

DATA SHEET

FortiGate® 100E Series

FG-100E, FG-100EF, and FG-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
- 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 for best-in-class security effectiveness and performance
- Received unparalleled third-party certifications from NSS Labs

Networking

- Delivers advanced networking capabilities that seamlessly integrate with advanced layer 7 security and virtual domains (VDMs) to offer extensive deployment flexibility, multi-tenancy and effective utilization of resources
- Delivers high-density, flexible combination of various high-speed interfaces to enable best TCO for customers for data center and WAN deployments

Management

- Includes a management console that is effective, simple to use, and provides comprehensive network automation and visibility
- Provides Zero Touch Integration with Fortinet’s 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

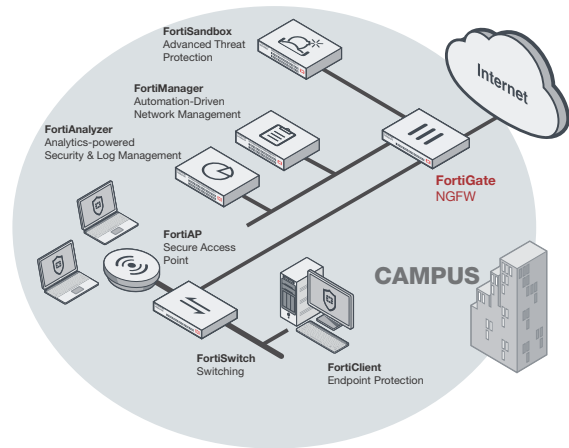
- Enables Fortinet and Fabric-ready partners’ products to provide broader visibility, integrated end-to-end detection, threat intelligence sharing, and automated remediation

Firewall	IPS	NGFW	Threat Protection	Interfaces
7.4 Gbps	500 Mbps	360 Mbps	250 Mbps	Multiple GE RJ45, GE SFP Slots PoE/+ Variants

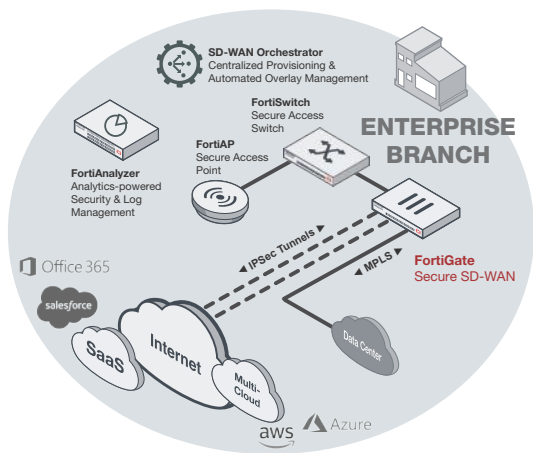
DEPLOYMENT

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



Campus Next Generation Firewall Deployment



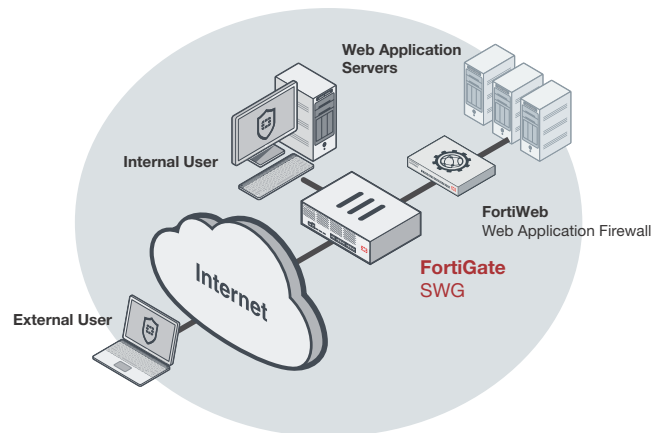
Enterprise Branch Secure SD-WAN Deployment

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

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 Web Gateway Deployment



HARDWARE

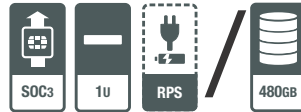
FortiGate 100E



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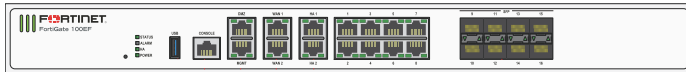
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Interfaces

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

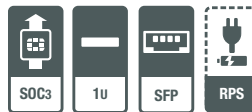
FortiGate 100EF



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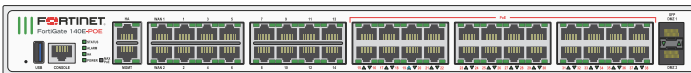
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Interfaces

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

FortiGate 140E-POE



1 2

3 4

5

6

7



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

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
- VPN, CAPWAP and IP tunnel acceleration
- Anomaly-based intrusion prevention, checksum offload, and packet defragmentation
- Traffic shaping and priority queuing

Content Processor

Fortinet's ninth generation custom SPU CP9 content processor works outside of the direct flow of traffic and accelerates the inspection.

Powered by SPU

- Fortinet's 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



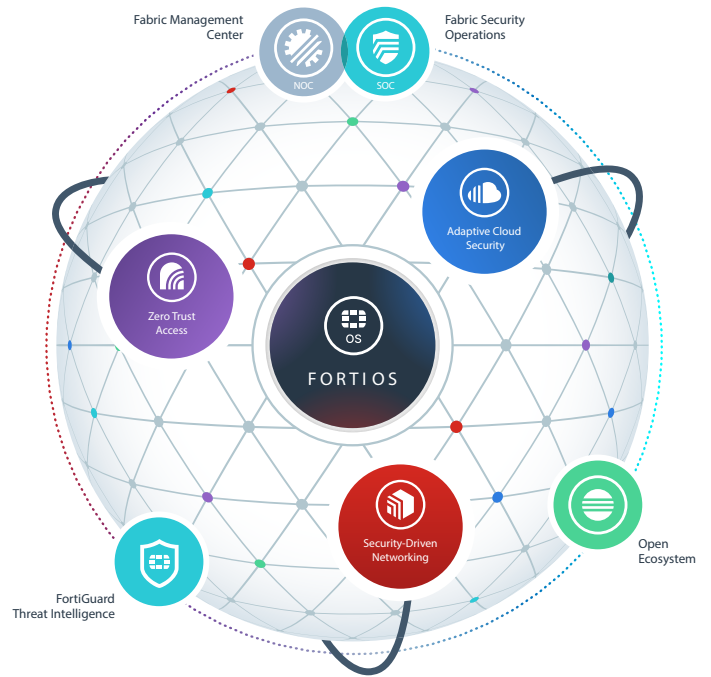
FORTINET SECURITY FABRIC

Security Fabric

The industry's highest-performing cybersecurity platform, powered by FortiOS, with a rich ecosystem designed to span the extended digital attack surface, delivering fully automated, self-healing network security.

- **Broad:** Coordinated detection and enforcement across the entire digital attack surface and lifecycle with converged networking and security across edges, clouds, endpoints and users
- **Integrated:** Integrated and unified security, operation, and performance across different technologies, location, deployment options, and the richest Ecosystem
- **Automated:** Context aware, self-healing network & security posture leveraging cloud-scale and advanced AI to automatically deliver near-real-time, user-to-application coordinated protection across the Fabric

The Fabric empowers organizations of any size to secure and simplify their hybrid infrastructure on the journey to digital innovation.



FortiOS™ Operating System

FortiOS, Fortinet's leading operating system enable the convergence of high performing networking and security across the Fortinet Security Fabric delivering consistent and context-aware security posture across network endpoint, and clouds. The organically built best of breed capabilities and unified approach allows organizations to run their businesses without compromising performance or protection, supports seamless scalability, and simplifies innovation consumption.

The release of FortiOS 7 dramatically expands the Fortinet Security Fabric's ability to deliver consistent security across hybrid deployment models consisting on appliances, software and As-a-Service with SASE, ZTNA and other emerging cybersecurity solutions.

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™ Services

Fortinet is dedicated to helping our customers succeed, and every year FortiCare services help thousands of organizations get the most from their Fortinet Security Fabric solution. We have more than 1,000 experts to help accelerate technology implementation, provide reliable assistance through advanced support, and offer proactive care to maximize security and performance of Fortinet deployments.



SPECIFICATIONS

	FORTIGATE 100E	FORTIGATE 100EF	FORTIGATE 140E-POE
Hardware Specifications			
GE RJ45 Ports	14	8	14
GE RJ45 Management/HA/DMZ Ports	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
GE RJ45 or SFP Shared Ports	2	—	—
USB Port	1	1	1
Console Port	1	1	1
Internal Storage	—	—	—
Included Transceivers	0	0	0
System Performance — Enterprise Traffic Mix			
IPS Throughput ²		500 Mbps	
NGFW Throughput ^{2,4}		360 Mbps	
Threat Protection Throughput ^{2,5}		250 Mbps	
System Performance			
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) ¹		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) ³		130 Mbps	
SSL Inspection CPS (IPS, avg. HTTPS) ³		130	
SSL Inspection Concurrent Session (IPS, avg. HTTPS) ³		125,000	
Application Control Throughput (HTTP 64K) ²		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	
Dimensions and Power			
Height x Width x Length (inches)	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 394
Form Factor (supports EIA / non-EIA standards)	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)	12.4 lbs (5.6 kg)
Power Input			
Maximum Current	100V / 0.52A, 240V / 0.22A	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	24.4 W / 28.6 W; 51.9 VA	477.1 W / 500.0 W
Heat Dissipation	97.6 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 100EF	FORTIGATE 140E-POE
Operating Environment and Certifications			
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	57 dBA
Compliance		FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB	
Certifications		ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN; IPv6	

ORDERING 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 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.
Optional Accessories		
1 GE SFP LX transceiver module	FN-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP RJ45 transceiver module	FN-TRAN-GC	1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP SX transceiver module	FN-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.

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	Unified Threat Protection	Advanced 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 and Video ² Filtering Service	•	•	•	
FortiGuard Antispam Service	•	•	•	
FortiGuard Security Rating Service	•	•		
FortiGuard IoT Detection Service	•	•		
FortiGuard Industrial Service	•	•		
FortiConverter Service	•	•		
SD-WAN Orchestrator Entitlement	•			
SD-WAN Cloud Assisted Monitoring	•			
SD-WAN Overlay Controller VPN Service	•			
Fortinet SOCaaS	•			
FortiAnalyzer Cloud	•			
FortiManager Cloud	•			

1. 24x7 plus Advanced Services Ticket Handling 2. Available when running FortiOS 7.0



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