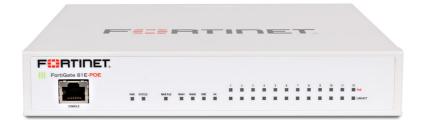


DATA SHEET

FortiGate® 80E Series

FortiGate 80E, 80E-POE, FortiGate 81E, and 81E-POE

Secure SD-WAN
Next Generation Firewall



The FortiGate 80E series provides a fast and secure SD-WAN solution in a compact fanless desktop form factor for enterprise branch offices and mid-sized businesses. 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 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
4 Gbps	450 Mbps	360 Mbps	250 Mbps	Multiple GE RJ45 Variants with internal storage Variants with PoE/+ interfaces

Deployment



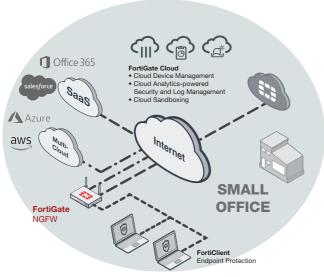
Next Generation Firewall (NGFW)

- 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 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 Al-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric

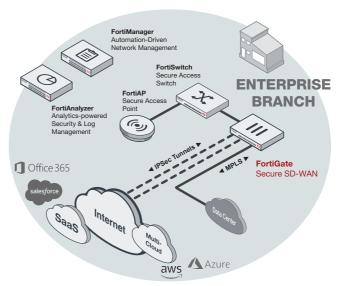


Secure SD-WAN

- 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



FortiGate 80E deployment in Small Office (NGFW)



FortiGate 80E deployment in Enterprise Branch (Secure SD-WAN)



Hardware

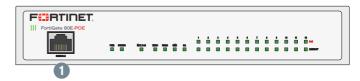
FortiGate 80E/81E

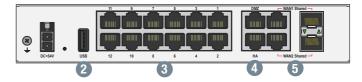






FortiGate 80E/81E-POE







Interfaces

- 1. Console Port
- 2. USB Port
- 3. 12x GE RJ45 Ports
- 4. 2x GE RJ45 DMZ/HA Ports
- 5. 2x GE RJ45/SFP Shared Media Pairs

Interfaces

- 1. Console Port
- 2. USB Port
- 3. 12x GE RJ45 PoE/+ Ports
- 4. 2x GE RJ45 DMZ/HA Ports
- 5. 2x GE RJ45/SFP Shared Media Pairs

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 and secure remote access

3G/4G WAN Connectivity

The FortiGate 80E Series includes a USB port that allows you to plug in a compatible third-party 3G/4G USB modem, providing additional WAN connectivity or a redundant link for maximum reliability.

Compact and Reliable Form Factor

Designed for small environments, you can place it on a desktop or wall-mount it. It is small, lightweight yet highly reliable with superior MTBF (Mean Time Between Failure), minimizing the chance of a network disruption.

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 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 threats

Network Access Secure WLAN/LAN Security Open Fabric Ecosystem Cloud Infrastructure Solvent Security Open Fabric Ecosystem

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[™] 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 and forti.net/forticare



	FORTIGATE 80E	FORTIGATE 80E-POE	FORTIGATE 81E	FORTIGATE 81E-POE			
Hardware Specifications							
GE RJ45/SFP Shared Media Pairs	2	2	2	2			
GE RJ45 Ports	12	_	12	_			
GE RJ45 PoE/+ Ports	_	12	_	12			
GE RJ45 DMZ/HA Ports	2	2	2	2			
USB Ports	1	1	1	1			
Console (RJ45)	1	1	1	1			
Internal Storage	_	_	1x 128 GB SSD	1x 128 GB SSD			
System Performance — Enterprise Traffic Mix							
IPS Throughput ²		450 N	Mbps				
NGFW Throughput ^{2,4}		360 N	1bps				
Threat Protection Throughput ^{2,5}	250 Mbps						
System Performance							
Firewall Throughput (1518 / 512 / 64 byte UDP packets)		4/4/4	Gbps				
Firewall Latency (64 byte UDP packets)		3 µ	S				
Firewall Throughput (Packets Per Second)	6 Mpps						
Concurrent Sessions (TCP)	1.3 Million						
New Sessions/Second (TCP)	30,000						
Firewall Policies	5,000						
IPsec VPN Throughput (512 byte) 1		2.5 G	bps				
Gateway-to-Gateway IPsec VPN Tunnels		20)				
Client-to-Gateway IPsec VPN Tunnels		2,500					
SSL-VPN Throughput	200 Mbps						
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)		20	0				
SSL Inspection Throughput (IPS, avg. HTTPS) ³		135 N	1bps				
SSL Inspection CPS (IPS, avg. HTTPS) ³		13	5				
SSL Inspection Concurrent Session (IPS, avg. HTTPS) ³		95,0	00				
Application Control Throughput (HTTP 64K) ²	900 Mbps						
CAPWAP Throughput (HTTP 64K)		920 N	920 Mbps				
Virtual Domains (Default / Maximum)	10 / 10						
Maximum Number of FortiSwitches Supported		16	;				
Maximum Number of FortiAPs (Total / Tunnel Mode)		32 /	16				
Maximum Number of FortiTokens	500						
High Availability Configurations	Active / Active / Passive, Clustering						
Dimensions							
Height x Width x Length (inches)		1.65 x 8	3.5 x 7				
Height x Width x Length (mm)		42 x 216	x 178				
Weight	2.65 lbs (1.2 kg)						
Form Factor		Desk	top				

- 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.



	FORTIGATE 80E	FORTIGATE 80E-P0E	FORTIGATE 81E	FORTIGATE 81E-POE		
Environment						
Input Rating	12Vdc, 3A	54Vdc, 2.78A	12Vdc, 3A	54Vdc, 2.78A		
Power Required		Powered by External DC Power Ad				
Maximum Current	100V AC / 0.25A, 240V AC / 0.11A	115V AC / 1.2A, 230V AC / 0.6A	100V AC / 0.27A, 240V AC / 0.12A	115V AC / 1.2A, 230V AC / 0.6A		
Total Available PoE Power Budget*	_	110 W	_	110 W		
Power Consumption (Average / Maximum)	18 W / 25 W	20 W / 137 W	20 W / 72 W	20 W / 137 W		
Heat Dissipation	85.3 BTU/h	467.5 BTU/h	92.1 BTH/h	467.5 BTU/h		
Operating Temperature	32-104°F (0-40°C)					
Storage Temperature	-31–158°F (-35–70°C)					
Humidity	10-90% non-condensing					
Noise Level	Fanless 0 dBA	35 dBA	Fanless 0 dBA	35 dBA		
Operating Altitude	Up to 16,404 ft (5,000 m)					
Compliance	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB					
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN					

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

Order Information

Product	SKU	Description
FortiGate 80E	FG-80E	14x GE RJ45 ports (including 1x DMZ port, 1x Mgmt port, 1x HA port, 12x switch ports), 2x Shared Media pairs (including 2x GE RJ45 ports, 2x SFP slots)
FortiGate 80E-PoE	FG-80E-POE	16x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x HA port, 12x PoE ports)
FortiGate 81E	FG-81E	14x GE RJ45 ports (including 1x DMZ port, 1x Mgmt port, 1x HA port, 12 x switch ports), 2x Shared Media pairs (including 2x GE RJ45 ports, 2x SFP slots),128 GB onboard storage
FortiGate 81E-PoE	FG-81E-P0E	16x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x HA port, 12x PoE ports). 128 GB onboard storage

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.

FortiGuard App Control Service FortiGuard App Control Service FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service FortiGuard Advanced Malware Protection and FortiSandbox Cloud Service FortiGuard Web Filtering Service FortiGuard Antispam Service FortiGuard Security Rating Service FortiGuard Industrial Service	Bundles	360 Protection	Enterprise Protection	Unified Threat Protection	Threat Protection
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 Industrial Service FortiGuard IoT Detection Service FortiGuard Service FortiGuard Service FortiGuard IoT Detection Service FortiGuard Service FortiGuard IoT Detection Service FortiGuard IoT Detection Service	FortiCare	ASE 1	24x7	24x7	24x7
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 Industrial Service FortiGuard IoT Detection Service ² FortiConverter Service • • • • • • • • • • • • • • • • • • •	FortiGuard App Control Service	•	•	•	•
Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service FortiGuard Web Filtering Service FortiGuard Antispam Service FortiGuard Security Rating Service FortiGuard Industrial Service FortiGuard Industrial Service FortiGuard IoT Detection Service 2 FortiGuard Security Service FortiGuard IoT Detection Service 2 FortiGuard IoT Detection Service 3 FortiGuard IoT Detection Service 3 FortiGuard IoT Detection Service 3	FortiGuard IPS Service	•	•	•	•
FortiGuard Antispam Service • • • • • • • • • • • • • • • • • • •	, , , , , , , , , , , , , , , , , , , ,	•	•	•	•
FortiGuard Security Rating Service FortiGuard Industrial Service FortiGuard IoT Detection Service FortiGuard Service FortiGuard IoT Detection Service FortiConverter Serv	FortiGuard Web Filtering Service	•	•	•	
FortiGuard Industrial Service FortiGuard IoT Detection Service FortiConverter Service • • • • • • • • • • • • • • • • • •	FortiGuard Antispam Service	•	•	•	
FortiGuard IoT Detection Service ² FortiConverter Service • • •	FortiGuard Security Rating Service	•	•		
FortiConverter Service • •	FortiGuard Industrial Service	•	•		
	FortiGuard IoT Detection Service ²	•	•		
IPAM Cloud ²	FortiConverter Service	•	•		
	IPAM Cloud ²	•			
SD-WAN Orchestrator Entitlement ²	SD-WAN Orchestrator Entitlement ²	•			
SD-WAN Cloud Assisted Monitoring •	SD-WAN Cloud Assisted Monitoring	•			
SD-WAN Overlay Controller VPN Service	SD-WAN Overlay Controller VPN Service	•			
FortiAnalyzer Cloud •	FortiAnalyzer Cloud	•			
FortiManager Cloud •	FortiManager Cloud	•			

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



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FST-PROD-DS-GT80E FG-80E-DAT-R25-20200



DATA SHEET

FortiGate/FortiWiFi® 60F Series

FortiGate 60F, FortiGate 61F, FortiWiFi 60F, and FortiWiFi 61F

Secure SD-WAN
Next Generation Firewall



The FortiGate/FortiWiFi 60F series provides a fast and secure SD-WAN solution in a compact fanless desktop form factor for enterprise branch offices and mid-sized businesses. 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 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
10 Gbps	1.4 Gbps	1 Gbps	700 Mbps	Multiple GE RJ45 Variants with internal storage WiFi variants

Deployment



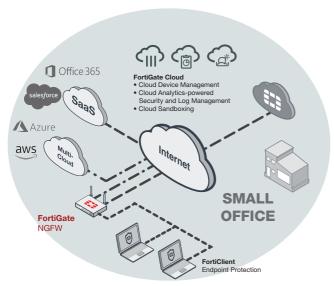
Next Generation Firewall (NGFW)

- 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 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
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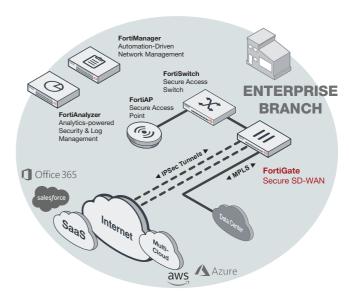


Secure SD-WAN

- 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



FortiWiFi 60F deployment in Small Office (NGFW)

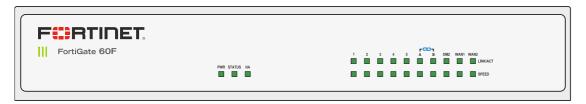


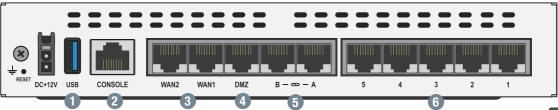
FortiGate 60F deployment in Enterprise Branch (Secure SD-WAN)



Hardware

FortiGate/FortiWiFi 60F/61F







Interfaces

- 1. USB Port
- 2. Console Port
- 3. 2x GE RJ45 WAN Ports

4. 1x GE RJ45 DMZ Port

- 5. 2x GE RJ45 FortiLink Ports
- 6. 5x GE RJ45 Internal Ports

Powered by Purpose-built Secure SD-WAN ASIC SOC4



- Combines a RISC-based CPU with Fortinet's proprietary Security Processing Unit (SPU) content and network processors for unmatched performance
- Delivers industry's fastest application identification and steering for efficient business operations
- Accelerates IPsec VPN performance for best user experience on direct internet access
- Enables best of breed NGFW Security and Deep SSL Inspection with high performance
- Extends security to access layer to enable SD-Branch transformation with accelerated and integrated switch and access point connectivity

3G/4G WAN Connectivity

The FortiGate 60F Series includes a USB port that allows you to plug in a compatible third-party 3G/4G USB modem, providing additional WAN connectivity or a redundant link for maximum reliability.

Compact and Reliable Form Factor

Designed for small environments, you can place it on a desktop or wall-mount it. It is small, lightweight yet highly reliable with superior MTBF (Mean Time Between Failure), minimizing the chance of a network disruption.

Extends Security to Access Layer with FortiLink **Ports**

FortiLink protocol enables you to converge security and the network access by integrating the FortiSwitch into the FortiGate as a logical extension of the NGFW. These FortiLink enabled ports can be reconfigured as regular ports as needed.

Fortinet Security Fabric

Security Fabric

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Network Access Network Access

FortiOS

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- 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.
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- Utilize SPU hardware acceleration to boost network security performance.

Services



FortiGuard[™] Security Services

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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 and forti.net/forticare



	FORTIGATE 60F	FORTIGATE 61F	FORTIWIFI 60F	FORTIWIFI 61F		
Hardware Specifications						
GE RJ45 WAN / DMZ Ports	2/1	2/1	2/1	2/1		
GE RJ45 Internal Ports	7	7	7	7		
GE RJ45 FortiLink Ports	2	2	2	2		
Wireless Interface	_	_	802.11 a/b/g/n/ac-W2	802.11 a/b/g/n/ac-W2		
JSB Ports	1	1	1	1		
Console (RJ45)	1	1	1	1		
nternal Storage	_	1 x 128 GB SSD	_	1 x 128 GB SSD		
System Performance — Enterprise Traffic Mix						
PS Throughput ²		1 /	Gbps			
IGFW Throughput ^{2,4}			albps Tibps			
Threat Protection Throughput ^{2,5}			Mbps			
5 ,		700	iviups			
System Performance		4040	/o_oi			
Firewall Throughput 1518 / 512 / 64 byte UDP packets)			/6 Gbps			
Firewall Latency (64 byte UDP packets)		4				
irewall Throughput (Packets Per Second)		9 N				
Concurrent Sessions (TCP)		700	,000			
lew Sessions/Second (TCP)		35,	000			
irewall Policies		5,000				
Psec VPN Throughput (512 byte) 1						
ateway-to-Gateway IPsec VPN Tunnels						
lient-to-Gateway IPsec VPN Tunnels	500					
SL-VPN Throughput		900	Mbps			
Concurrent SSL-VPN Users		2	00			
Recommended Maximum, Tunnel Mode)						
SL Inspection Throughput PS, avg. HTTPS) ³		750	Mbps			
SSL Inspection CPS (IPS, avg. HTTPS) ³		4	00			
SL Inspection Concurrent Session PS, avg. HTTPS) ³		55,	000			
Application Control Throughput (HTTP 64K) ²		1.8	Gbps			
APWAP Throughput (HTTP 64K)		8 0	ibps			
rirtual Domains (Default / Maximum)		10	/ 10			
Maximum Number of FortiSwitches Supported		1	6			
Maximum Number of FortiAPs Total / Tunnel Mode)		64	/ 32			
Maximum Number of FortiTokens		5	00			
ligh Availability Configurations		Active / Active, Active	e / Passive, Clustering			
Dimensions						
leight x Width x Length (inches)		1.5 x 8	.5 x 6.3			
leight x Width x Length (mm)		38.5 x 216	3 x 160 mm			
Veight		2.23 lbs				
Form Factor			ktop			
Radio Specifications						
Multiple User (MU) MIMO	_	_	3>	3		
Maximum Wi-Fi Speeds	_	_	1300 Mbps @ 5 GHz,			
Maximum Tx Power	_	_	20 (
Antenna Gain			3.5 dBi @ 5 GHz,			

- 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.



	FORTIGATE 60F	FORTIGATE 61F	FORTIWIFI 60F	FORTIWIFI 61F		
Operating Environment and Certifications						
Power Rating		12Vd	c, 3A			
Power Required		Powered by External DC Power Adapter, 100–240V AC, 50–60 Hz				
Maximum Current		115V AC / 0.2A, 230V AC / 0.1A				
Power Consumption (Average / Maximum)	17.0W / 18.5W	17.2W / 18.7.0W	17.2W / 18.7W	16.5W / 19.0W		
Heat Dissipation	63.1 BTU/hr	63.8 BTU/hr	63.8 BTU/hr	64.8 BTU/hr		
Operating Temperature	32-104°F (0-40°C)					
Storage Temperature	-31–158°F (-35–70°C)					
lumidity	Humidity 10–90% non-condensing					
loise Level	Fanless O dBA					
Operating Altitude	Up to 7,400 ft (2,250 m)					
Compliance		FCC, ICES, CE, RCM, V	CCI, BSMI, UL/cUL, CB			
Certifications		ICSA Labs: Firewall, IPsed				

Order Information

Product	SKU	Description
FortiGate 60F	FG-60F	10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port)
FortiGate 61F	FG-61F	10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port), 128 GB SSD onboard storage
FortiWiFi 60F	FWF-60F	10 x GE RJ45 ports (including 7x Internal Ports, 2x WAN Ports, 1x DMZ Port), Wireless (802.11 a/b/g/n/ac-W2)
FortiWiFi 61F	FWF-61F	10 x GE RJ45 ports (including 7x Internal Ports, 2x WAN Ports, 1x DMZ Port), Wireless (802.11 a/b/g/n/ac-W2), 128GB SSD onboard storage
Optional Accessories		
Rack Mount Tray	SP-RACKTRAY-02	Rack mount tray for all FortiGate E series and F series desktop models are backwards compatible with SP-RackTray-01. For list of compatible FortiGate products, visit our Documentation website, docs.fortinet.com
AC Power Adaptor	SP-FG60E-PDC-5	Pack of 5 AC power adaptors for FG/FWF 60E/61E, 60F/61F, and 80E/81E
Wall Mount Kit	SP-FG60F-MOUNT-20	Pack of 20 wall mount kits for FG/FWF-60F and FG/FWF-80F series

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	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	•	•		
FortiGuard IoT Detection Service ²	•	•		
FortiConverter Service	•	•		
IPAM Cloud ²	•			
SD-WAN Orchestrator Entitlement ²	•			
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



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FST-PROD-DS-GT60F FGFWF-60F-DAT-R14-2020



DATA SHEET

FortiGate/FortiWiFi® 60E Series

FortiGate 60E, 60E-POE, FortiWiFi 60E, FortiGate 61E, and FortiWiFi 61E

Secure SD-WAN
Next Generation Firewall



The FortiGate/FortiWiFi 60E series provides a fast and secure SD-WAN solution in a compact fanless desktop form factor for enterprise branch offices and mid-sized businesses. 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 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
3 Gbps	400 Mbps	250 Mbps	200 Mbps	Multiple GE RJ45 WiFi variants Variants with internal storage Variants with PoE/+ interfaces

Deployment



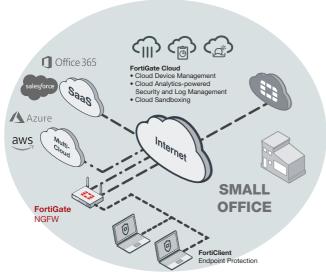
Next Generation Firewall (NGFW)

- 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 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 Al-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric

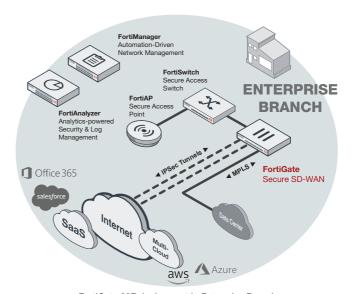


Secure SD-WAN

- 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



FortiWiFi 60E deployment in Small Office (NGFW)



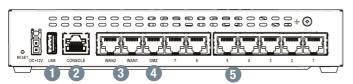
FortiGate 60E deployment in Enterprise Branch (Secure SD-WAN)



Hardware

FortiGate/FortiWiFi 60E/61E







FortiGate 60E-POE







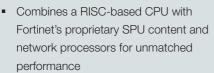
Interfaces

- 1. USB Port
- 2. Console Port
- 3. 2x GE RJ45 WAN Ports
- 4. 1x GE RJ45 DMZ Port
- 5. 7x GE RJ45 Internal Ports

Interfaces

- 1. USB Port
- 2. Console Port
- 3. 8x GE RJ45 PoE/+ Ports
- 4. 2x GE RJ45 WAN Ports

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 and secure remote access

3G/4G WAN Connectivity

The FortiGate/FortiWiFi 60E Series includes a USB port that allows you to plug in a compatible third-party 3G/4G USB modem, providing additional WAN connectivity or a redundant link for maximum reliability.

Compact and Reliable Form Factor

Designed for small environments, you can place it on a desktop or wall-mount it. It is small, lightweight yet highly reliable with superior MTBF (Mean Time Between Failure), minimizing the chance of a network disruption.

Superior Wireless Coverage

A built-in dual-band, dual-stream access point with internal antennas is integrated on the FortiWiFi 60E and provides speedy 802.11ac wireless access. The dual-band chipset addresses the PCI-DSS compliance requirement for rogue AP wireless scanning, providing maximum protection for regulated environments.

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 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 threats

Security Open Fabric Endpoint Security Open Fabric Ecosystem Cloud Infrastructure Solvan Security Open Fabric Ecosystem

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[™] 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 and forti.net/forticare



	FORTIGATE 60E	FORTIGATE 60E-P0E	FORTIWIFI 60E	FORTIGATE 61E	FORTIWIFI 61E		
Hardware Specifications							
GE RJ45 WAN / DMZ Ports	2/1	2	2/1	2	2/1		
GE RJ45 Internal Ports	7	_	7		7		
GE RJ45 PoE/+ Ports	_	8	_		_		
Wireless Interface	_	_	802.11 a/b/g/n/ac	_	802.11 a/b/g/n/ac		
USB Ports	1	1	1		1		
Console (RJ45)	1	1	1		1		
Internal Storage	-	-	-	1x 128	3 GB SSD		
System Performance — Enterprise Traffic Mix							
IPS Throughput ²			400 Mbps				
NGFW Throughput ^{2,4}			250 Mbps				
Threat Protection Throughput ^{2,5}			200 Mbps				
System Performance							
Firewall Throughput (1518 / 512 / 64 byte UDP packets)			3/3/3 Gbps				
Firewall Latency (64 byte UDP packets)			3 µs				
Firewall Throughput (Packets Per Second)			4.5 Mpps				
Concurrent Sessions (TCP)			1.3 Million				
New Sessions/Second (TCP)			30,000				
Firewall Policies			5,000				
Psec VPN Throughput (512 byte) 1			2 Gbps				
Gateway-to-Gateway IPsec VPN Tunnels			200				
Client-to-Gateway IPsec VPN Tunnels			500				
SSL-VPN Throughput			150 Mbps				
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)			200				
SSL Inspection Throughput (IPS, avg. HTTPS) ³			135 Mbps				
SSL Inspection CPS (IPS, avg. HTTPS) ³			135				
SSL Inspection Concurrent Session (IPS, avg. HTTPS) ³			75,000				
Application Control Throughput (HTTP 64K) ²			650 Mbps				
CAPWAP Throughput (HTTP 64K)	890 Mbps						
Virtual Domains (Default / Maximum)			10 / 10				
Maximum Number of FortiSwitches Supported			16				
Maximum Number of FortiAPs (Total / Tunnel Mode)			30 / 10				
Maximum Number of FortiTokens			500				
High Availability Configurations	Active / Active, Active, Passive, Clustering						
Dimensions							
Height x Width x Length (inches)			1.5 x 8.5 x 6.3				
Height x Width x Length (mm)			38 x 216 x 160				
Weight	1.9 lbs (0.9 kg)	2.2 lbs (1.0 kg)	1.9 lbs (0.9 kg)	1.9 lbs (0.9 kg)	1.9 lbs (0.9 kg)		
Form Factor			Desktop				
Radio Specifications							
Multiple User (MU) MIMO		_	2x2	_	2x2		
Maximum Wi-Fi Speeds	_	_	876 Mbps @ 5GHz, 300 Mbps @ 2.4GHz	_	876 Mbps @ 5GHz, 300 Mbps @ 2.4GH		
Maximum Tx Power	_	_	21 dBm	_	21 dBm		
			6 dBi @ 5 GHz,		6 dBi @ 5 GHz,		
Antenna Gain	_	_	3 dBi @ 2.4 GHz	_	3 dBi @ 2.4 GHz		

- 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.



	FORTIGATE 60E	FORTIGATE 60E-P0E	FORTIWIFI 60E	FORTIGATE 61E	FORTIWIFI 61E	
Operating Environment and Certifications						
Input Rating	12Vdc, 3A	12Vdc, 7A	12Vdc, 3A	12Vdc, 3A	12Vdc, 3A	
Power Required			DC Power Adapter, 100-2			
Maximum Current	115V AC / 0.7 A, 230V AC / 0.48 A	0.8A	115V AC / 0.9A, 230V AC / 0.6A	115V AC / 0.9A, 230V AC / 0.6A	115V AC / 0.9A, 230V AC / 0.6A	
Total Available PoE Power Budget*	_	75 W	_	_	_	
Power Consumption (Average / Maximum)	11.5 / 14 W	20 / 95 W	12.6 / 15.2 W	11.9 / 14.3 W	13 / 16 W	
Heat Dissipation	48 BTU/h	324 BTU/h	52 BTU/h	49 BTU/h	55 BTU/h	
Operating Temperature			32-104°F (0-40°C)			
Storage Temperature	-31–158°F (-35–70°C)					
Humidity			10-90% non-condensing			
Noise Level			Fanless 0 dBA			
Operating Altitude	Up to 7,400 ft (2,250 m)					
Compliance	FCC, ICES, CE, RCM, VCCI, BSMI, UL/dUL, CB					
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN					

 $^{^{\}star}$ Maximum loading on each PoE/+ port is 30 W (802.3at).

Order Information

Product	SKU	Description
FortiGate 60E	FG-60E	10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port)
FortiGate 60E-P0E	FG-60E-POE	10x GE RJ45 ports (including 8x PoE/PoE+ ports; 2x WAN ports)
FortiWiFi 60E	FWF-60E	10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port), Wireless (802.11a/b/g/n/ac)
FortiGate 61E	FG-61E	10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port), 128 GB SSD onboard storage
FortiWiFi 61E	FWF-61E	10x GE RJ45 ports (including 7x Internal ports, 2x WAN ports, 1x DMZ port), Wireless (802.11a/b/g/n/ac), 128 GB SSD onboard storage

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	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	•	•		
FortiGuard IoT Detection Service ²	•	•		
FortiConverter Service	•	•		
IPAM Cloud ²	•			
SD-WAN Orchestrator Entitlement ²	•			
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



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DATA SHEET

FortiGate/FortiWiFi® 50E Series

FortiGate 50E, FortiWiFi 50E/-2R and FortiGate/FortiWiFi 51E

Secure SD-WAN
Next Generation Firewall



The FortiGate/FortiWiFi 50E series provides a fast and secure SD-WAN solution in a compact fanless desktop form factor for enterprise branch offices and mid-sized businesses. 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 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 Conter
- 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
2.5 Gbps	350 Mbps	220 Mbps	160 Mbps	Multiple GE RJ45 WiFi variants Variants with dual radios Variants with internal storage

Deployment



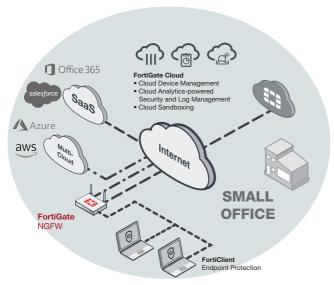
Next Generation Firewall (NGFW)

- 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 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 Al-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric

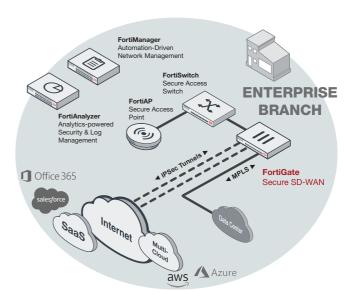


Secure SD-WAN

- 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



FortiWiFi 50E deployment in Small Office (NGFW)

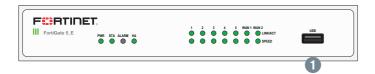


FortiGate 50E deployment in Enterprise Branch (Secure SD-WAN)



Hardware

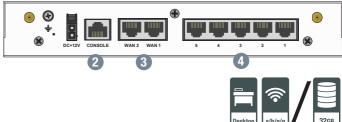
FortiGate 50/51





FortiWiFi 50E/-2R and 51E





Interfaces

- 1. USB Port
- 2. Console RJ45
- 3. 2x GE RJ45 WAN Ports
- 4. 5x GE RJ45 Switch Ports

Interfaces

- 1. USB Port
- 2. Console RJ45
- 3. 2x GE RJ45 WAN Ports
- 4. 5x GE RJ45 Switch Ports

Install in Minutes with FortiExplorer

The FortiExplorer wizard enables easy setup and configuration coupled with easy-to-follow instructions. FortiExplorer runs on popular iOS devices. Using FortiExplorer is as simple as starting the application and connecting to the appropriate USB port on the FortiGate. By using FortiExplorer, you can be up and running and protected in minutes.

Wireless and 3G/4G WAN Extensions

The FortiGate supports external 3G/4G modems that allow additional or redundant WAN connectivity for maximum reliability. The FortiGate can also operate as a wireless access point controller to further extend wireless capabilities.

Compact and Reliable Form Factor

Designed for small environments, you can simply place the FortiGate/FortiWiFi 50E series on a desktop. It is small, lightweight yet highly reliable with superior MTBF (Mean Time Between Failure), minimizing the chance of a network disruption.

Superior Wireless Coverage

A built-in dual-band, dual-stream access point on the FortiWiFi 50E-2R provides speedy 802.11ac coverage on 2.4 GHz or 5 GHz bands. The dual-band chipset addresses the PCI-DSS compliance requirement for roque AP wireless scanning.



Fortinet Security Fabric

Security Fabric

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- 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 threats

Network Access Network Access Network Access Network Access Nopen Fabric Ecosystem Cloud Infrastructure So-WAN 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[™] 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 and forti.net/forticare



	FG-50E	FWF-50E	FWF-50E-2R	FG-51E	FWF-51E
Hardware Specifications					
GE RJ45 Switch Ports			5		
BE RJ45 WAN Ports			2		
JSB Ports			1		
Console (RJ45)			1		
Vireless Interface	_	802.11 a/b/g/n	dual radio, 802.11a/b/ g/n/ac	_	802.11 a/b/g/n
nternal Storage	_	_	_	1x 32 GB SSD	1x 32 GB SSD
System Performance — Enterprise Traffic Mix					
PS Throughput ²			350 Mbps		
NGFW Throughput ^{2,4}			220 Mbps		
Threat Protection Throughput ^{2,5}			160 Mbps		
System Performance					
Firewall Throughput			2.5 Gbps		
irewall Latency (64 byte UDP packets)			180 µs		
irewall Throughput (Packets Per Second)			375 Kpps		
Concurrent Sessions (TCP)			1.8 Million		
New Sessions/Second (TCP)			21,000		
irewall Policies			5,000		
Psec VPN Throughput (512 byte) 1			90 Mbps		
ateway-to-Gateway IPsec VPN Tunnels			200		
lient-to-Gateway IPsec VPN Tunnels			250		
SL-VPN Throughput			100 Mbps		
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)			200		
SL Inspection Throughput (IPS, avg. HTTPS) ³			150 Mbps		
SL Inspection CPS (IPS, avg. HTTPS) ³			140		
SSL Inspection Concurrent Session (IPS, avg. HTTPS) ³			75,000		
pplication Control Throughput (HTTP 64K) ²			450 Mbps		
CAPWAP Throughput (HTTP 64K)			1.2 Gbps		
rirtual Domains (Default / Maximum)			5/5		
Maximum Number of FortiSwitches Supported			8		
Maximum Number of FortiAPs (Total / Tunnel Mode)			10/5		
Maximum Number of FortiTokens			500		
ligh Availability Configurations		Activ	/e/Active, Active/Passive, Cluster	ring	
Dimensions					
Height x Width x Length (inches)			1.44 x 8.52 x 5.5		
Height x Width x Length (mm)			36.5 x 216 x 140		
Weight	2.015 lbs (0.914 kg)	2.041 lbs (0.926 kg)	2.38 lbs (1.08 kg)	2.04 lbs (0.925 kg)	2.04 lbs (0.925 kg)
Form Factor	(19/	Desktop	(9)	(
Radio Specifications			· .		
MIMO		2x2	2x2	_	2x2
Maximum Wi-Fi Speeds	_	300 Mbps	876 Mbps	_	300 Mbps
Maximum Tx Power		21 dBm	21 dBm	·····	21 dBm
Antenna Gain	_	2 dBi @ 5 GHz,	3 dBi @ 5 GHz,	_	2 dBi @ 5 GHz,
		2.4dBi @ 2.4 GHz	2 dBi @ 2.4 GHz		2.4dBi @ 2.4 GHz

- 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.



	FG-50E	FWF-50E	FWF-50E-2R	FG-51E	FWF-51E		
Operating Environment and Certifications							
Input Rating	12Vdc, 2A						
Power Required		Powered by External DC Power Adapter, 100–240V AC, 50–60 Hz					
Maximum Current	100 V / 0.6 A, 240 V / 0.4 A						
Power Consumption (Average / Maximum)	15 / 18 W	18 / 22 W	22.1 / 26.5 W	16 / 20 W	19 / 23 W		
Heat Dissipation	62 BTU/h	75 BTU/h	90 BTU/h	67 BTU/h	79 BTU/h		
Operating Temperature	32-104°F (0-40°C)						
Storage Temperature	-31–158°F (-35–70°C)						
Humidity	10-90% non-condensing						
Noise Level	Fanless O dBA						
Operating Altitude	Up to 7,400 ft (2,250 m)						
Regulatory Compliance	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB						
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN						

Order Information

Product	SKU	Description
FortiGate 50E	FG-50E	7x GE RJ45 ports (including 2x WAN ports, 5x Switch ports)
FortiWiFi 50E	FWF-50E	7x GE RJ45 ports (including 2x WAN ports, 5x Switch ports), Wireless (802.11a/b/g/n)
FortiWiFi 50E-2R	FWF-50E-2R	7x GE RJ45 ports (including 2x WAN ports, 5x Switch ports), dual radio wireless (802.11a/b/g/n/ac)
FortiGate 51E	FG-51E	7x GE RJ45 ports (including 2x WAN ports, 5x Switch ports), 32 GB SSD onboard storage
FortiWiFi 51E	FWF-51E	7x GE RJ45 ports (including 2x WAN ports, 5x Switch ports), Wireless (802.11a/b/g/n), 32 GB SSD onboard storage
Optional Accessory		
Rack Mount Tray	SP-RACKTRAY-02	Rack mount tray for FG-30D, FG-40C, FG-50/51E, FG-60C, FG-60D/-POE, FG-70D, FG-80D, FG-90D/-POE, FAD-100E, FRC-100D, FWB-100D, FWL-60D, FVE-100E.

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 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



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