

# FortiGate® 100E Series

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

Next Generation Firewall Enterprise Branch Secure SD-WAN



The FortiGate 100E 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

- Protects against known exploits, malware and malicious websites using continuous threat intelligence provided by FortiGuard Labs security services
- Identify thousands of applications including cloud applications for deep inspection into network traffic
- Detects unknown attacks using dynamic analysis and provides automated mitigation to stop targeted attacks

### **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, ICSA, Virus Bulletin and AV Comparatives

### **Networking**

- Delivers an extensive routing, switching, wireless controller and high performance IPsec VPN capabilities to consolidate networking and security functionality
- Enables flexible deployment such as Next Generation Firewall and Secure SD-WAN

# Management

- Single Pane of Glass with Network Operations Center (NOC) view provides 360° visibility to identify issues quickly and intuitively
- 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 collaboratively integrate and provide end-to-end security across the entire attack surface



 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

Refer to specification table for details

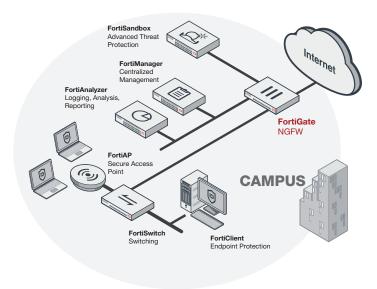
# **DEPLOYMENT**



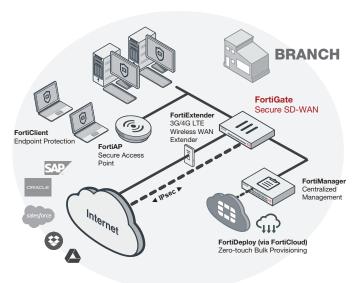
- Combines threat prevention security capabilities into single high performance network security appliance
- Reduces complexity by creating campus topology view and providing granular visibility of devices, users and threat information
- Identify and stop threats with powerful intrusion prevention beyond port and protocol that examines the actual content of your network traffic
- Delivers industry's highest SSL inspection performance using industry-mandated ciphers
- Proactively detect malicious unknown threats using integrated cloud-based sandbox service



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



FortiGate 100E deployment in campus (NGFW)



FortiGate 100E deployment in branch office (Secure SD-WAN)

2 www.fortinet.com

# **HARDWARE**

# FortiGate 100E/101E

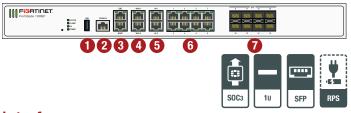




# Interfaces

- 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

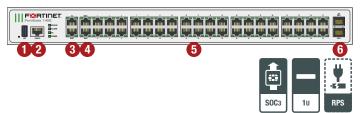
# FortiGate 100EF



# 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



# Interfaces

- 1. USB Port
- 2. Console Port
- 3. 2x GE RJ45 MGMT/HA Ports
- 4. 2x GE RJ45 WAN Ports
- 5. 38x GE RJ45 Ports
- 6. 2x GE SFP DMZ Slots

# Powered by SPU SoC3





- Simplifies appliance design and enables breakthrough performance for smaller networks
- Supports firewall acceleration across all packet sizes for maximum throughput
- Delivers accelerated UTM content processing for superior performance and protection
- Accelerates VPN performance for high speed, secure remote access

# 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

# **Redundant Power Supply**

Power supply redundancy is essential in the operation of mission-critical networks. The FortiGate 100E Series offers the option to connect to an external redundant power supply appliance — The FortiRPS 100, designed to increase network availability and uptime.

# **FORTINET SECURITY FABRIC**

# **Security Fabric**

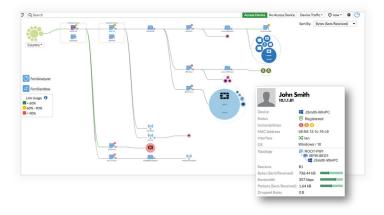
The Security Fabric allows security to dynamically expand and adapt as more and more workloads and data are added. Security seamlessly follows and protects data, users, and applications as they move between IoT, devices, and cloud environments throughout the network.

FortiGates are the foundation of Security Fabric, expanding security via visibility and control by tightly integrating with other Fortinet security products and Fabric-Ready Partner solutions.

# FortiSandbox FortiSandbox

# **FortiOS**

Control all the security and networking capabilities across the entire FortiGate platform with one intuitive operating system. Reduce operating expenses and save time with a truly consolidated next-generation security platform.



- A truly consolidated platform with one OS for all security and networking services for all FortiGate platforms.
- Industry-leading protection: NSS Labs Recommended, VB100,
   AV Comparatives, and ICSA validated security and performance.
- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings.
- Prevent, detect, and mitigate advanced attacks automatically in minutes with integrated advanced threat protection.
- Fulfill your networking needs with extensive routing, switching, and SD-WAN capabilities.
- Ultilize SPU hardware acceleration to boost security capability performance.



For more information, please refer to the FortiOS data sheet available at www.fortinet.com

# SERVICES



# FortiGuard<sup>™</sup> 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<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

www.fortinet.com

# **SPECIFICATIONS**

	FORTIGATE 100E	FORTIGATE 101E	FORTIGATE 100EF	FORTIGATE 140E	FORTIGATE 140E-POE	
Hardware Specifications						
GE RJ45 Ports	14	14	8	38	14	
GE RJ45 Management/HA/DMZ Ports	1/2/1	1/2/1	1/2/1	1/1/—	1/1/—	
GE SFP Slots			8	2	2	
GE RJ45 PoE/+ Ports	_	_	_	_	24	
GE RJ45 WAN Ports	2	2	2	2	2	
GE RJ45 or SFP Shared Ports	2	2	_	_	_	
USB Port	1	1	1	1	1	
Console Port	1	1	1	1	1	
Internal Storage		1x 480 GB SSD			_	
Included Transceivers	0	0	0	0	0	
System Performance — Enterprise Traffic Mix						
IPS Throughput <sup>2</sup>			500 Mbps			
NGFW Throughput <sup>2,4</sup>			360 Mbps			
Threat Protection Throughput <sup>2,5</sup>			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					
Psec 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)	300					
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 Switches Supported			24			
Maximum Number of FortiAPs (Total / Tunnel Mode)	64 / 32					
Maximum Number of FortiTokens	1,000					
Maximum Number of Registered FortiClients	600					
High Availability Configurations	Active / Active / Passive, Clustering					
Dimensions						
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	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	44.45 x 432 x 394	
Form Factor	Rack Mount, 1 RU	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)	12.4 lbs (5.6 kg)	

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.
- NGFW performance is measured with Firewall, IPS and Application Control enabled.
   Threat Protection performance is measured with Firewall, IPS, Application Control and Malware. Protection enabled.

# **SPECIFICATIONS**

	FORTIGATE 100E	FORTIGATE 101E	FORTIGATE 100EF	FORTIGATE 140E	FORTIGATE 140E-POE	
Environment						
Power Required			100-240V AC, 60-50 Hz			
Maximum Current	100V / 1A, 240V / 0.5A	100V / 1A, 240V / 0.5A	100V / 1A, 240V / 0.5A	100V / 0.4A	100V / 5A	
Total Available PoE Power Budget*	_	_	_	_	400 W	
Power Consumption (Average / Maximum)	23.0 W / 25.5 W	24.8 W / 27.5 W	24.4 W / 26.9 W	34.4 W / 40.0 W	477.1 W / 500.0 W	
Heat Dissipation	87.0 BTU/h	93.8 BTU/h	91.8 BTU/h	136.48 BTU/h	1706.07 BTU/h	
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	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					

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

# 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	FG-140E	42x GE RJ45 ports (including 2x WAN ports, 1x Mgmt port, 1x HA port, 38x switch ports), 2x GE SFP DMZ slots. 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.



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	Threat Protection	UTM	Enterprise Protection
FortiCASB SaaS-only Service ^			•
FortiGuard Industrial Service ^			•
FortiGuard Security Rating Service* ^			•
FortiGuard Antispam		•	•
FortiGuard Web Filtering		•	•
FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR*, Virus Outbreak Protection* and FortiSandbox Cloud Service*	•	•	•
FortiGuard IPS Service	•	•	•
FortiCare + FortiGuard App Control Service	•	•	•

 $^{\star}$  Available when running FortiOS 6.0.1 and above  $\,^{\wedge}$  With new Q3-2018 SKUs



GLOBAL HEADQUARTERS Fortinet Inc. 899 KIFER ROAD Sunnyvale, CA 94086 United States Tel: +1.408.235.7700 www.fortinet.com/sales

EMEA SALES OFFICE 905 rue Albert Einstein 06560 Valbonne France Tel: +33.4.8987.0500

APAC SALES OFFICE 8 Temasek Boulevard #12-01 Suntec Tower Three Singapore 038988 Tel: +65.6395.2788

LATIN AMERICA SALES OFFICE Sawgrass Lakes Center 13450 W. Sunrise Blvd., Suite 430 Sunrise, FL 33323 United States Tel: +1.954.368.9990

Copyright© 2018 Forfinet, Inc. All rights reserved. Forficate®, Forficate®, Forficate®, Forficate® and Forficard®, and certain other marks are registered trademarks of Forfinet, Inc., in the U.S. and other jurisdictions, and other Forfinet names herein may also be registered and/or common law trademarks of Forfinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Forfinet, and Forfinet disclaims all warranties, whether express or implied, except to the extent Forfinet network and the results may vary. Network variables, different network environments and other conditions may affect performance metrics and, in such event, only the specification is such binding varieties. To extend by Forfinets General Coursel, with a purchase that expressly warrants that the identified portions can be interestly extended in such binding varieties. In one went does Forfinet make any commitment related to future deliverables, features or development, and circumstances may change such that any forward-locking statements herein are not accurate. Forfinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Forfinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.

FG-100E-DAF-R13-201808