

FortiGate® 80E Series

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

Secure SD-WAN
Unified Threat Management



The FortiGate 80E series offers an excellent Security and SD-WAN solution in a compact fanless desktop form factor for enterprise branch offices and mid-sized businesses. Protect against cyber threats with industry-leading secure SD-WAN in a simple, affordable and easy to deploy solution.

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 best security effectiveness and performance
- Received unparalleled third-party certifications from NSS Labs, ICSA, Virus Bulletin and AV Comparatives

Networking

- Best of Breed SD-WAN capabilities to enable application steering using WAN path control for high quality of experience
- Delivers advanced networking capabilities, high-performance, and scalable IPsec VPN capabilities

Management

- Includes Management Console that's effective, simple to use, and provides comprehensive network automation & visibility.
- Provides Zero Touch Integration with 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
- Automatically builds Network Topology visualizations which discover IoT devices and provide complete visibility into Fortinet and Fabric-ready partner products

| Firewall | IPS | NGFW | Threat Protection | Interfaces |
|----------|----------|----------|-------------------|--|
| 4 Gbps | 450 Mbps | 360 Mbps | 250 Mbps | Multiple GE RJ45 Variants with internal storage Variants with PoE/+ interfaces |

Refer to specification table for details

Deployment



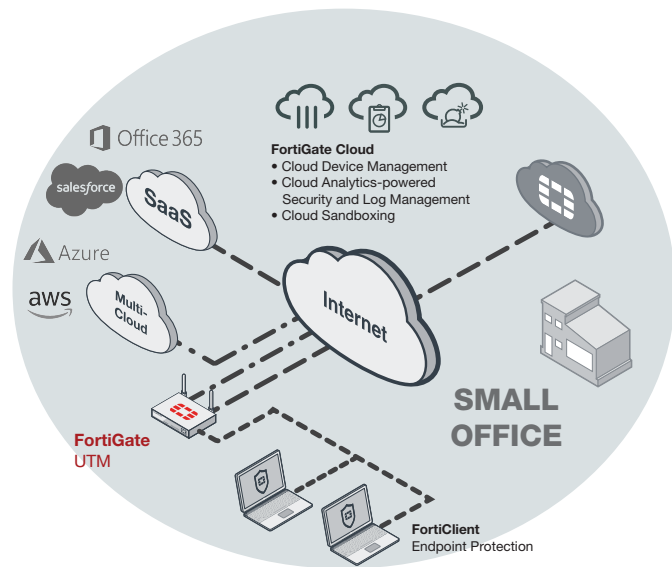
Unified Threat Management (UTM)

- Integrated wired and wireless networking to simplify IT
- Purpose-built hardware for industry best performance with easy administration through cloud management
- Provides consolidated security and networking for small businesses and consistently provides top-rated threat protection
- Proactively blocks newly discovered sophisticated attacks in real-time with advanced threat protection

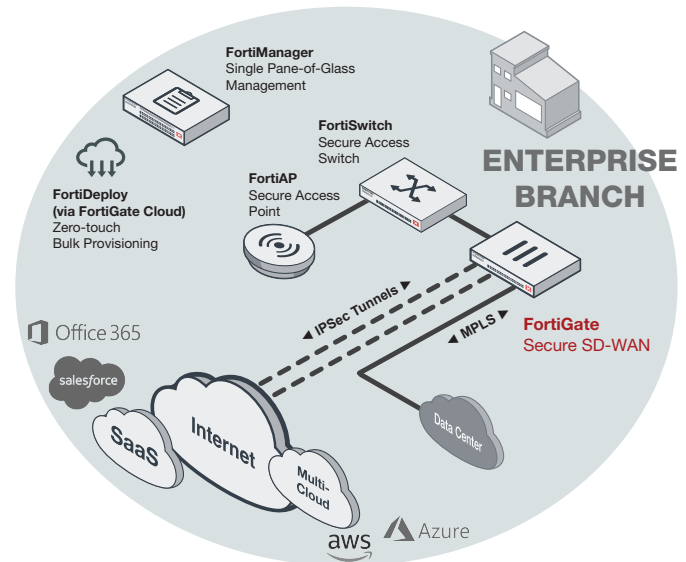


Secure SD-WAN

- Secure direct Internet access for Cloud Applications for improved latency and reduce WAN cost spending
- High-performance and cost-effective threat protection capabilities
- WAN Path Controller and Link Health Monitoring for better application performance and quality of experience
- Security Processor powered industry's best IPsec VPN and SSL Inspection performance
- Simplified Management and Zero Touch deployment



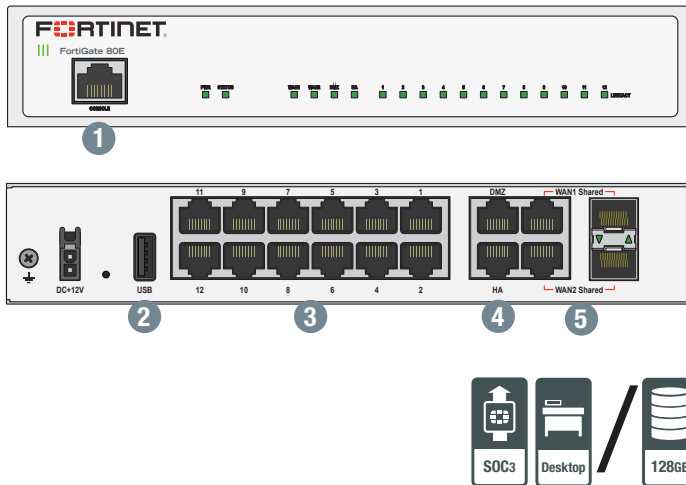
FortiWiFi 80E deployment in Small Office (UTM)



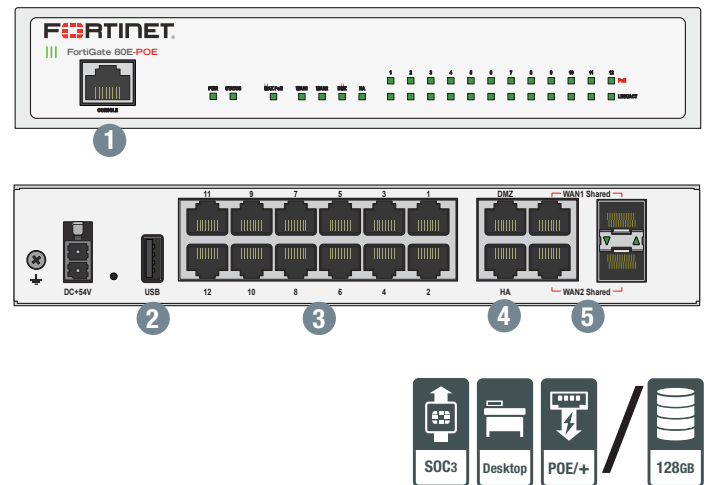
FortiGate 80E deployment in Enterprise Branch (Secure SD-WAN)

Hardware

FortiGate 80E/81E



FortiGate 80E/81E-POE



Interfaces

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

Interfaces

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

Powered by SPU SoC3

- Combines a RISC-based CPU with Fortinet's proprietary SPU content and network processors for unmatched performance
- Simplifies appliance design and enables breakthrough performance for smaller networks
- Supports firewall acceleration across all packet sizes for maximum throughput
- Delivers accelerated UTM content processing for superior performance and protection
- Accelerates VPN performance for high speed, secure remote access



3G/4G WAN Connectivity

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

Compact and Reliable Form Factor

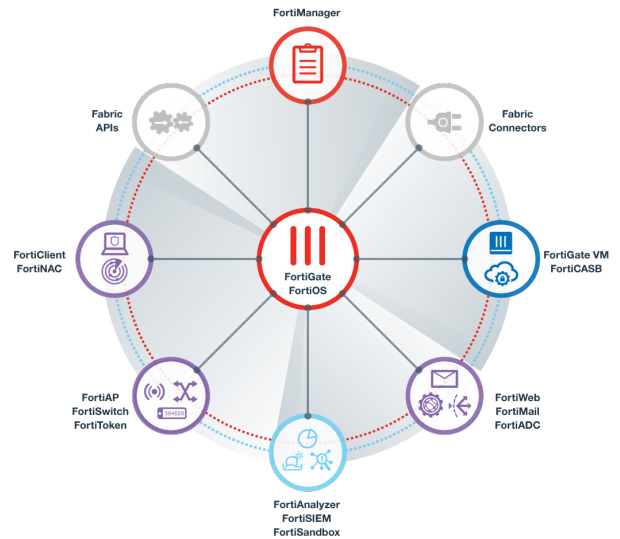
Designed for small environments, you can place it on a desktop or wall-mount it. It is small, lightweight yet highly reliable with superior MTBF (Mean Time Between Failure), minimizing the chance of a network disruption.

Fortinet Security Fabric

Security Fabric

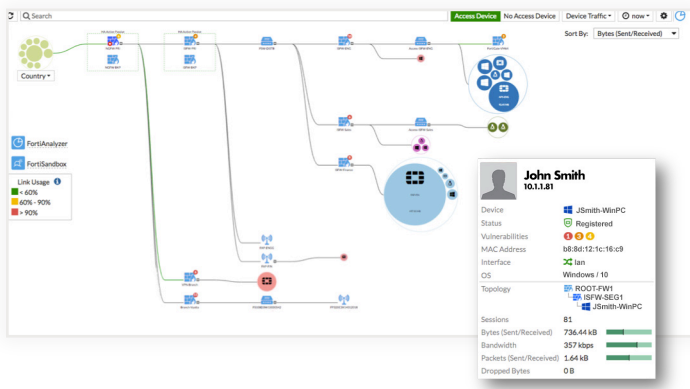
The Security Fabric delivers broad visibility, integrated AI-driven breach prevention, and automated operations, orchestration, and response across all Fortinet and its ecosystem deployments. It allows security to dynamically expand and adapt as more and more workloads and data are added. Security seamlessly follows and protects data, users, and applications as they move between IoT, devices, and cloud environments throughout the network. All this is tied together under a single pane of glass management for significantly thereby delivering leading security capabilities across your entire environment while also significantly reducing complexity.

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



FortiOS

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



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.



Our FortiCare customer support team provides global technical support for all Fortinet products. With support staff in the Americas, Europe, Middle East, and Asia, FortiCare offers services to meet the needs of enterprises of all sizes.

For more information, please refer to forti.net/fortiguard and forti.net/forticare

Specifications

| | FORTIGATE 80E | FORTIGATE 80E-POE | FORTIGATE 81E | FORTIGATE 81E-POE |
|--|---------------|-------------------|---|-------------------|
| Hardware Specifications | | | | |
| GE RJ45/SFP Shared Media Pairs | 2 | 2 | 2 | 2 |
| GE RJ45 Ports | 12 | — | 12 | — |
| GE RJ45 PoE/+ Ports | — | 12 | — | 12 |
| GE RJ45 DMZ/HA Ports | 2 | 2 | 2 | 2 |
| USB Ports | 1 | 1 | 1 | 1 |
| Console (RJ45) | 1 | 1 | 1 | 1 |
| Internal Storage | — | — | 1x 128 GB SSD | 1x 128 GB SSD |
| System Performance — Enterprise Traffic Mix | | | | |
| IPS Throughput ² | | | 450 Mbps | |
| NGFW Throughput ^{2,4} | | | 360 Mbps | |
| Threat Protection Throughput ^{2,5} | | | 250 Mbps | |
| System Performance | | | | |
| Firewall Throughput (1518 / 512 / 64 byte UDP packets) | | | 4 / 4 / 4 Gbps | |
| Firewall Latency (64 byte UDP packets) | | | 3 µs | |
| Firewall Throughput (Packets Per Second) | | | 6 Mpps | |
| Concurrent Sessions (TCP) | | | 1.3 Million | |
| New Sessions/Second (TCP) | | | 30,000 | |
| Firewall Policies | | | 5,000 | |
| IPsec VPN Throughput (512 byte) ¹ | | | 2.5 Gbps | |
| Gateway-to-Gateway IPsec VPN Tunnels | | | 200 | |
| Client-to-Gateway IPsec VPN Tunnels | | | 2,500 | |
| SSL-VPN Throughput | | | 200 Mbps | |
| Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode) | | | 200 | |
| SSL Inspection Throughput (IPS, avg. HTTPS) ³ | | | 135 Mbps | |
| SSL Inspection CPS (IPS, avg. HTTPS) ³ | | | 135 | |
| SSL Inspection Concurrent Session (IPS, avg. HTTPS) ³ | | | 95,000 | |
| Application Control Throughput (HTTP 64K) ² | | | 900 Mbps | |
| CAPWAP Throughput (HTTP 64K) | | | 920 Mbps | |
| Virtual Domains (Default / Maximum) | | | 10 / 10 | |
| Maximum Number of FortiSwitches Supported | | | 16 | |
| Maximum Number of FortiAPs (Total / Tunnel Mode) | | | 32 / 16 | |
| Maximum Number of FortiTokens | | | 500 | |
| Maximum Number of Registered FortiClients | | | 200 | |
| High Availability Configurations | | | Active / Active, Active / Passive, Clustering | |
| Dimensions | | | | |
| Height x Width x Length (inches) | | | 1.65 x 8.5 x 7 | |
| Height x Width x Length (mm) | | | 42 x 216 x 178 | |
| Weight | | | 2.65 lbs (1.2 kg) | |
| Form Factor | | | Desktop | |

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

| | FORTIGATE 80E | FORTIGATE 80E-POE | FORTIGATE 81E | FORTIGATE 81E-POE |
|---------------------------------------|---|-----------------------------------|-----------------------------------|-----------------------------------|
| Environment | | | | |
| Power Required | 100–240V AC, 50–60 Hz (External DC Power Adapter, 12 VDC) | | | |
| Maximum Current | 100V AC / 0.25A, 240V AC / 0.11A | 115V AC / 1.2A, 230V AC / 0.6A | 100V AC / 0.7A, 240V AC / 0.3A | 115V AC / 1.2A, 230V AC / 0.6A |
| Total Available PoE Power Budget* | N/A | 110 W | N/A | 110 W |
| Power Consumption (Average / Maximum) | 18 W / 25 W | 20 / 137 W | 20 W / 72 W | 20 / 137 W |
| Heat Dissipation | 85.30 BTU/h | 467.5 BTU/h | 245.67 BTH/h | 467.5 BTU/h |
| Operating Temperature | 32–104°F (0–40°C) | | | |
| Storage Temperature | -31–158°F (-35–70°C) | | | |
| Humidity | 10–90% non-condensing | | | |
| Noise Level | Fanless 0 dBA | 35 dBA | Fanless 0 dBA | 35 dBA |
| Operating Altitude | Up to 16,404 ft (5,000 m) | | | |
| Compliance | FCC Part 15B, Class B, CE, RoHS, VCCI, UL/cUL, CB, BSMI | | | |
| Certifications | ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN | | | |

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

Order Information

| Product | SKU | Description |
|-------------------|------------|--|
| FortiGate 80E | FG-80E | 14x GE RJ45 ports (including 1x DMZ port, 1x Mgmt port, 1x HA port, 12x switch ports), 2x Shared Media pairs (including 2x GE RJ45 ports, 2x SFP slots). Maximum managed FortiAPs (Total/Tunnel) 32/16. |
| FortiGate 80E-PoE | FG-80E-POE | 16x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x HA port, 12x PoE ports). Maximum managed FortiAPs (Total/Tunnel) 32/16. |
| FortiGate 81E | FG-81E | 14x GE RJ45 ports (including 1x DMZ port, 1x Mgmt port, 1x HA port, 12 x switch ports), 2x Shared Media pairs (including 2x GE RJ45 ports, 2x SFP slots). 128 GB onboard storage. Maximum managed FortiAPs (Total/Tunnel) 32/16. |
| FortiGate 81E-PoE | FG-81E-POE | 16x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x HA port, 12x PoE ports). 128 GB onboard storage. Maximum managed FortiAPs (Total/Tunnel) 32/16. |

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 | 360 Protection | Enterprise Protection | UTM | Threat Protection |
|---|------------------|-----------------------|------|-------------------|
| FortiCare | ASE ¹ | 24x7 | 24x7 | 24x7 |
| FortiGuard App Control Service | • | • | • | • |
| FortiGuard IPS Service | • | • | • | • |
| FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service | • | • | • | • |
| FortiGuard Web Filtering Service | • | • | • | • |
| FortiGuard Antispam Service | • | • | • | • |
| FortiGuard Security Rating Service | • | • | • | • |
| FortiGuard Industrial Service | • | • | • | • |
| FortiCASB SaaS-only Service | • | • | • | • |
| FortiConverter Service | • | • | • | • |
| SD-WAN Cloud Assisted Monitoring ² | • | • | • | • |
| SD-WAN Overlay Controller VPN Service ² | • | • | • | • |
| FortiAnalyzer Cloud ² | • | • | • | • |
| FortiManager Cloud ² | • | • | • | • |

1. 24x7 plus Advanced Services Ticket Handling 2. Available when running FortiOS 6.2



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