

DATA SHEET

FortiGate® FortiWiFi 80F Series

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

Next Generation Firewall
Secure SD-WAN



The FortiGate FortiWiFi 80F series provides an application-centric, scalable, and secure SD-WAN solution in a compact, fanless, desktop form factor for enterprise branch offices and mid-sized businesses with integrated WiFi-6 (802.11ax). 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
- Prevent and detect against known and unknown attacks using continuous threat intelligence from AI-powered FortiGuard Labs security services

Performance

- Delivers industry's best threat protection performance and ultra-low latency using purpose-built security processor (SPU) technology
- Provides industry-leading performance and protection for SSL encrypted traffic

Certification

- Independently tested and validated for best-in-class security effectiveness and performance
- Received unparalleled third-party certifications from NSS Labs

Networking

- Delivers advanced networking capabilities that seamlessly integrate with advanced layer 7 security and virtual domains (VDMs) to offer extensive deployment flexibility, multi-tenancy and effective utilization of resources
- Delivers high-density, flexible combination of various high-speed interfaces to enable best TCO for customers for data center and WAN deployments

Management

- Includes a management console that is effective, simple to use, and provides comprehensive network automation and visibility
- Provides Zero Touch Integration with Fortinet's Security Fabric's Single Pane of Glass Management
- Predefined compliance checklist analyzes the deployment and highlights best practices to improve overall security posture

Security Fabric

- Enables Fortinet and Fabric-ready partners' products to provide broader visibility, integrated end-to-end detection, threat intelligence sharing, and automated remediation

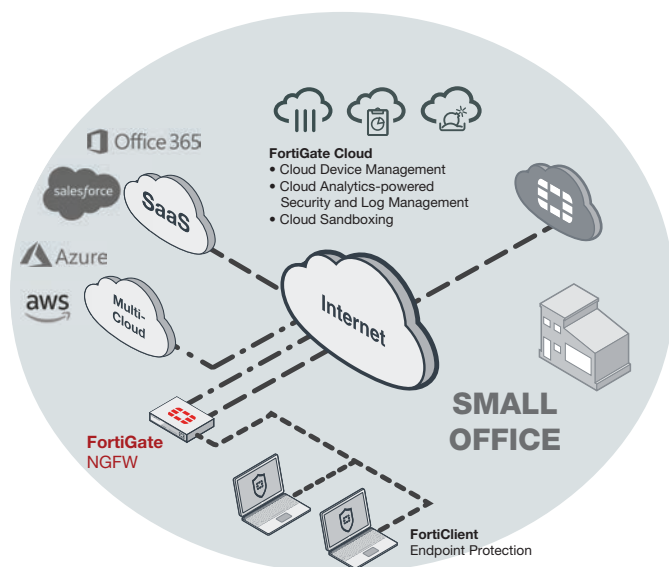
| Firewall | IPS | NGFW | Threat Protection | Interfaces |
|----------|----------|--------|-------------------|---|
| 10 Gbps | 1.4 Gbps | 1 Gbps | 900 Mbps | Multiple GE RJ45 POE DSL 3G4G Variants with internal storage WiFi |

DEPLOYMENT



Next Generation Firewall (NGFW)

- Reduce the complexity and maximize your ROI by integrating threat protection security capabilities into a single high-performance network security appliance, powered by Fortinet's Security Processing Unit (SPU)
- Full visibility into users, devices, and applications across the entire attack surface and consistent security policy enforcement irrespective of asset location
- Protect against network exploitable vulnerabilities with industry-validated 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 AI-powered FortiGuard Labs and advanced threat protection services included in the Fortinet Security Fabric

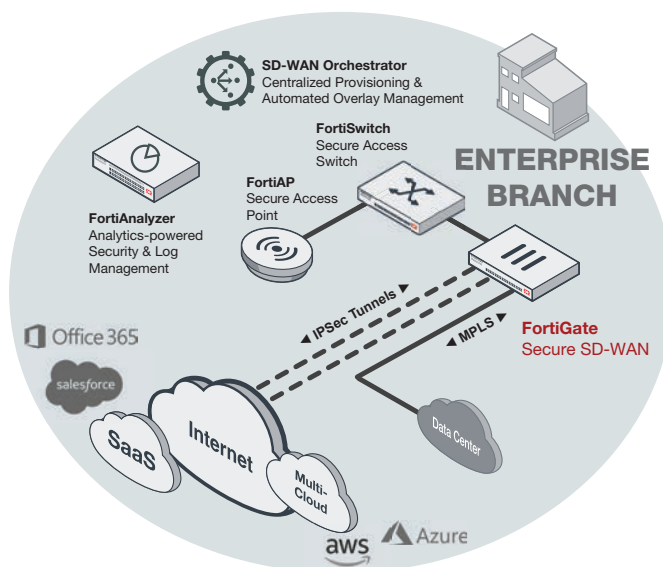


**Small Office Deployment
(NGFW)**



Secure SD-WAN

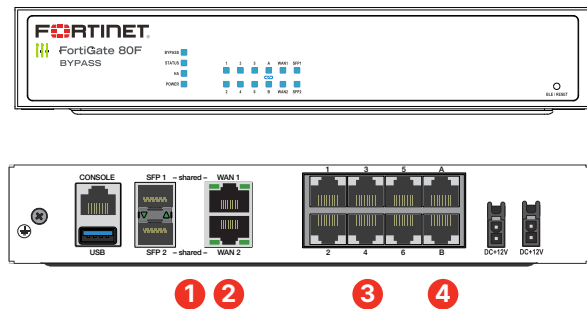
- Consistent business application performance with accurate detection, dynamic WAN path steering on any best-performing WAN transport
- Accelerated multi-cloud access for faster SaaS adoption with cloud-on-ramp
- Self-healing networks with WAN edge high availability, sub-second traffic switchover-based, and real-time bandwidth compute-based traffic steering
- Automated overlay tunnels provides encryption and abstracts physical hybrid WAN making it simple to manage
- Simplified and intuitive workflow with SD-WAN orchestrator for management and zero touch deployment
- Enhanced analytics both real-time and historical provides visibility into network performance and identifies anomalies
- Strong security posture with next generation firewall and real-time threat protection



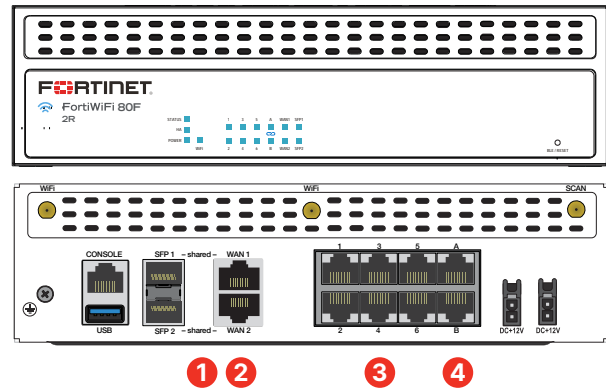
**Enterprise Branch Deployment
(Secure SD-WAN)**

HARDWARE

FortiGate 80F/80F-Bypass/81F



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

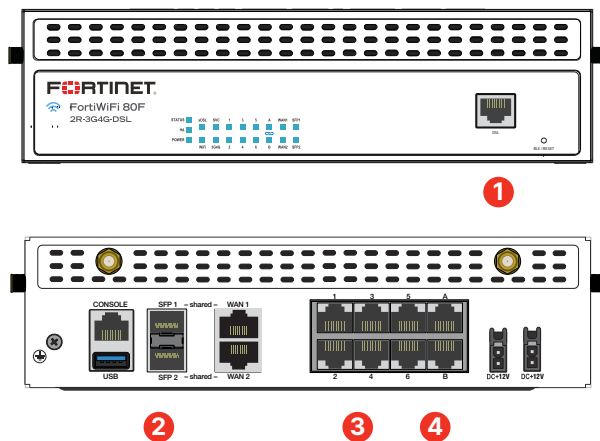


Interfaces

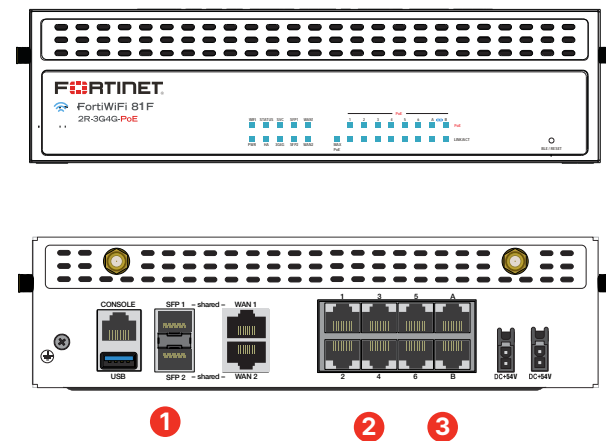
1. 2x GE RJ45/SFP Shared Media Ports
2. 2x WAN GE RJ45 Ports, FG-80F-Bypass model only: 1x Bypass GE RJ45 Port Pair, (WAN1 and Port1, default configuration)
3. 6x GE RJ45* Ports
4. 2x GE RJ45* FortiLink Ports

* POE/+ ports for POE Variants

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



FortiWiFi 81F-2R-3G4G-POE



Interfaces

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

Interfaces

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



Superior Wireless Coverage

A built-in dual-band, dual-stream access point is integrated on the FortiWiFi 80F-2R series which provides the industry's latest high-speed WiFi-6 (802.11ax) wireless access.

Secure Access Layer

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.

Trusted Platform Module

The FortiGate/FortiWiFi 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-Bypass offers a pair of bypass ports that help organizations avoid network communication interruption due to device faults and improve network reliability.

Various WAN Connectivity Options

The FortiGate 80F Series includes a 3.0 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.

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

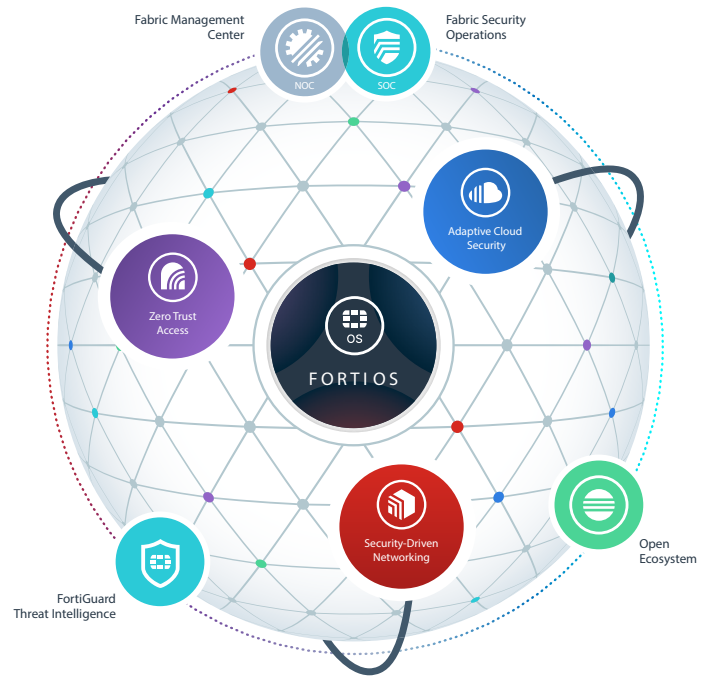
FORTINET SECURITY FABRIC

Security Fabric

The industry's highest-performing cybersecurity platform, powered by FortiOS, with a rich ecosystem designed to span the extended digital attack surface, delivering fully automated, self-healing network security.

- **Broad:** Coordinated detection and enforcement across the entire digital attack surface and lifecycle with converged networking and security across edges, clouds, endpoints and users
- **Integrated:** Integrated and unified security, operation, and performance across different technologies, location, deployment options, and the richest Ecosystem
- **Automated:** Context aware, self-healing network & security posture leveraging cloud-scale and advanced AI to automatically deliver near-real-time, user-to-application coordinated protection across the Fabric

The Fabric empowers organizations of any size to secure and simplify their hybrid infrastructure on the journey to digital innovation.



FortiOS™ Operating System

FortiOS, Fortinet's leading operating system enable the convergence of high performing networking and security across the Fortinet Security Fabric delivering consistent and context-aware security posture across network endpoint, and clouds. The organically built best of breed capabilities and unified approach allows organizations to run their businesses without compromising performance or protection, supports seamless scalability, and simplifies innovation consumption.

The release of FortiOS 7 dramatically expands the Fortinet Security Fabric's ability to deliver consistent security across hybrid deployment models consisting on appliances, software and As-a-Service with SASE, ZTNA and other emerging cybersecurity solutions.

SERVICES

FortiGuard™ Security Services

FortiGuard Labs offers real-time intelligence on the threat landscape, delivering comprehensive security updates across the full range of Fortinet's solutions. Comprised of security threat researchers, engineers, and forensic specialists, the team collaborates with the world's leading threat monitoring organizations and other network and security vendors, as well as law enforcement agencies.

FortiCare™ Services

Fortinet is dedicated to helping our customers succeed, and every year FortiCare services help thousands of organizations get the most from their Fortinet Security Fabric solution. We have more than 1000 experts to help accelerate technology implementation, provide reliable assistance through advanced support, and offer proactive care to maximize security and performance of Fortinet deployments.

SPECIFICATIONS

| | FORTIGATE 80F | FORTIGATE 81F | FORTIGATE 80F-BYPASS | FORTIGATE 80F-POE | FORTIGATE 81F-POE |
|--|---------------|---------------|---|-------------------|-------------------|
| Hardware Specifications | | | | | |
| 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 | | | | | |
| 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 | | | 16 | | |
| 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, URL filtering, and Malware Protection with sandboxing enabled.



SPECIFICATIONS

| | FORTIGATE 80F | FORTIGATE 81F | FORTIGATE 80F-BYPASS | FORTIGATE 80F-POE | FORTIGATE 81F-POE |
|--|---|---------------------------------------|---------------------------------------|--|--|
| Dimensions | | | | | |
| 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 | 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) | 12.6W / 15.4W | 13.5W / 16.5W | 12.6W / 15.4W | 96W / 118W | 98W / 137W |
| 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 | ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN | | | | |

* 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 & 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 | 16 | | |
| 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, URL filtering, and Malware Protection with sandboxing 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 | ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN | | |

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



SPECIFICATIONS

| | 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 |
| 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 |
| DSL RJ11 Port | 1 | 1 | – |
| Cellular Modem | | 3G4G / LTE | |
| Wireless Interface | | Single Radio (2.4GHz/5GHz), 802.11 a/b/g/n/ac-W2 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 | |
| Console Port (RJ45) | | 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

| | 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 |
| Height x Width x Length (mm) | 60 × 216 × 178 | 60 × 216 × 178 | 60 × 216 × 178 |
| Weight | 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 | 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 | 115Vac/0.9A, 230Vac/0.6A | 115Vac/0.9A, 230Vac/0.6A |
| Total Available PoE Power Budget* | — | — | 96W |
| Power Consumption (Average / Maximum) | 28.07 W / 34.31 W | 29.2 W / 35.6 W | 109.3 W / 133.6 W |
| Heat Dissipation | 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 | 20–90% non-condensing | 20–90% non-condensing | 20–90% 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 | ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN | | |
| Radio Specifications | | | |
| Multiple (MU) MIMO | 3×3 | | |
| Maximum Wi-Fi Speeds | 1300 Mbps @ 5 GHz, 450 Mbps @ 2.4 GHz | | |
| Maximum Tx Power | 20 dBm | | |
| Antenna Gain | 3.5 dBi @ 5 GHz, 5 dBi @ 2.4 GHz | | |
| 3G4G Modem | | | |
| Regions Supported | All Regions | | |
| Modem Model | Sierra Wireless EM7565 (2 SIM Slots, Active/Passive) | | |
| LTE Category | CAT-12 | | |
| LTE Bands | 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+ | B1, B2, B4, B5, B6, B8, B9, B19 | | |
| WCDMA | — | | |
| CDMA 1xRTT/EV-DO Rev A | — | | |
| GSM/GPRS/EDGE | — | | |
| Module Certifications | FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB | | |
| Diversity | Yes | | |
| MIMO | Yes | | |
| GNSS Bias | Yes | | |
| xDSL Modem - Supported Mode | | | |
| VDSL2 | Ⓢ | Ⓢ | N/A |
| ADSL2 | Ⓢ | Ⓢ | N/A |
| ADSL2+ | Ⓢ | Ⓢ | N/A |
| G.DMT | Ⓢ | Ⓢ | N/A |
| T1.143 | Ⓢ | Ⓢ | N/A |
| G.Lite | Ⓢ | Ⓢ | N/A |
| xDSL Modem - Supported Type | | | |
| Annex A | Ⓢ | Ⓢ | N/A |
| Annex I | Ⓢ | Ⓢ | N/A |
| Annex A/L | Ⓢ | Ⓢ | N/A |
| Annex M | Ⓢ | Ⓢ | N/A |
| Annex A/I/J/L/M | Ⓢ | Ⓢ | N/A |

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



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. |
| 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, -40/85c operation | FR-TRAN-ZX | 1G SFP transceivers, -40/85 degree 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

BUNDLES



FortiGuard Bundle

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 | Enterprise Protection | SMB Protection | Unified Threat Protection | Advanced Threat Protection |
|---|-----------------------|----------------|---------------------------|----------------------------|
| FortiCare | 24×7 | 24×7 | 24×7 | 24×7 |
| 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 and Video ¹ Filtering Service | • | • | • | |
| FortiGuard Antispam Service | • | • | • | |
| FortiGuard Security Rating Service | • | | | |
| FortiGuard IoT Detection Service | • | | | |
| FortiGuard Industrial Service | • | | | |
| FortiConverter Service | • | | | |
| FortiGate Cloud Subscription | | • | | |

1. Available when running FortiOS 7.0



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