Data Sheet

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 AI/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

Hosted

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.

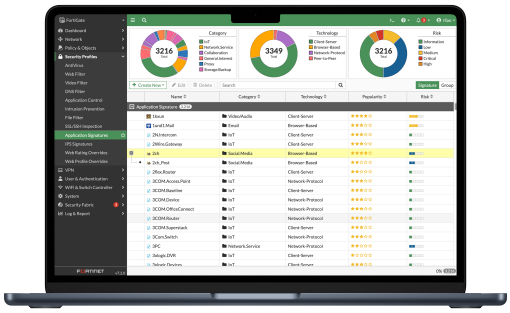
FortiOS powers all FortiGate deployments whether a physical or virtual device, as a container, or as a cloud service. This universal deployment model enables the consolidation of many technologies and use cases into organically built best-of-breed capabilities, unified operating system, and ultra-scalability. 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

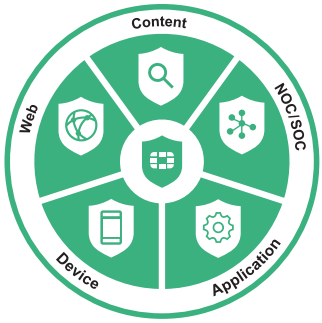
Intuitive easy to use view into the network and endpoint vulnerabilities



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

FortiGuard AI-Powered Security

FortiGuard's rich suite of security services counter threats in real time using AI-powered, coordinated protection designed by FortiGuard Labs security threat researchers, engineers, and forensic specialists.

Web Security

Advanced cloud-delivered URL, DNS (Domain Name System), and Video Filtering providing complete protection for phishing and other web born attacks while meeting compliance.

Additionally, its dynamic inline CASB (Cloud Access Security Broker) service is focused on securing business SaaS data, while inline ZTNA traffic inspection and ZTNA posture check provide per-sessions access control to applications. It also integrates with the FortiClient Fabric Agent to extend protection to remote and mobile users.

Content Security

Advanced content security technologies enable the detection and prevention of known and unknown threats and file-based attack tactics in real-time. With capabilities like CPRL (Compact Pattern Recognition Language), AV, inline Sandbox, and lateral movement protection make it a complete solution to address ransomware, malware, and credential-based attacks.

Device Security

Advanced security technologies are optimized to monitor and protect IT, IIoT, and OT (Operational Technology) devices against vulnerability and device-based attack tactics. Its validated near-real-time IPS intelligence detects, and blocks known and zero-day threats, provides deep visibility and control into ICS/OT/SCADA protocols, and provides automated discovery, segmentation, and pattern identification-based policies.

Advanced Tools for SOC/NOC

Advanced NOC and SOC management tools attached to your NGFW provide simplified and faster time-to-activation.

SOC-as-a-Service

Includes tier-one hunting and automation, log location, 24×7 SOC analyst experts, managed firewall and endpoint functions, and alert triage.

Fabric Rating Security Best Practices

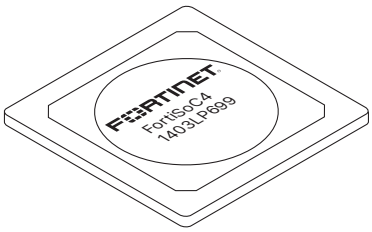
Includes supply chain virtual patching, up-to-date risk and vulnerability data to deliver quicker business decisions, and remediation for data breach situations.

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

FortiCare Services

Fortinet is dedicated to helping our customers succeed, and every year FortiCare Services help thousands of organizations get the most from our Fortinet Security Fabric solution. Our lifecycle portfolio offers Design, Deploy, Operate, Optimize, and Evolve services. Operate services offer device-level FortiCare Elite service with enhanced SLAs to meet our customer's operational and availability needs. In addition, our customized account-level services provide rapid incident resolution and offer proactive care to maximize the security and performance of Fortinet deployments.

Use Cases

Next Generation Firewall (NGFW)

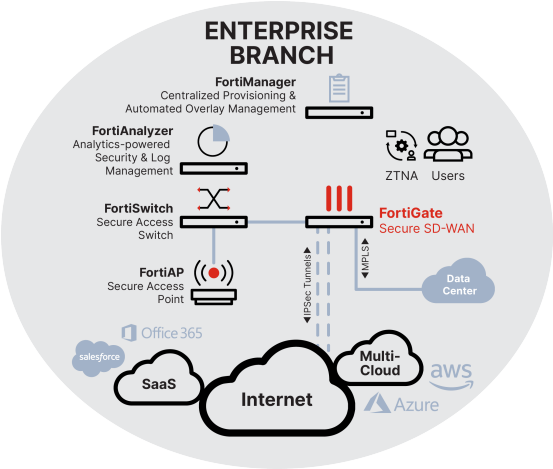
- FortiGuard Labs' suite of AI-powered Security Services—natively integrated with your NGFW—secures web, content, and devices and protects networks from ransomware and sophisticated cyberattacks
- Real-time SSL inspection (including TLS 1.3) provides full visibility into users, devices, and applications 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

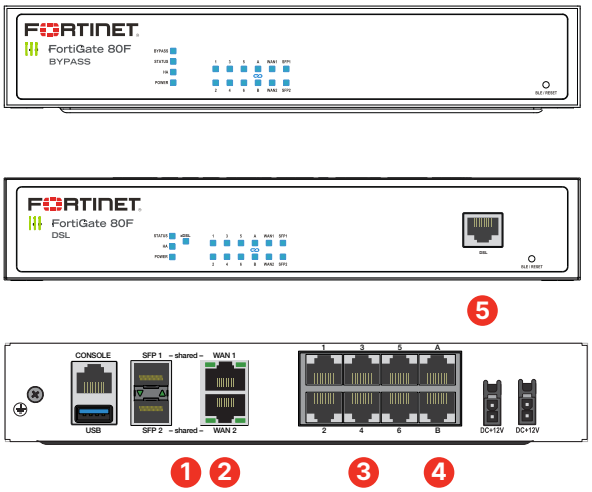
Universal ZTNA

- 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

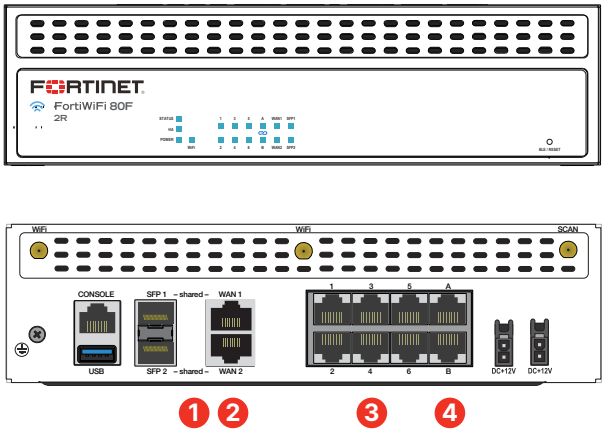


Hardware

FortiGate 80F/80F-Bypass/81F
FortiGate 80F-DSL



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

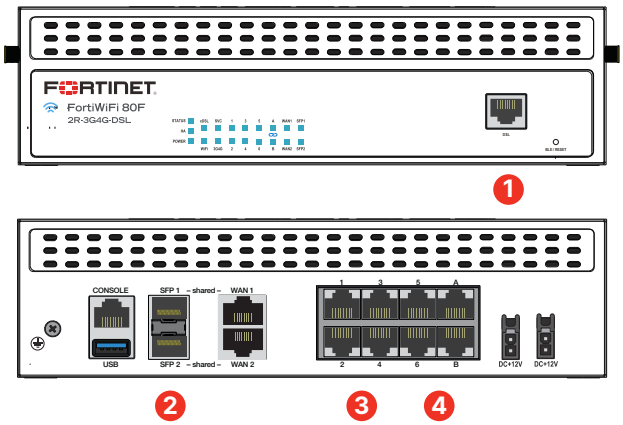


Interfaces

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

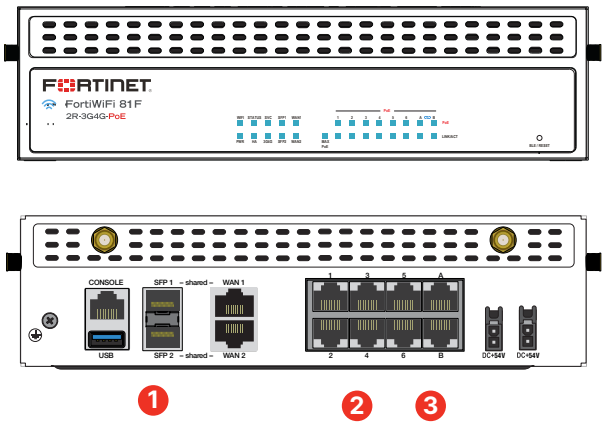
FortiWiFi 80F/81F-2R-3G4G-DSL



Interfaces

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 [2]			1.4 Gbps		
NGFW Throughput [2, 4]			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)[3]			715 Mbps		
SSL Inspection CPS (IPS, avg. HTTPS)[3]			700		
SSL Inspection Concurrent Session (IPS, avg HTTPS)[3]			100 000		
Application Control Throughput (HTTP 64K)[2]			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)			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.

[1] IPsec VPN performance test uses AES256-SHA256.

[2] IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

[3] SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

[4] NGFW performance is measured with Firewall, IPS and Application Control enabled.

[5] Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

Specifications

	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)	Desktop/ Wall Mount/ Rack Tray				
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)	Powered by up to 2 External DC Power Adapters (1 adapter included), 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°–104°F (0°–40°C)				
Storage Temperature	-31°–158°F (-35°–70°C)				
Humidity	10%–90% non-condensing				
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, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB				
Certifications	USGv6/IPv6				

* 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 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			
Multiple User (MU) MIMO	2×2		
Maximum Wi-Fi Speeds	574 Mbps @ 2.4 GHz, 1201 Mbps @ 5 GHz		
Maximum Tx Power	23 dBm @ 2.4 GHz, 22 dBm @ 5 GHz		
Antenna Gain	4.5dBi @ 2.4Ghz, 5.5dBi @ 5GHz		
System Performance — Enterprise Traffic Mix			
IPS Throughput [2]	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		
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) [3]	715 Mbps		
SSL Inspection CPS (IPS, avg. HTTPS) [3]	700		
SSL Inspection Concurrent Session (IPS, avg. HTTPS) [3]	100 000		
Application Control Throughput (HTTP 64K) [2]	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.

[1] IPsec VPN performance test uses AES256-SHA256.

[2] IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

[3] SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

[4] NGFW performance is measured with Firewall, IPS and Application Control enabled.

[5] Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

Specifications

	FORTIWIFI 80F-2R	FORTIWIFI 81F-2R	FORTIWIFI 81F-2R-POE
Dimensions			
Height x Width x Length (inches)	2.4 × 8.5 × 7.0	2.4 × 8.5 × 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 Certifications			
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°–104°F (0°–40°C)		
Storage Temperature	-31°–158°F (-35°–70°C)		
Humidity	10%–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		

* 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		
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, 2.4 GHz) 802.11a/b/g/n/ac/ax + 1 Scanning Radio
Antenna Ports (SMA)	–	6		
USB Ports	1	1		
Console Port (RJ45)	1	1		
SIM Slots (Nano SIM)	–	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 [2]	1 Gbps			
NGFW Throughput [2, 4]	800 Mbps			
Threat Protection Throughput [2, 5]	600 Mbps			
System Performance and Capacity				
IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP)	5 / 5 / 5 Gbps			
Firewall Latency (64 byte, UDP)	2.97 µs			
Firewall Throughput (Packet per Second)	7.5 Mpps			
Concurrent Sessions (TCP)	700 000			
New Sessions/Second (TCP)	35 000			
Firewall Policies	5 000			
IPsec VPN Throughput (512 byte) [1]	4.4 Gbps			
Gateway-to-Gateway IPsec VPN Tunnels	200			
Client-to-Gateway IPsec VPN Tunnels	250			
SSL-VPN Throughput	490 Mbps			
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)	200			
SSL Inspection Throughput (IPS, avg. HTTPS) [3]	310 Mbps			
SSL Inspection CPS (IPS, avg. HTTPS) [3]	320			
SSL Inspection Concurrent Session (IPS, avg. HTTPS) [3]	55 000			
Application Control Throughput (HTTP 64K) [2]	990 Mbps			
CAPWAP Throughput (HTTP 64K)	3.5 Gbps			
Virtual Domains (Default / Maximum)	10 / 10			
Maximum Number of FortiSwitches Supported	8			
Maximum Number of FortiAPs (Total / Tunnel)	16 / 8			
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.

[1] IPsec VPN performance test uses AES256-SHA256.

[2] IPS (Enterprise Mix), Application Control, NGFW and Threat Protection are measured with Logging enabled.

[3] SSL Inspection performance values use an average of HTTPS sessions of different cipher suites.

[4] NGFW performance is measured with Firewall, IPS and Application Control enabled.

[5] Threat Protection performance is measured with Firewall, IPS, Application Control and Malware Protection enabled.

Specifications

	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 × 8.5 × 7.0	2.4 × 8.5 × 7.0	2.4 × 8.5 × 7.0	2.4 × 8.5 × 7.0
Height x Width x Length (mm)	60 × 216 × 178	60 × 216 × 178	60 × 216 × 178	60 × 216 × 178
Weight	TBA	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 / Wallmount (optional)			
Input Rating	TBA	12V DC, 5A	12V DC, 5A	54V DC, 2.78A
Power Required (Redundancy Optional)	Powered by up to two external DC power adapters (one adapter included), 100-240V AC, 50/60 Hz			
Current (Maximum)	115Vac/0.9A, 230Vac/0.6A			
Total Available PoE Power Budget*	–	—	—	96W
Power Consumption (Average / Maximum)	TBA	28.07 W / 34.31 W	29.2 W / 35.6 W	109.3 W / 133.6 W
Heat Dissipation	TBA	117.0 BTU/h	121.5 BTU/h	455.6 BTU/h
Operating Environment and Certifications				
Operating Temperature	32°–104°F (0°–40°C)			
Storage Temperature	-31°–158°F (-35°–70°C)			
Humidity	10%–90% non-condensing	20%–90% non-condensing	20%–90% non-condensing	20%–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, VCCI, BSMI, UL/cUL, CB			
Certifications	USGv6/IPv6			
Radio Specifications				
Multiple (MU) MIMO	N/A	3×3		
Maximum Wi-Fi Speeds	N/A	1300 Mbps @ 5 GHz, 450 Mbps @ 2.4 GHz		
Maximum Tx Power	N/A	20 dBm		
Antenna Gain	N/A	3.5 dBi @ 5 GHz, 5 dBi @ 2.4 GHz		
3G4G Modem				
Regions Supported	N/A	All Regions		
Modem Model	N/A	Sierra Wireless EM7565 (2 SIM Slots, Active/Passive)		
LTE Category	N/A	CAT-12		
LTE Bands	N/A	B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B18, B19, B20, B26, B28, B29, B30, B32, B41, B42, B43, B46, B48, B66		
UMTS/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/cUL, CB		
Diversity	N/A	Yes		
MIMO	N/A	Yes		
GNSS Bias	N/A	Yes		
xDSL Modem - Supported Mode				
VDSL2	✓	✓	✓	N/A
ADSL2	✓	✓	✓	N/A
ADSL2+	✓	✓	✓	N/A
G.DMT	✓	✓	✓	N/A
T1.413	✓	✓	✓	N/A
G.Lite	✓	✓	✓	N/A
xDSL Modem - Supported Type				
Annex A, B, I,J, M & L	✓	✓	✓	N/A

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

SUBSCRIPTIONS

Service Category	Service Offering	A-la-carte	Bundles			
			Enterprise Protection	SMB Protection	Unified Threat Protection	Advanced Threat Protection
Security Services	FortiGuard IPS Service	•	•	•	•	•
	FortiGuard Anti-Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•	•
	FortiGuard Web Security — URL and web content, Video and Secure DNS Filtering	•	•	•	•	
	FortiGuard Anti-Spam		•	•	•	
	FortiGuard IoT Detection Service	•	•			
	FortiGuard Industrial Security Service	•	•			
	FortiCloud AI-based Inline Sandbox Service [1]	•				
NOC Services	FortiGate Cloud (SMB Logging + Cloud Management)	•		•		
	FortiGuard Security Fabric Rating and Compliance Monitoring Service	•	•			
	FortiConverter Service	•	•			
	FortiGuard SD-WAN Underlay Bandwidth and Quality Monitoring Service	•				
SOC Services	FortiAnalyzer Cloud	•				
	FortiAnalyzer Cloud with SOCaaS	•				
Hardware and Software Support	FortiCare Essentials	•				
	FortiCare Premium	•	•	•	•	•
	FortiCare Elite	•				
Base Services	FortiGuard Application Control	included with FortiCare Subscription				
	FortiCloud ZTNA Inline CASB Service [1]					
	Internet Service (SaaS) DB Updates					
	GeoIP DB Updates					
	Device/OS Detection Signatures					
	Trusted Certificate DB Updates					
	DDNS (v4/v6) Service					

[1] Available when running FortiOS 7.2

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 Elite

FortiCare Elite services offers enhanced service-level agreements (SLAs) and accelerated issue resolution. This advanced support offering provides access to a dedicated support team. Single-touch ticket handling by the expert technical team streamlines resolution. This option also provides Extended End-of-Engineering-Support (EoE's) of 18 months for added flexibility and access to the new FortiCare Elite Portal. This intuitive portal provides a single unified view of device and security health.

Fortinet CSR Policy

Fortinet is committed to driving progress and sustainability for all through cybersecurity, with respect for human rights and ethical business practices, making possible a digital world you can always trust. You represent and warrant to Fortinet that you will not use Fortinet's products and services to engage in, or support in any way, violations or abuses of human rights, including those involving illegal censorship, surveillance, detention, or excessive use of force. Users of Fortinet products are required to comply with the Fortinet EULA and report any suspected violations of the EULA via the procedures outlined in the Fortinet Whistleblower Policy.

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 x GE RJ45 Ports, 2 x 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 x GE RJ45 PoE/+ Ports, 2 x 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

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