

DATA SHEET

# FortiGate® 100E Series

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

Next Generation Firewall Secure SD-WAN Secure Web Gateway



The FortiGate 100E series delivers next generation firewall (NGFW) capabilities for mid-sized to large enterprises deployed at the campus or enterprise branch level. Protects against cyber threats with high-powered security processors for optimized network performance, security efficacy and deep visibility. 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 Al-powered FortiGuard Labs security services
- Proactively blocks unknown sophisticated attacks in realtime with the Fortinet Security Fabric integrated Al-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
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 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



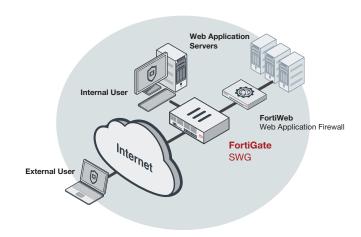
# Secure SD-WAN

- Consistent business application performance with accurate detection, dynamic WAN path steering and optimization
- Multi-cloud access for faster SaaS adoption with end-toend optimization
- Simplification with zero touch deployment and centralized management with auto-provisioning, analytics and reporting
- Strong security posture with next generation firewall and realtime threat protection

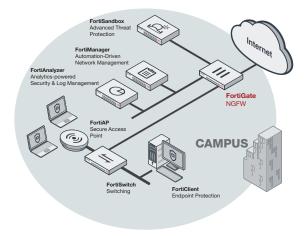


# Secure Web Gateway (SWG)

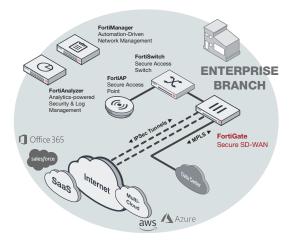
- Secure web access from both internal and external risks, even for encrypted traffic at high performance
- Enhanced user experience with dynamic web and video caching
- Block and control web access based on user or user groups across URL's and domains
- Prevent data loss and discover user activity to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



FortiGate 100E SWG deployment



FortiGate 100E deployment in Campus (NGFW)



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



### **Hardware**

# FortiGate 100E/101E

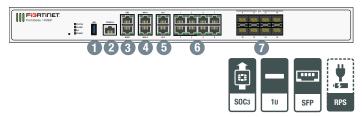




### Interfaces

- 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

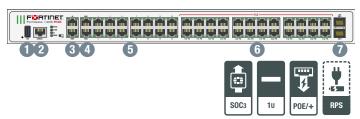
### FortiGate 100EF



### 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

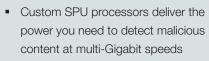
### FortiGate 140E-POE



### 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





- 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. 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

# Network Access Network Access Open Fabric Ecosystem Cloud Infrastructure SO-WAN Security Operations

### **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<sup>™</sup> 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<sup>™</sup> 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 100E	FORTIGATE 101E	FORTIGATE 100EF	FORTIGATE 140E-POE	
Hardware Specifications					
E RJ45 Ports	14	14	8	14	
E RJ45 Management/HA/DMZ Ports	1/2/1	1/2/1	1/2/1	1/1/—	
E SFP Slots	_	_	8	2	
E RJ45 PoE/+ Ports	_	_	<u> </u>	24	
E RJ45 WAN Ports	2	2	2	2	
E RJ45 or SFP Shared Ports	2	2	<u> </u>		
SB Port	1	1	1	1	
onsole Port	1	1	1	1	
nternal Storage	_	1x 480 GB SSD			
ncluded Transceivers	0	0	0	0	
	<u> </u>	<u> </u>		-	
ystem Performance — Enterprise Traffic Mix		500			
PS Throughput <sup>2</sup>			VIbps		
GFW Throughput <sup>2,4</sup>		360			
hreat Protection Throughput 2,5		250	VIDPS		
ystem Performance					
irewall Throughput (1518 / 512 / 64 byte UDP packets)		7.4 / 7.4	4.4 Gbps		
rewall Latency (64 byte UDP packets)		3	JS		
irewall Throughput (Packets Per Second)	6.6 Mpps				
oncurrent Sessions (TCP)	2 Million				
ew Sessions/Second (TCP)	30,000				
irewall Policies	10,000				
Psec VPN Throughput (512 byte) <sup>1</sup>	4 Gbps				
ateway-to-Gateway IPsec VPN Tunnels	2,000				
lient-to-Gateway IPsec VPN Tunnels	10,000				
SL-VPN Throughput	250 Mbps				
Concurrent SSL-VPN Users		5(	00		
Recommended Maximum, Tunnel Mode)					
SL Inspection Throughput (IPS, avg. HTTPS) 3		130			
SL Inspection CPS (IPS, avg. HTTPS) 3		10	130		
SL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>		125	000		
pplication Control Throughput (HTTP 64K) <sup>2</sup>		1 G			
APWAP Throughput (1444 byte, UDP)		1.5	Gbps		
irtual Domains (Default / Maximum)		10 /			
laximum Number of FortiSwitches Supported		2	4		
laximum Number of FortiAPs (Total / Tunnel Mode)	64/32				
laximum Number of FortiTokens	5,000				
ligh Availability Configurations	Active / Active / Passive, Clustering				
			<u> </u>		
imensions	1 75 v 17 v 10	1.75 v 17 v 10	1.75 v 17 v 10	1 75 - 17 - 15 -	
eight 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	
eight 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	
orm Factor	Rack Mount, 1 RU	Rack Mount, 1 RU	Rack Mount, 1 RU	Rack Mount, 1 RU	
/eight	7.28 lbs (3.3 kg)	7.28 lbs (3.3 kg)	7.28 lbs (3.3 kg)	12.4 lbs (5.6 kg)	
nvironment					
ower Required	100-240V AC, 60-50 Hz				
Maximum Current	100V / 0.52A, 240V / 0.22A	100V / 0.59A, 240V / 0.25A	100V / 0.52A, 240V / 0.22A	100V / 5A	
otal Available PoE Power Budget*	_	_	_	400 W	
ower 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	

<sup>\*</sup> 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	
Environment					
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 Part 15B, Class A, CE, RCM, VCCI, UL/cUL, CB, BSMI				
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). Maximum managed FortiAPs (Total / Tunnel) 64 / 32.
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. Maximum managed FortiAPs (Total / Tunnel) 64 / 32.
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. Maximum managed FortiAPs (Total / Tunnel) 64 / 32.
FortiGate 140E-POE	FG-140E-P0E	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.  Maximum managed FortiAPs (Total / Tunnel) 64 / 32.
Optional Accessories		
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 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 <sup>2</sup>	•			
SD-WAN Overlay Controller VPN Service <sup>2</sup>	•			
FortiAnalyzer Cloud <sup>2</sup>	•			
FortiManager Cloud <sup>2</sup>	•			

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



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