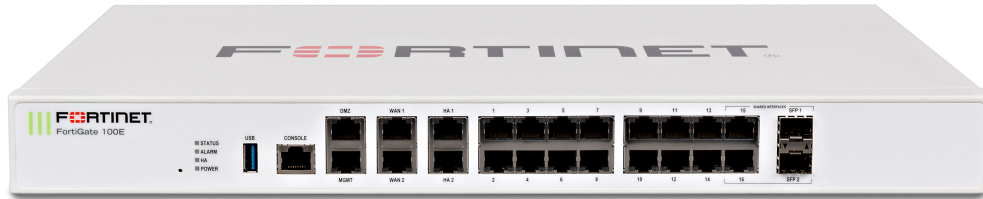


# FortiGate® 100E Series

FortiGate 100E, 101E, 100EF, and 140E-POE

**Next Generation Firewall  
Secure SD-WAN  
Secure Web Gateway**



The FortiGate 100E series provides an application-centric, scalable and secure SD-WAN solution with next generation firewall (NGFW) capabilities for mid-sized to large enterprises deployed at the campus or enterprise branch level. Protects against cyber threats with system-on-a-chip acceleration and industry-leading secure SD-WAN in a simple, affordable, and easy to deploy solution. Fortinet's Security-Driven Networking approach provides tight integration of the network to the new generation of security.

### 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 real-time 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, ICASA, Virus Bulletin, and AV Comparatives

### Networking

- Dynamic Path Selection over any WAN transport to provide better application experience based on self-healing SD-WAN capabilities
- Advanced routing, Scalable VPN, multi-cast and IPV4/IPV6 forwarding powered by purpose-built network processors

### Management

- SD-WAN Orchestration provides intuitive and simplified workflow for centralized management and provisioning of business policies in a few easy clicks
- Expedited deployment with Zero touch provisioning well-suited for large and distributed infrastructure
- Automated VPN tunnels for flexible hub-to-spoke and full-mesh deployment at scale to provide bandwidth aggregation and encrypted WAN paths
- 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
<b>7.4 Gbps</b>	<b>500 Mbps</b>	<b>360 Mbps</b>	<b>250 Mbps</b>	Multiple GE RJ45, GE SFP Slots   PoE/+ Variants

Refer to the specifications table for details

## Deployment

### Next Generation Firewall (NGFW)

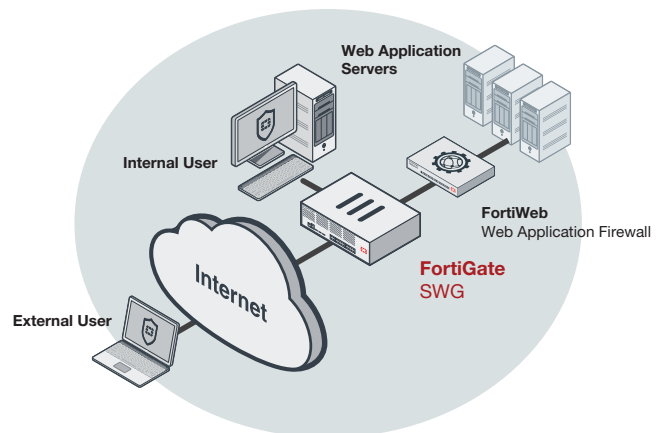
- Reduce the complexity and maximize your ROI by integrating threat protection security capabilities into a single high-performance network security appliance, powered by Fortinet's Security Processing Unit (SPU)
- Full visibility into users, devices, applications across the entire attack surface and consistent security policy enforcement irrespective of asset location
- Protect against network exploitable vulnerabilities with industry-validated IPS that offers 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 AI-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric

### Secure Web Gateway (SWG)

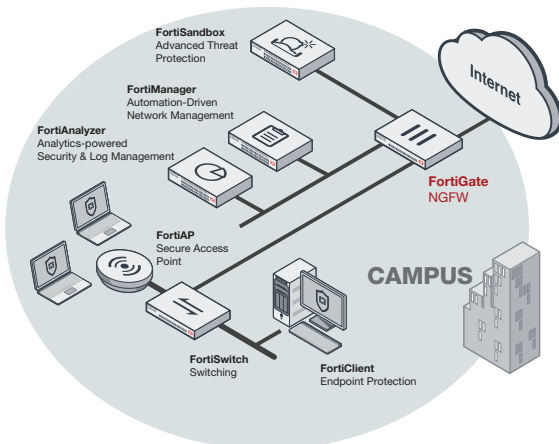
- Secure web access from both internal and external risks, even for encrypted traffic at high performance
- Enhanced user experience with dynamic web and video caching
- Block and control web access based on user or user groups across URL's and domains
- Prevent data loss and discover user activity to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

### Secure SD-WAN

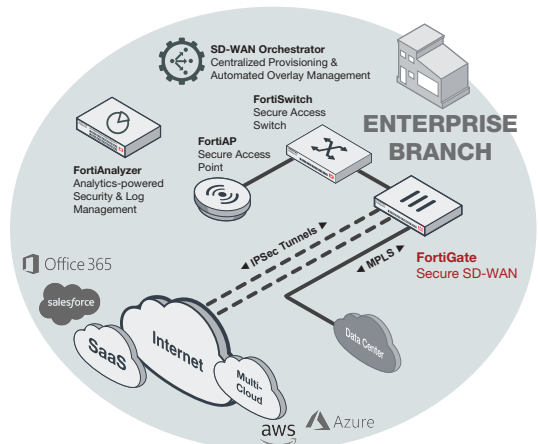
- Consistent business application performance with accurate detection, dynamic WAN path steering on any best-performing WAN transport
- Accelerated Multi-cloud access for faster SaaS adoption with cloud-on-ramp
- Self-healing networks with WAN edge high availability, sub-second traffic switchover-based and real-time bandwidth compute-based traffic steering
- Automated Overlay tunnels provides encryption and abstracts physical hybrid WAN making it simple to manage.
- Simplified and intuitive workflow with SD-WAN Orchestrator for management and zero touch deployment
- Enhanced analytics both real-time and historical provides visibility into network performance and identify anomalies
- Strong security posture with next generation firewall and real-time threat protection



FortiGate 100E SWG deployment



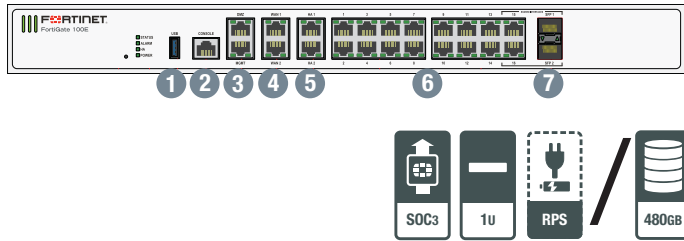
FortiGate 100E deployment in Campus (NGFW)



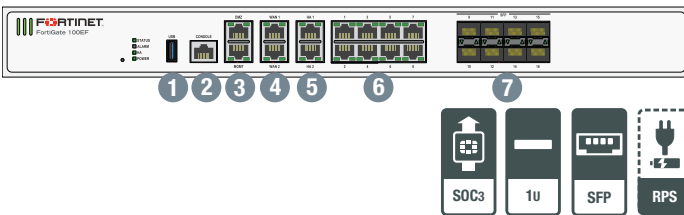
FortiGate 100E deployment in Enterprise Branch (Secure SD-WAN)

## Hardware

### FortiGate 100E/101E



### FortiGate 100EF



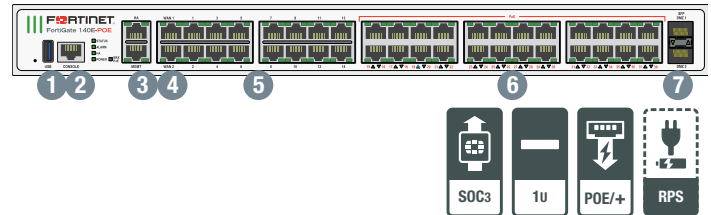
### Interfaces

1. USB Port
2. Console Port
3. 2x GE RJ45 MGMT/DMZ Ports
4. 2x GE RJ45 WAN Ports
5. 2x GE RJ45 HA Ports
6. 8x GE RJ45 Ports
7. 8x GE SFP Slots

### Interfaces

1. USB Port
2. Console Port
3. 2x GE RJ45 MGMT/DMZ Ports
4. 2x GE RJ45 WAN Ports
5. 2x GE RJ45 HA Ports
6. 14x GE RJ45 Ports
7. 2x GE RJ45/SFP Shared Media Pairs

### FortiGate 140E-POE



### Interfaces

1. USB Port
2. Console Port
3. 2x GE RJ45 MGMT/HA Ports
4. 2x GE RJ45 WAN Ports
5. 14x GE RJ45 Ports
6. 24x GE RJ45 POE Ports
7. 2x GE SFP DMZ 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:

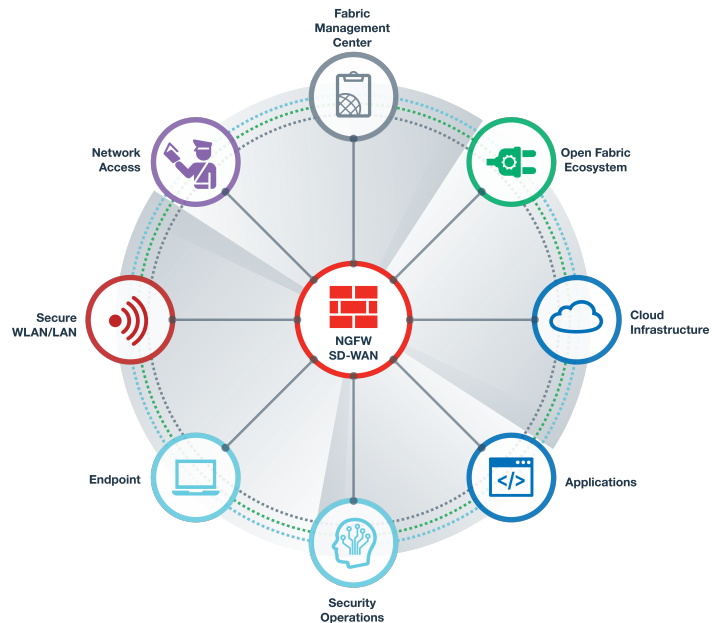
- Enhanced IPS performance with unique capability of full signature matching at ASIC
- SSL Inspection capabilities based on the latest industry mandated cipher suites
- Encryption and decryption offloading

## 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. Its 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 covers 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
- **AI-Driven Security Operations** that automatically prevents, detects, isolates, and responds to cyber threats



### 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 ICSCA 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 AI-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.



#### 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](https://forti.net/fortiguard) and [forti.net/forticare](https://forti.net/forticare)

# Specifications

	FORTIGATE 100E	FORTIGATE 101E	FORTIGATE 100EF	FORTIGATE 140E-POE
<b>Hardware Specifications</b>				
GE RJ45 Ports	14	14	8	14
GE RJ45 Management/HA/DMZ Ports	1 / 2 / 1	1 / 2 / 1	1 / 2 / 1	1 / 1 / —
GE SFP Slots	—	—	8	2
GE RJ45 PoE/+ Ports	—	—	—	24
GE RJ45 WAN Ports	2	2	2	2
GE RJ45 or SFP Shared Ports	2	2	—	—
USB Port	1	1	1	1
Console Port	1	1	1	1
Internal Storage	—	1x 480 GB SSD	—	—
Included Transceivers	0	0	0	0
<b>System Performance — Enterprise Traffic Mix</b>				
IPS Throughput <sup>2</sup>			500 Mbps	
NGFW Throughput <sup>2,4</sup>			360 Mbps	
Threat Protection Throughput <sup>2,5</sup>			250 Mbps	
<b>System Performance</b>				
Firewall Throughput (1518 / 512 / 64 byte UDP packets)			7.4 / 7.4 / 4.4 Gbps	
Firewall Latency (64 byte UDP packets)			3 µs	
Firewall Throughput (Packets Per Second)			6.6 Mpps	
Concurrent Sessions (TCP)			2 Million	
New Sessions/Second (TCP)			30,000	
Firewall Policies			10,000	
IPsec VPN Throughput (512 byte) <sup>1</sup>			4 Gbps	
Gateway-to-Gateway IPsec VPN Tunnels			2,000	
Client-to-Gateway IPsec VPN Tunnels			10,000	
SSL-VPN Throughput			250 Mbps	
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)			500	
SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>			130 Mbps	
SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>			130	
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>			125,000	
Application Control Throughput (HTTP 64K) <sup>2</sup>			1 Gbps	
CAPWAP Throughput (1444 byte, UDP)			1.5 Gbps	
Virtual Domains (Default / Maximum)			10 / 10	
Maximum Number of FortiSwitches Supported			32	
Maximum Number of FortiAPs (Total / Tunnel Mode)			64 / 32	
Maximum Number of FortiTokens			5,000	
High Availability Configurations			Active / Active, Active / Passive, Clustering	
<b>Dimensions</b>				
Height x Width x Length (inches)	1.75 x 17 x 10	1.75 x 17 x 10	1.75 x 17 x 10	1.75 x 17 x 15.5
Height x Width x Length (mm)	44.45 x 432 x 254	44.45 x 432 x 254	44.45 x 432 x 254	44.45 x 432 x 394
Form Factor (supports EIA / non-EIA standards)	Rack Mount, 1 RU	Rack Mount, 1 RU	Rack Mount, 1 RU	Rack Mount, 1 RU
Weight	7.28 lbs (3.3 kg)	7.28 lbs (3.3 kg)	7.28 lbs (3.3 kg)	12.4 lbs (5.6 kg)
<b>Environment</b>				
Power Input			100–240V AC, 50–60 Hz	
Maximum Current	100V / 0.52A, 240V / 0.22A	100V / 0.59A, 240V / 0.25A	100V / 0.52A, 240V / 0.22A	100V / 5A
Total Available PoE Power Budget*	—	—	—	400 W
Power Consumption (Average / Maximum)	23.0 W / 28.6 W; 51.9 VA	24.8 W / 33.8 W; 59.2 VA	24.4 W / 28.6 W; 51.9 VA	477.1 W / 500.0 W
Heat Dissipation	97.6 BTU/h	115.3 BTU/h	97.6 BTU/h	1706.07 BTU/h

\* Maximum loading on each PoE/+ port is 30 W (802.3at).

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.

# Specifications

	FORTIGATE 100E	FORTIGATE 101E	FORTIGATE 100EF	FORTIGATE 140E-POE
<b>Environment</b>				
Operating Temperature		32–104°F (0–40°C)		
Storage Temperature		-31–158°F (-35–70°C)		
Operating Altitude		Up to 7,400 ft (2,250 m)		
Humidity		10–90% non-condensing		
Noise Level	40.4 dBA	40.4 dBA	40.4 dBA	57 dBA
Compliance		FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB		
Certifications		ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN; IPv6		

# Order Information

Product	SKU	Description
FortiGate 100E	FG-100E	20x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x Mgmt port, 2x HA ports, 14x switch ports), 2x Shared Media pairs (including 2x GE RJ45 ports, 2x SFP slots)
FortiGate 101E	FG-101E	20 x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x Mgmt port, 2x HA ports, 14x switch ports), 2x Shared Media pairs (including 2x GE RJ45 ports, 2x SFP slots) 480 GB onboard storage
FortiGate 100EF	FG-100EF	14x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x Mgmt port, 2x HA ports, 8x internal switch ports), 8x SFP ports
FortiGate 140E-POE	FG-140E-POE	42x GE RJ45 ports (including 2x WAN ports, 1x Mgmt port, 1x HA port, 24x RJ45 GE PoE/PoE+ ports, 14x switch ports), 2x GE SFP DMZ slots
<b>Optional Accessories</b>		
External redundant AC power supply	FRPS-100	External redundant AC power supply for up to 4 units: FG-100/101E, FG-300C, FG-310B, FS-348B and FS-448B. Up to 2 units: FG-200B, FG-200D, FG-200/201E, FG-240D and FG-300D, FG-400D, FG-500D, FG-600D, FHV-500D, FDD-200B, FDD-400B, FDD-600B and FDD-800B.
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.

# 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	Unified Threat Protection	Threat Protection
FortiCare	ASE <sup>1</sup>	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	•	•		
FortiGuard IoT Detection Service <sup>2</sup>	•	•		
FortiConverter Service	•	•		
IPAM Cloud <sup>2</sup>	•			
SD-WAN Orchestrator Entitlement <sup>2</sup>	•			
SD-WAN Cloud Assisted Monitoring	•			
SD-WAN Overlay Controller VPN Service	•			
FortiAnalyzer Cloud	•			
FortiManager Cloud	•			

1. 24x7 plus Advanced Services Ticket Handling 2. Available when running FortiOS 6.4

