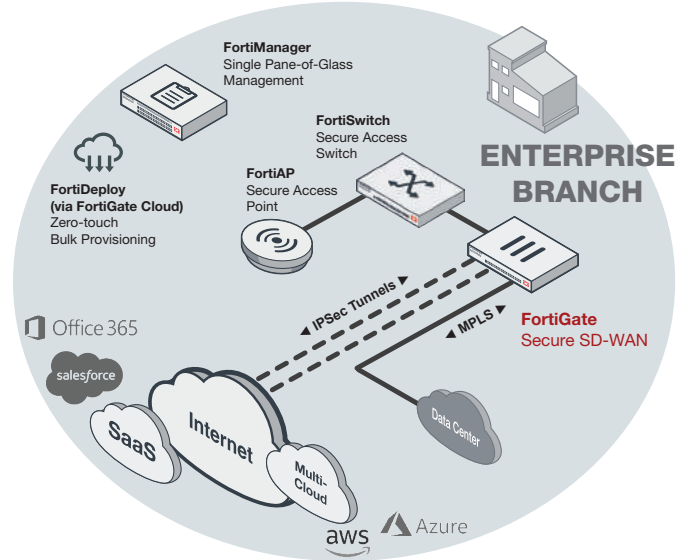
- Reduce complexity by combining threat protection security capabilities into single high-performance network security appliance
- Identify and stop threats with powerful intrusion prevention beyond port and protocol that examines the actual applications in your network traffic
- Delivers industry's highest SSL inspection performance using industry-mandated ciphers while maximizing ROI
- Proactively blocks newly discovered sophisticated attacks in real-time with advanced threat protection

Secure SD-WAN

- Secure direct Internet access for Cloud applications for improved latency and reduce WAN cost spending
- High-performance and cost-effective threat protection capabilities
- WAN Path Controller and Link Health Monitoring for better application performance
- Security Processor powered industry's best IPsec VPN and SSL Inspection performance
- Simplified Management and Zero-Touch deployment



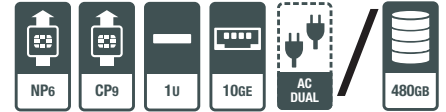
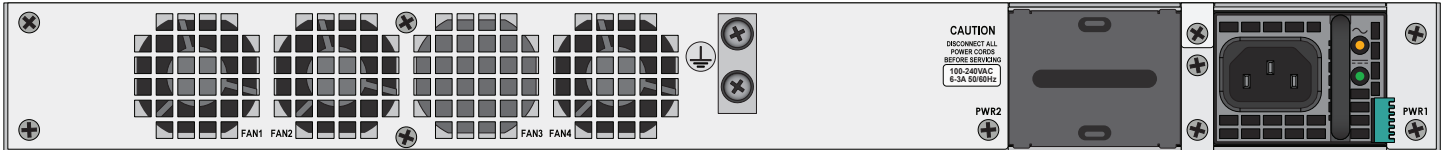
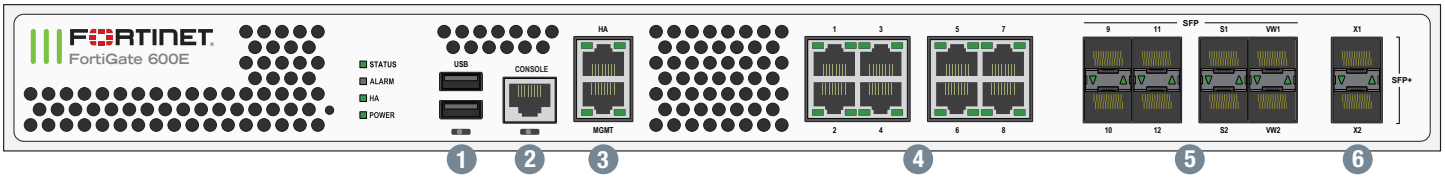
FortiGate 600E/601E deployment in Campus (NGFW)



FortiGate 600E/601E deployment in Enterprise Branch (Secure SD-WAN)

Hardware

FortiGate 600E/601E



Interfaces

- | | |
|-----------------------------|------------------------|
| 1. USB Port | 4. 8x GE RJ45 Ports |
| 2. Console Port | 5. 8x GE SFP Slots |
| 3. 2x GE RJ45 MGMT/HA Ports | 6. 2x 10 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

Fortinet’s new, breakthrough SPU CP9 content processor works outside of the direct flow of traffic and accelerates the inspection of computationally intensive security features:

- Enhanced IPS performance with unique capability of full signature matching at ASIC
- SSL Inspection capabilities based on the latest industry mandated cipher suites
- Encryption and decryption offloading

Specifications

	FORTIGATE 600E	FORTIGATE 601E
Interfaces and Modules		
10 GE SFP+ Slots		2
GE RJ45 Interfaces		8
GE SFP Slots		8
GE RJ45 Management Ports		2
USB Ports		2
RJ45 Console Port		1
Local Storage	NIL	2x 240 GB SSD
Included Transceivers		2x SFP (SX 1 GE)
System Performance — Enterprise Traffic Mix		
IPS Throughput ²		10 Gbps
NGFW Throughput ^{2,4}		9.5 Gbps
Threat Protection Throughput ^{2,5}		7 Gbps
System Performance and Capacity		
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)		36 / 36 / 27 Gbps
IPv6 Firewall Throughput (1518 / 512 / 64 byte, UDP)		36 / 36 / 27 Gbps
Firewall Latency (64 byte, UDP)		2 µs
Firewall Throughput (Packet per Second)		40.5 Mpps
Concurrent Sessions (TCP)		8 Million
New Sessions/Second (TCP)		450,000
Firewall Policies		10,000
IPsec VPN Throughput (512 byte) ¹		20 Gbps
Gateway-to-Gateway IPsec VPN Tunnels		2,000
Client-to-Gateway IPsec VPN Tunnels		50,000
SSL-VPN Throughput		7 Gbps
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)		10,000
SSL Inspection Throughput (IPS, avg. HTTPS) ³		8 Gbps
SSL Inspection CPS (IPS, avg. HTTPS) ³		5,500
SSL Inspection Concurrent Session (IPS, avg. HTTPS) ³		800,000
Application Control Throughput (HTTP 64K) ²		15 Gbps
CAPWAP Throughput (HTTP 64K)		18 Gbps
Virtual Domains (Default / Maximum)		10 / 10
Maximum Number of FortiSwitches Supported		64
Maximum Number of FortiAPs (Total / Tunnel)		1,024 / 512
Maximum Number of FortiTokens		5,000
Maximum Number of Registered FortiClients		2,000
High Availability Configurations		Active-Active, Active-Passive, Clustering

	FORTIGATE 600E	FORTIGATE 601E
Dimensions and Power		
Height x Width x Length (inches)	1.75 x 17.0 x 15.0	
Height x Width x Length (mm)	44.45 x 432 x 380	
Weight	16.1 lbs (7.3 kg)	16.6 lbs (7.5 kg)
Form Factor	1 RU	
Power Consumption (Average / Maximum)	129 W / 244 W	
Power Source	100–240V 60–50Hz	
Current (Maximum)	6A @ 100V	
Heat Dissipation	832 BTU/h	
Redundant Power Supplies (Hot Swappable)	optional	
Operating Environment and Certifications		
Operating Temperature	32–104°F (0–40°C)	
Storage Temperature	-31–158°F (-35–70°C)	
Humidity	10–90% non-condensing	
Noise Level	59 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.

Order Information

Product	SKU	Description
FortiGate 600E	FG-600E	2x 10 GE SFP+ slots, 10x GE RJ45 ports (including 1x MGMT port, 1x HA port, 8x switch ports), 8x GE SFP slots, SPU NP6 and CP9 hardware accelerated.
FortiGate 601E	FG-601E	2x 10 GE SFP+ slots, 10x GE RJ45 ports (including 1x MGMT port, 1x HA port, 8x switch ports), 8x GE SFP slots, SPU NP6 and CP9 hardware accelerated, 2x 240 GB onboard SSD storage.
Optional Accessories		
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 Copper SFP+ Transceiver Module, up to 30m	FS-TRAN-SFP+GC	10 GE copper SFP+ RJ45 transceiver. For FortiSwitch only, up to 30m.
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.
Optional Power Supply	SP-FG300E-PS	AC power supply for FG-300/301E, FG-400/401E, FG-500/501E, FG-600/601E, FAZ-200F/300F/800F and FMG-200F/300F.

Bundles



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	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	•	•	•	•
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

