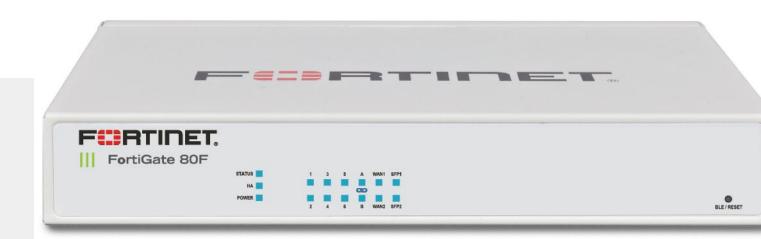


# FortiGate FortiWiFi 80F Series

FG-80F, FG-80F-POE, FG-80F-Bypass, FG-81F, FG-81F-POE, FG-80F-DSL, FWF-81F-2R-POE, FWF-81F-2R-3G4G-POE, FWF-80F/81F-2R, and FWF-80F/81F-2R-3G4G-DSL



#### **Highlights**

#### **Gartner Magic Quadrant**

**Leader** for both Network Firewalls and SD-WAN.

#### Security-Driven

**Networking** with FortiOS delivers converged networking and security.

#### **Unparalleled Performance**

with Fortinet's patented SoC processors.

#### **Enterprise Security**

with consolidated AI / ML-powered FortiGuard Services.

#### **Simplified Operations**

with centralized management for networking and security, automation, deep analytics, and self-healing.

### **Converged Next-Generation Firewall (NGFW) and SD-WAN**

The FortiGate Next-Generation Firewall 80F series is ideal for building security-driven networks at distributed enterprise sites and transforming WAN architecture at any scale.

With a rich set of Al/ML-based FortiGuard security services and our integrated Security Fabric platform, the FortiGate FortiWiFi 80F series delivers coordinated, automated, end-to-end threat protection across all use cases.

FortiGate has the industry's first integrated SD-WAN and zero-trust network access (ZTNA) enforcement within an NGFW solution and is powered by one OS. FortiGate FortiWiFi 80F automatically controls, verifies, and facilitates user access to applications, delivering consistency with a seamless and optimized user experience.

IPS	NGFW	Threat Protection	Interfaces
1.4 Gbps	1 Gbps	900 Mbps	Multiple GE RJ45   Variants with PoE, DSL, 3G4G, WiFi and/or storage



Available in



**Appliance** 



Virtual





Cloud



Container

#### **FortiOS Everywhere**

#### FortiOS, Fortinet's Advanced Operating System

FortiOS enables the convergence of high performing networking and security across the Fortinet Security Fabric. Because it can be deployed anywhere, it delivers consistent and context-aware security posture across network, endpoint, and multi-cloud environments.

FortiOS powers all FortiGate deployments whether a physical or virtual device, as a container, or as a cloud service. This universal deployment model enables the consolidation of many technologies and use cases into organically built best-of-breed capabilities, unified operating system, and ultra-scalability. The solution allows organizations to protect all edges, simplify operations, and run their business without compromising performance or protection.

FortiOS dramatically expands the Fortinet Security Fabric's ability to deliver advanced AI/ML-powered services, inline advanced sandbox detection, integrated ZTNA enforcement, and more. It provides protection across hybrid deployment models for hardware, software, and Software-as-a-Service with SASE.

FortiOS expands visibility and control, ensures the consistent deployment and enforcement of a simplified, single policy and management framework. Its security policies enable centralized management across large-scale networks with the following key attributes:

- Interactive drill-down and topology viewers that display real-time status
- On-click remediation that provides accurate and quick protection against threats and abuses
- Unique threat score system correlates weighted threats with users to prioritize investigations



Intuitive easy to use view into the network and endpoint vulnerabilities



Visibility with FOS Application Signatures

#### **FortiConverter Service**

FortiConverter Service provides hassle-free migration to help organizations transition from a wide range of legacy firewalls to FortiGate Next-Generation Firewalls quickly and easily. The service eliminates errors and redundancy by employing best practices with advanced methodologies and automated processes. Organizations can accelerate their network protection with the latest FortiOS technology.





#### **FortiGuard Services**

#### **Network and File Security**

Services provide protection against network-based and file-based threats. This consists of Intrusion Prevention (IPS) which uses AI/M models to perform deep packet/SSL inspection to detect and stop malicious content, and apply virtual patching when a new vulnerability is discovered. It also includes Anti-Malware for defense against known and unknown file-based threats. Anti-malware services span both antivirus and file sandboxing to provide multi-layered protection and are enhanced in real-time with threat intelligence from FortiGuard Labs. Application Control enhances security compliance and offers real-time application visibility.

#### Web / DNS Security

Services provide protection against web-based threats including DNS-based threats, malicious URLs (including even in emails), and botnet/command and control communications. DNS filtering provides full visibility into DNS traffic while blocking high-risk domains, and protects against DNS tunneling, DNS infiltration, C2 server ID and Domain Generation Algorithms (DGA). URL filtering leverages a database of 300M+ URLs to identify and block links to malicious sites and payloads. IP Reputation and anti-botnet services prevent botnet communications, and block DDoS attacks from known sources.

#### SaaS and Data Security

Services address numerous security use cases across application usage as well as overall data security. This consists of Data Leak Prevention (DLP) which ensures data visibility, management and protection (including blocking exfiltration) across networks, clouds, and users, while simplifying compliance and privacy implementations. Separately, our Inline Cloud Access Security Broker (CASB) service protects data in motion, at rest, and in the cloud. The service enforces major compliance standards and manages account, user and cloud application usage. Services also include capabilities designed to continually assess your infrastructure, validate that configurations are working effectively and secure, and generate awareness of risks and vulnerabilities that could impact business operations. This includes coverage across IoT devices for both IoT detection and IoT vulnerability correlation.

#### **Zero-Day Threat Prevention**

Zero-day threat prevention entails Fortinet's Al-based inline malware prevention, our most advanced sandbox service, to analyze and block unknown files in real-time, offering subsecond protection against zero-day and sophisticated threats across all NGFWs. The service also has a built-in MITRE ATT&CK® matrix to accelerate investigations. The service focuses on comprehensive defense by blocking unknown threats while streamlining incident response efforts and reducing security overhead.

#### **OT Security**

The service provides OT detection, OT vulnerability correlation, virtual patching, OT signatures, and industry-specific protocol decoders for overall robust defense of OT environments and devices.





### **Secure Any Edge at Any Scale**

#### Powered by Security Processing Unit (SPU)

Traditional firewalls cannot protect against today's content- and connection-based threats because they rely on off-the-shelf hardware and general-purpose CPUs, causing a dangerous performance gap. Fortinet's custom SPU processors deliver the power you need—up to 520Gbps—to detect emerging threats and block malicious content while ensuring your network security solution does not become a performance bottleneck.

#### **ASIC Advantage**



#### 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





Intuitive view and clear insights into network security posture with FortiManager

# **Centralized Network and Security Management at Scale**

FortiManager, the centralized management solution from Fortinet, enables integrated management of the Fortinet security fabric, including devices like FortiGate, FortiSwitch, and FortiAP. It simplifies and automates the oversight of network and security functions across diverse environments, serving as the fundamental component for deploying Hybrid Mesh Firewalls.



#### **Use Cases**



#### **Next Generation Firewall (NGFW)**

 FortiGuard Labs' suite of Al-powered Security Services—natively integrated with your NGFW—secures web, content, and devices and protects networks from ransomware and sophisticated cyberattacks

- Real-time SSL inspection (including TLS 1.3) provides full visibility into users, devices, and applications across the attack surface
- Fortinet's patented SPU (Security Processing Unit) technology provides industry-leading high-performance protection



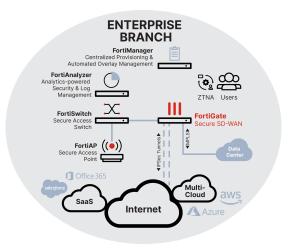
#### **Secure SD-WAN**

- FortiGate WAN Edge powered by one OS and unified security and management framework and systems transforms and secures WANs
- Delivers superior quality of experience and effective security posture for work-from-any where models, SD-Branch, and cloud-first WAN use cases
- Achieve operational efficiencies at any scale through automation, deep analytics, and self-healing



#### **Universal ZTNA**

- Control access to applications no matter where the user is and no matter where the application is hosted for universal application of access policies
- Provide extensive authentications, checks, and enforce policy prior to granting application access every time
- Agent-based access with FortiClient or agentless access via proxy portal for guest or BYOD

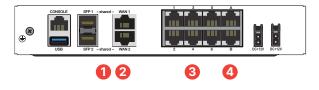




#### **Hardware**

# FortiGate 80F/81F FortiGate 80F-Bypass

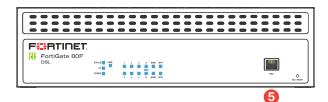


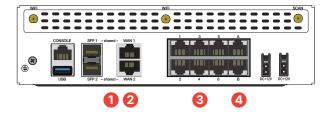


#### Interfaces

- 1. 2 x GE RJ45/SFP Shared Media Ports
- 2 x WAN GE RJ45 Ports, FG-80F-Bypass model only: 1x Bypass GE RJ45 Port Pair (WAN1 and Port1, default configuration)

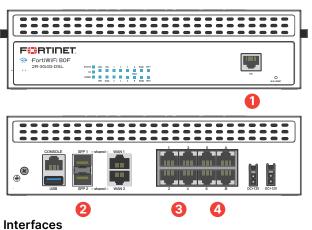
#### FortiGate 80F-DSL FortiGate 80F/81F-POE FortiWiFi 80F/81F-2R FortiWiFi 81F-2R-POE





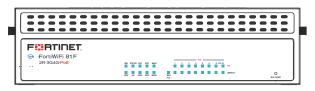
- 3. 6 x GE RJ45\* Ports
- 4. 2 x GE RJ45\* FortiLink Ports
- 5. 1 x DSL RJ11 Port (for 80F-DSL only)
- \* POE/+ ports for POE Variants

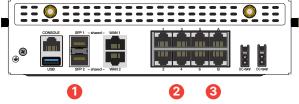
#### FortiWiFi 80F/81F-2R-3G4G-DSL



- 1. 1 x DSL Port (RJ11)
- 2. 2 x GE RJ45/SFP Shared Media Ports
- 3. 6 x GE RJ45 Ports
- 4. 2 x GE RJ45 FortiLink Ports

#### FortiWiFi 81F-2R-3G4G-POE





#### Interfaces

- 1. 2 x GE RJ45/SFP Shared Media Ports
- 2. 6 x GE RJ45 POE/+ Ports
- 3. 2 x GE RJ45 POE/+ FortiLink Ports

#### **Hardware Features**

#### **Superior Wireless Coverage**

A built-in dual-band, dual-stream access point is integrated on the FortiWiFi 80F series which provides the industry's latest high-speed WiFi-6 (802.11ax) wireless access.

#### **Trusted Platform Module (TPM)**

The FortiGate 80F Series features a dedicated module that hardens physical networking appliances by generating, storing, and authenticating cryptographic keys. Hardware-based security mechanisms protect against malicious software and phishing attacks.

#### Bypass WAN/LAN Mode

The FortiGate 80F Series offers a pair of bypass ports that help organizations avoid network communication interruption due to device faults and improve network reliability.

#### **Access Layer Security**

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.



### **Specifications**

	FG-80F	FG-81F	FG-80F-BYPASS	FG-80F-POE	FG-81F-POE
Interfaces and Modules					
GE RJ45/SFP Shared Media Pairs	2	2	2	2	2
GE RJ45 Internal Ports	6	6	6	_	_
GE RJ45 FortiLink Ports (Default)	2	2	2	_	_
GE RJ45 PoE/+ Ports	_	_	_	6	6
GE RJ45 PoE/+ FortiLink Ports (Default)	_	-	-	2	2
Bypass GE RJ45 Port Pair (WAN1 & Port1, default configuration)	-	_	Yes	_	-
Wireless Interface	_	_	_	_	_
USB Ports 3.0	1	1	1	1	1
Console (RJ45)	1	1	1	1	1
Internal Storage		1× 128 GB SSD			1× 128 GB SSD
Trusted Platform Module (TPM)	Yes	Yes	Yes	Yes	Yes
Bluetooth Low Energy (BLE)	Yes	Yes	Yes	Yes	Yes
System Performance — Enterprise Traffic Mix					
IPS Throughput <sup>2</sup>			1.4 Gbps		
NGFW Throughput <sup>2, 4</sup>			1 Gbps		
Threat Protection Throughput 2,5 900 Mbps					
System Performance and Capacity					
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	10 / 10 / 7 Gbps				
Firewall Latency (64 byte, UDP)	3.23 µs				
Firewall Throughput (Packet per Second)	10.5 Mpps				
Concurrent Sessions (TCP)	1.5 Million				
New Sessions/Second (TCP)	45 000				
Firewall Policies	5000				
IPsec VPN Throughput (512 byte)1	6.5 Gbps				
Gateway-to-Gateway IPsec VPN Tunnels	200				
Client-to-Gateway IPsec VPN Tunnels	2500				
SSL-VPN Throughput			950 Mbps		
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)			200		
SSL Inspection Throughput (IPS, avg HTTPS) <sup>3</sup>			715 Mbps		
SSL Inspection CPS (IPS, avg. HTTPS)3			700		
SSL Inspection Concurrent Session (IPS, avg HTTPS) <sup>3</sup>			100 000		
Application Control Throughput (HTTP 64K) <sup>2</sup>	1.8 Gbps				
CAPWAP Throughput (HTTP 64K) 9 Gbps					
Virtual Domains (Default / Maximum)	imum) 10 / 10				
Maximum Number of FortiSwitches Supported	24				
Maximum Number of FortiAPs (Total /Tunnel)	96 / 48				
			500		

Note: All performance values are "up to" and vary depending on system configuration.



 $<sup>^{\</sup>mbox{\tiny 1}}$  IPsec VPN performance test uses AES256-SHA256.

 $<sup>^{\</sup>rm 2}$  IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

<sup>&</sup>lt;sup>3</sup> SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

 $<sup>^{\</sup>rm 4}$  NGFW performance is measured with Firewall, IPS and Application Control enabled.

<sup>5</sup> Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

# **Specifications**

	FG-80F	FG-81F	FG-80F-BYPASS	FG-80F-POE	FG-81F-POE
Dimensions and Power					
Height x Width x Length (inches)	1.6 × 8.5 × 7.0	1.6 × 8.5 × 7.0	1.6 × 8.5 × 7.0	2.4 × 8.5 × 7.0	2.4 × 8.5 × 7.0
Height x Width x Length (mm)	40 × 216 × 178	40 × 216 × 178	40 × 216 × 178	60 × 216 × 178	60 × 216 × 178
Weight	2.4 lbs (1.1 kg)	2.4 lbs (1.1 kg)	2.6 lbs (1.2 kg)	3.1 lbs (1.4 kg)	3.1 lbs (1.4 kg)
Form Factor (supports EIA/non-EIA standards)		D	esktop/ Wall Mount/ Rack Tra	ay	
Operating Environment and Certifications					
Input Rating	12V DC, 3A (dual redundancy optional)	12V DC, 3A (dual redundancy optional)	12V DC, 3A (dual redundancy optional)	+54V DC, 3A (dual redundancy optional)	+54V DC, 3A (dual redundancy optional
Power Required (Redundancy Optional)	Pov	vered by up to 2 External DC	Power Adapters (1 adapter ir	ncluded), 100-240V AC, 50/60	) Hz
Maximum Current	115VAC/0.4A, 230VAC/0.2A	115VAC/0.4A, 230VAC/0.2A	115VAC/0.4A, 230VAC/0.2A	115VAC/2.2A, 230VAC/1.1A	115VAC/1.2A, 230VAC/0.6A
Total Available PoE Power Budget*	_	_	_	96W	96W
Power Consumption (Average / Maximum)	12.69 W / 15.51 W	13.5 W / 16.5 W	12.6 W / 15.4 W	96 W / 118 W	98 W / 137 W
Heat Dissipation	52.55 BTU/h	56.30 BTU/h	52.55 BTU/h	402.26 BTU/h	467.5 BTU/h
Operating Temperature			32°F to 104°F (0°C to 40°C)		
Storage Temperature		-	31°F to 158°F (-35°C to 70°C	0)	
Humidity			10% to 90% non-condensing	J	
Noise Level	Fanless 0 dBA	Fanless 0 dBA	Fanless 0 dBA	31.56 dBA	31.56 dBA
Operating Altitude			Up to 7400 ft (2250 m)		
Compliance		FCC, ICE	S, CE, RCM, VCCI, BSMI, UL	/cUL, CB	
Certifications			USGv6/IPv6		

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



### **Specifications**

	FORTIWIFI 80F-2R	FORTIWIFI 81F-2R	FORTIWIFI 81F-2R-POE		
Hardware Specifications					
GE RJ45/SFP Shared Media Pairs	2	2	2		
GE RJ45 Internal Ports	6 6 —				
GE RJ45 FortiLink Ports (Default)	2	2			
GE RJ45 PoE/+ Ports			6		
GE RJ45 PoE/+ FortiLink Ports (Default)			2		
Bypass GE RJ45 Port Pair (WAN1 and Port1, default configuration)	_	_			
Wireless Interface	Dual WiFi Radi	Dual WiFi Radio (5 GHz, 2.4 GHz) 802.11a/b/g/n/ac/ax + 1 Scanning Radio			
Antenna Ports (SMA)	3	3	3		
USB Ports 3.0	1	1	1		
Console (RJ45)	1	1	1		
Internal Storage	_	1× 128 GB SSD	1× 128 GB SSD		
Trusted Platform Module (TPM)	Yes	Yes	Yes		
Bluetooth Low Energy (BLE)	Yes	Yes	Yes		
Radio Specifications			100		
Multiple User (MU) MIMO		2×2			
Maximum Wi-Fi Speeds		574 Mbps @ 2.4 GHz, 1201 Mbps @ 5 GHz			
Maximum Tx Power					
Antenna Gain	23 dBm @ 2.4 GHz, 22 dBm @ 5 GHz				
System Performance — Enterprise Traffic Mix	4.5dBi @ 2.4Ghz, 5.5dBi @ 5GHz				
	110				
IPS Throughput <sup>2</sup>	1.4 Gbps				
NGFW Throughput 2,4	1 Gbps				
Threat Protection Throughput 2,5	900 Mbps				
System Performance					
Firewall Throughput (1518 / 512 / 64 byte UDP packets)	10/10/7 Gbps				
Firewall Latency (64 byte UDP packets)	3.23 µs				
Firewall Throughput (Packets Per Second)	10.5 Mpps				
Concurrent Sessions (TCP)	1.5 Million				
New Sessions/Second (TCP)		45 000			
Firewall Policies		5000			
Psec VPN Throughput (512 byte) 1		6.5 Gbps			
Gateway-to-Gateway IPsec VPN Tunnels		200			
Client-to-Gateway IPsec VPN Tunnels		2500			
SSL-VPN Throughput		950 Mbps			
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)		200			
SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>		715 Mbps			
SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>	700				
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>	100 000				
Application Control Throughput (HTTP 64K) <sup>2</sup>	1.8 Gbps				
CAPWAP Throughput (HTTP 64K)	9 Gbps				
Virtual Domains (Default / Maximum)	10 / 10				
Maximum Number of FortiSwitches Supported	24				
Maximum Number of FortiAPs (Total / Tunnel Mode)	96 / 48				
Maximum Number of FortiTokens	500				
High Availability Configurations	Active-Active, Active-Passive, Clustering				

Note: All performance values are "up to" and vary depending on system configuration.



<sup>&</sup>lt;sup>1</sup> IPsec VPN performance test uses AES256-SHA256.

 $<sup>^{\</sup>rm 2}$  IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

 $<sup>^{\</sup>rm 3}$  SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

 $<sup>^{\</sup>rm 4}$  NGFW performance is measured with Firewall, IPS and Application Control enabled.

<sup>5</sup> Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

# **Specifications**

	FORTIWIFI 80F-2R	FORTIWIFI 81F-2R	FORTIWIFI 81F-2R-POE	
Dimensions				
Height x Width x Length (inches)	$2.4 \times 8.5 \times 7.0$	$2.4 \times 8.5 \times 7.0$	2.4 × 8.5 × 7.0	
Height x Width x Length (mm)	60 × 216 × 178	60 × 216 × 178	60 × 216 × 178	
Weight	3.3 lbs (1.5 kg)	3.3 lbs (1.5 kg)	3.3 lbs (1.5 kg)	
Form Factor		Desktop/ Wall Mount/ Rack Tray		
Operating Environment and Certificati	ons			
Input Rating	12V DC, 5A (dual redundancy optional)	12V DC, 5A (dual redundancy optional)	+54V DC, 5A (dual redundancy optional)	
Power Required (Redundancy Optional)	Powered by up to 2 External DC Power Adapters (1 adapter included), 100–240V AC, 50/60 Hz			
Maximum Current	115VAC/0.42A, 230VAC/0.21A	115VAC/0.42A, 230VAC/0.28A	115VAC/0.9A, 230VAC/0.6A	
Total Available PoE Power Budget*	_	_	96W	
Power Consumption (Average / Maximum)	22.9 W / 27.9 W	24.79 W / 30.29 W	107.4 W / 131.3 W	
Heat Dissipation	95.26 BTU/h	103.29 BTU/h	441.4 BTU/h	
Operating Temperature		32°F to 104°F (0°C to 40°C)		
Storage Temperature		-31°F to 158°F (-35°C to 70°C)		
Humidity		10% to 90% non-condensing		
Noise Level	24.14 dBA	24.14 dBA	31.56 dBA	
Operating Altitude		Up to 7400 ft (2250 m)		
Compliance		FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB		
Certifications		USGv6/IPv6		

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



### **Specifications**

	FG-80F-DSL	FWF-80F-2R-3G4G-DSL	FWF-81F-2R-3G4G-DSL	FWF-81F-2R-3G4G-POE	
Interfaces and Modules					
GE RJ45/SFP Shared Media Pairs	2	2	2	2	
GE RJ45 Internal Ports	6	6	6	-	
GE RJ45 FortiLink Ports (Default)	2	2	2	-	
GE RJ45 POE/+ Ports	-	-	-	6	
GE RJ45 POE/+ FortiLink Ports (Default)	-	_	-	2	
DSL RJ11 Port	1	1	1	-	
Cellular Modem	_	3G4G / LTE	3G4G / LTE	3G4G / LTE	
Wireless Interface	-	Single Radio (2.4GHz/5GHz), 802.11a/b/g/n/ac-W2 Dual WiFi Radio (5 GHz, 2.4 GHz) 802.11a/b/g/n/ac/ax + 1 Scanning Radio	Dual WiFi Radio (5 GHz, 2.4 GHz) 802.11a/b/g/n/ac/ax + 1 Scanning Radio	Dual WiFi Radio (5 GHz, 2 GHz) 802.11a/b/g/n/ac/ax + 1 Scanning Radio	
Antenna Ports (SMA)	-	6	6	6	
USB Ports	1	1	1	1	
Console Port (RJ45)	1	1	1	1	
SIM Slots (Nano SIM)	-	2	2	2	
Internal Storage	-	-	128 GB	128 GB	
Trusted Platform Module (TPM)	-	Yes	Yes	Yes	
Bluetooth Low Energy (BLE)	-	Yes	Yes	Yes	
System Performance — Enterprise Traffic Mix					
IPS Throughput <sup>2</sup>		1.4 (	Bbps		
GFW Throughput <sup>2,4</sup> 1 Gbps					
Threat Protection Throughput 2,5	900 Mbps				
System Performance and Capacity					
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)		10 / 10 /	7 Gbps		
Firewall Latency (64 byte, UDP)		3.2:	3 µs		
Firewall Throughput (Packet per Second)		10.5	Mpps		
Concurrent Sessions (TCP)		1.5 M	lillion		
New Sessions/Second (TCP)		45	000		
Firewall Policies		5 (	100		
Psec VPN Throughput (512 byte) 1		6.5 (	Bbps		
Gateway-to-Gateway IPsec VPN Tunnels		20	00		
Client-to-Gateway IPsec VPN Tunnels		25	00		
SSL-VPN Throughput		950	Mbps		
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)		20	00		
SSL Inspection Throughput (IPS, avg. HTTPS) <sup>3</sup>		715 N	Mbps		
SSL Inspection CPS (IPS, avg. HTTPS) <sup>3</sup>		70	00		
SSL Inspection Concurrent Session (IPS, avg. HTTPS) <sup>3</sup>	100 000				
Application Control Throughput (HTTP 64K) <sup>2</sup>		1.8 0	Bbps		
CAPWAP Throughput (HTTP 64K)	9 Gbps				
Virtual Domains (Default / Maximum)	10 / 10				
Maximum Number of FortiSwitches Supported		2	4		
Maximum Number of FortiAPs (Total / Tunnel)		96 /	48		
Maximum Number of FortiTokens		50	00		
High Availability Configurations		Active-Active, Active	2-Passive Clustering		

Note: All performance values are "up to" and vary depending on system configuration.

- <sup>1</sup> IPsec VPN performance test uses AES256-SHA256.
- $^{\rm 2}$  IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.
- $^{\rm 3}$  SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.
- $^{\rm 4}$  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**

	FG-80F-DSL	FWF-80F-2R-3G4G-DSL	FWF-81F-2R-3G4G-DSL	FWF-81F-2R-3G4G-POE	
Dimensions and Power					
Height x Width x Length (inches)	$2.4 \times 8.5 \times 7.0$	$2.4 \times 8.5 \times 7.0$	$2.4 \times 8.5 \times 7.0$	$2.4 \times 8.5 \times 7.0$	
Height x Width x Length (mm)	60 × 216 × 178	60 × 216 × 178	60 × 216 × 178	60 × 216 × 178	
Veight	3.07 lbs (1.39 kg)	3.5 lbs (1.6 kg)	3.5 lbs (1.6 kg)	3.5 lbs (1.6 kg)	
Form Factor (supports EIA/non-EIA standards)		Desktop / Walln	nount (optional)		
nput Rating	12V DC, 5A	12V DC, 5A	12V DC, 5A	54V DC, 2.78A	
Power Required (Redundancy Optional)	Powered by up	p to two external DC power adapters	s (one adapter included), 100-240\	V AC, 50/60 Hz	
Current (Maximum)		115Vac/0.9A,	230Vac/0.6A		
Total Available PoE Power Budget*	-	_	_	96W	
Power Consumption (Average / Maximum)	28.0 W / 31.6 W	28.07 W / 34.31 W	29.2 W / 35.6 W	109.3 W / 133.6 W	
Heat Dissipation	108 BTU/h	117.0 BTU/h	121.5 BTU/h	455.6 BTU/h	
Operating Environment and Certifications					
Operating Temperature		32°F to 104°F	(0°C to 40°C)		
Storage Temperature		-31°F to 158°F	(-35°C to 70°C)		
Humidity	10% to 90% non-condensing	20% to 90% non-condensing	20% to 90% non-condensing	20% to 90% non-condensing	
Noise Level	24.14 dBA	24.14 dBA	24.14 dBA	31.56 dBA	
Operating Altitude		Up to 7400	ft (2250 m)		
Compliance		FCC, ICES, CE, RCM, V			
Certifications		USGV			
Radio Specifications			-,		
Multiple (MU) MIMO	N/A		3×3		
	N/A				
Maximum Wi-Fi Speeds  Maximum Tx Power	N/A	1300 Mbps @ 5 GHz, 450 Mbps @ 2.4 GHz			
	N/A	20 dBm			
Antenna Gain	IVA	3.5 dBi @ 5 GHz, 5 dBi @ 2.4 GHz			
3G4G Modem	N/A		All D		
Regions Supported	N/A	0' \\	All Regions	/D : )	
Modem Model		Sierra Wi	ireless EM7565 (2 SIM Slots, Active	/Passive)	
TE Category	N/A		CAT-12		
TE Bands	N/A	B1, B2, B3, B4, B5, B7, B8, B9, B1	2, B13, B18, B19, B20, B26, B28, B2 B48, B66	.9, B30, B32, B41, B42, B43, B46	
JMTS/HSPA+	N/A		B1, B2, B4, B5, B6, B8, B9, B19		
WCDMA	N/A		_		
CDMA 1xRTT/EV-DO Rev A	N/A		_		
GSM/GPRS/EDGE	N/A		_		
Module Certifications	N/A	FCC,	ICES, CE, RCM, VCCI, BSMI, UL/cU	JL, CB	
Diversity	N/A		Yes		
MIMO	N/A		Yes		
GNSS Bias	N/A		Yes		
DSL Modem - Supported Mode					
VDSL2	$\odot$	$\odot$	$\odot$	N/A	
ADSL2	$\odot$	$\odot$	$\odot$	N/A	
ADSL2+	$\odot$	<u></u>	<u></u>	N/A	
G.DMT	<u> </u>	<u> </u>	<u> </u>	N/A	
Γ1.413	$\odot$	$\odot$	<u> </u>	N/A	
G.Lite	<u> </u>	<u> </u>	<u></u> ⊘	N/A	
DSL Modem - Supported Type				14/1	

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



### **Subscriptions**

				Bundles	
Service Category	Service Offering	A-la-carte	Enterprise Protection	Unified Threat Protection	Advanced Threat Protection
FortiGuard Security	IPS Service	•	•	•	•
Services	Anti-Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•
	URL, DNS & Video Filtering Service	•	•	•	
	Anti-Spam		•	•	
	Al-based Inline Malware Prevention Service	•	•		
	Data Loss Prevention Service 1	•	•		
	OT Security Service (OT Detection, OT Vulnerability correlation, Virtual Patching, OT Signature / Protocol Decoders) 1	•			
	Application Control		included with For	tiCare Subscription	
	CASB SaaS Control		included with For	tiCare Subscription	
SD-WAN and SASE Services	SD-WAN Underlay Bandwidth and Quality Monitoring Service	•			
Sei vices	SD-WAN Overlay-as-a-Service for SaaS-based overlay network provisioning	•			
	SD-WAN Connector for FortiSASE Secure Private Access	•			
	FortiSASE subscription including cloud management and 10Mbps bandwidth license $^{\rm 2}$	•			
NOC and SOC Services	FortiGuard Attack Surface Security Service (IoT Detection, IoT Vulnerability Correlation, and Security Rating Updates) <sup>1</sup>	•	•		
	FortiConverter Service	•	•		
	Managed FortiGate Service	•			
	FortiGate Cloud (SMB Logging + Cloud Management)	•			
	FortiManager Cloud	•			
	FortiAnalyzer Cloud	•			
	FortiAnalyzer Cloud with SOCaaS	•			
	FortiGuard SOCaaS	•			
Hardware and	FortiCare Essentials <sup>2</sup>	•			
Software Support	FortiCare Premium	•	•	•	•
	FortiCare Elite	•			
Base Services	Internet Service (SaaS) DB Updates				
	GeoIP DB Updates		included with For	tiCara Subscription	
	Device/OS Detection Signatures		included with FOI	tiCare Subscription	
	Trusted Certificate DB Updates				
	DDNS (v4/v6) Service				
	• • • • • • • • • • • • • • • • • • • •				

<sup>1.</sup> Full features available when running FortiOS 7.4.1

<sup>2.</sup> Desktop Models only



#### **FortiGuard 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.



#### **FortiCare Services**

Fortinet prioritizes customer success through FortiCare Services, optimizing the Fortinet Security Fabric solution. Our comprehensive lifecycle services include Design, Deploy, Operate, Optimize, and Evolve. The FortiCare Elite, one of the service variants, offers heightened SLAs and swift issue resolution with a dedicated support team. This advanced support option includes an Extended End-of-Engineering-Support of 18 months, providing flexibility. Access the intuitive FortiCare Elite Portal for a unified view of device and security health, streamlining operational efficiency and maximizing Fortinet deployment performance.



# **Ordering Information**

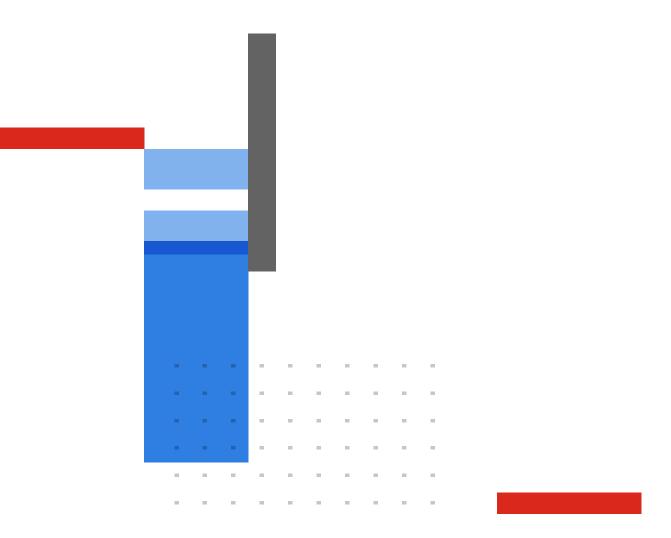
Product	SKU	Description
FortiGate 80F	FG-80F	8 x GE RJ45 ports, 2 x RJ45/SFP shared media WAN ports.
FortiGate 81F	FG-81F	8 x GE RJ45 ports, 2 x RJ45/SFP shared media WAN ports, 128GB onboard storage.
FortiGate 80F-Bypass	FG-80F-Bypass	8 x GE RJ45 ports, 2 x RJ45/SFP shared media WAN ports, may be configured with 1 pair of LAN bypass.
FortiGate 80F-POE	FG-80F-POE	8 x GE PoE ports, 2 x RJ45/SFP shared media WAN ports
FortiGate 81F-POE	FG-81F-POE	8 x GE RJ45 PoE ports, 2 x RJ45/SFP shared media WAN ports, 128GB SSD.
FortiGate 80F-DSL	FG-80F-DSL	8 x GE RJ45 Ports, 2 x RJ45/SFP shared media WAN ports, with embedded DSL module.
FortiWiFi 80F-2R	FWF-80F-2R-[RC]	8 x GE RJ45 ports, 2 x RJ45/SFP shared media WAN ports, dual WiFi radio.
FortiWiFi 81F-2R	FWF-81F-2R-[RC]	8 x GE RJ45 ports, 2 x RJ45/SFP shared media WAN ports, dual WiFi radio, 128GB SSD.
FortiWiFi 81F-2R-POE	FWF-81F-2R-POE-[RC]	8 x GE RJ45 RJ45 PoE ports, 2 x RJ45/SFP shared media WAN ports, dual WiFi radio, 128GB SSD.
FortiWiFi-80F-2R-3G4G-DSL	FWF-80F-2R-3G4G-DSL-[RC]	8 x GE RJ45 Ports, 2 x GE RJ45 WAN Ports, dual WiFi radio, with embedded DSL and 3G/4G/LTE modules
FortiWiFi-81F-2R-3G4G-DSL	FWF-81F-2R-3G4G-DSL-[RC]	$8 \times GE$ RJ45 Ports, $2 \times GE$ RJ45 WAN Ports, dual WiFi radio, with embedded DSL and $3G/4G/LTE$ modules, 128GB SSD onboard storage.
FortiWiFi-81F-2R-3G4G-PoE	FWF-81F-2R-3G4G-PoE-[RC]	$8 \times GE$ RJ45 PoE/+ Ports, $2 \times RJ45/SFP$ shared media WAN ports, dual WiFi radio, with embedded 3G/4G/LTE modules, 128GB SSD onboard storage.
Accessories	SKU	Description
AC Power Adaptor	SP-FG60E-PDC-5	Pack of 5 AC power adaptors for FG/FWF 60E/61E, 60F/61F, 80E/81E and 80F/81F.
AC Power Adaptor	SP-FWF80F-PDC-5	Pack of 5 AC power adaptors for FWF-80/81F-2R, power cable SP-FG60CPCOR-XX sold separately.
AC Power Adaptor	SP-FG80E-POE-PDC	AC power adaptor for FG-60E-POE, FG-80E-POE, FG-81E-POE, FG-80/81F-POE, FWF-81F-2R-POE power cable SP-FG60CPCOR-XX sold separately.
Rack Mount Tray	SP-RACKTRAY-02	Rack mount tray for all FortiGate E series and F series desktop models.
Wall Mount Kit	SP-FG60F-MOUNT-20	Pack of 20 wall mount kits for FG/FWF-40F series, FG/FWF-60F series, FG-80F, FG-81F and FG-80F-Bypass.
Transceivers	SKU	Description
1 GE SFP RJ45 Transceiver Module	FN-TRAN-GC	1 GE SFP RJ45 transceiver module for all systems with SFP and SFP/SFP+slots.
1 GE SFP SX Transceiver Module	FN-TRAN-SX	1 GE SFP SX transceiver module for all systems with SFP and SFP/SFP+ slots.
1 GE SFP LX Transceiver Module	FN-TRAN-LX	1 GE SFP LX transceiver module for all systems with SFP and SFP/SFP+ slots.
1GE SFP Transceiver, 90km Range, -40°/85°C Operation	FR-TRAN-ZX	1G SFP transceivers, -40°/85°C operation, 90km range for all systems with SFP Slots.

RC (regional code): A, B, D, E, F, I, J, N, P , S, V, and Y  $\,$ 



#### **Fortinet CSR Policy**

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