



Enterprise Branch Secure SD-WAN Unified Threat Management

FortiGate® 80E Series

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



The FortiGate 80E series offers an excellent network security 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

- Protects against known exploits, malware and malicious websites using continuous threat intelligence provided by FortiGuard Labs security services
- Detects unknown attacks using dynamic analysis and provides automated mitigation to stop targeted attacks

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

- Delivers an extensive routing, switching, wireless controller and high performance IPsec VPN capabilities to consolidate networking and security functionality
- Enables flexible deployment such as UTM and Secure SD-WAN

Management

- Single Pane of Glass with Network Operations Center (NOC) view provides 360° visibility to identify issues quickly and intuitively
- 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 collaboratively integrate and provide end-to-end security across the entire attack surface



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

Refer to specification table for details. * Not applicable for certain models

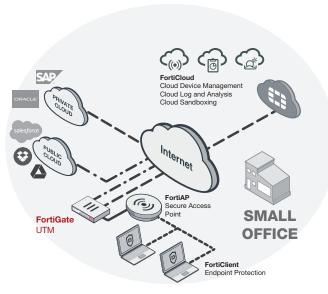
DEPLOYMENT



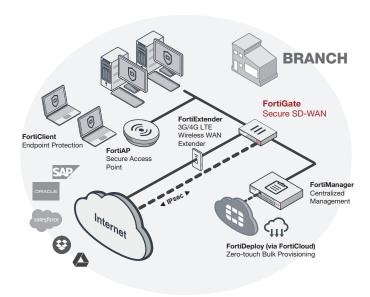
- Consolidated security and networking for small businesses
- Consistently top-rated protection to stop threats
- Integrated wired and wireless networking to simplify IT
- Purpose-built hardware for industry best performance
- Cloud management for easy administration



- Secure direct Internet access for Cloud Applications for improved latency and reduce WAN cost spending
- Effective, cost-efficient and high performance threat prevention capabilities
- WAN Path Controller and Link Health Monitoring for better application performance
- Security Processor powered industry's best IPSEC VPN and SSL Inspection performance
- Centralized Management and Zero Touch deployment



FortiGate 80E deployment in small office (UTM)

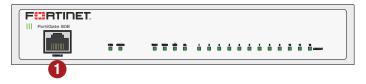


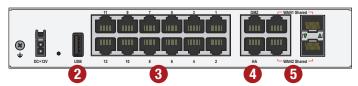
FortiGate 80E deployment in branch office (Secure SD-WAN)

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HARDWARE

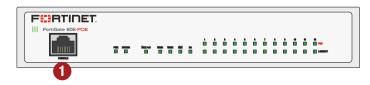
FortiGate 80E/81E

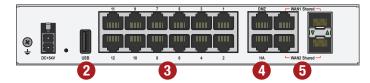






FortiGate 80E/81E-POE







Interfaces

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

Interfaces

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

Powered by SPU SoC3





- Simplifies appliance design and enables breakthrough performance for smaller networks
- Supports firewall acceleration across all packet sizes for maximum throughput
- Delivers accelerated UTM content processing for superior performance and protection
- Accelerates VPN performance for high speed, 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

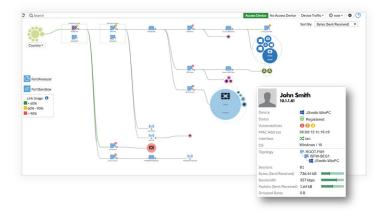
The Security Fabric allows security to dynamically expand and adapt as more and more workloads and data are added. Security seamlessly follows and protects data, users, and applications as they move between IoT, devices, and cloud environments throughout the network.

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.

FortiManager FortiManager FortiSIEM FortiSIEM FortiGateVM FortiGate FortiGate FortiGate FortiManager FortiSIEM FortiGateVM FortiManager FortiGateVM FortiGateVM FortiManager FortiGateVM FortiManager FortiGateVM

FortiOS

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



- A truly consolidated platform with one OS for all security and networking services for all FortiGate platforms.
- Industry-leading protection: NSS Labs Recommended, VB100,
 AV Comparatives, and ICSA validated security and performance.
- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings.
- Prevent, detect, and mitigate advanced attacks automatically in minutes with integrated advanced threat protection.
- Fulfill your networking needs with extensive routing, switching, and SD-WAN capabilities.
- Ultilize SPU hardware acceleration to boost security capability performance.



For more information, please refer to the FortiOS data sheet available at www.fortinet.com

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[™] Support Services

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



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

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SPECIFICATIONS

	FORTIGATE 80E	FORTIGATE 80E-P0E	FORTIGATE 81E	FORTIGATE 81E-POE		
Hardware Specifications						
GE RJ45/SFP Shared Media Pairs	2	2	2	2		
GE RJ45 Ports	12	<u> </u>	12	—		
GE RJ45 PoE/+ Ports	_	12	_	12		
GE RJ45 DMZ/HA Ports	2	2	2	2		
USB Ports	1	1	1	1		
Console (RJ45)	1	1	1	1		
Internal Storage	_	_	1x 128 GB SSD	1x 128 GB SSD		
System Performance — Enterprise Traffic Mix						
IPS Throughput ²		450 N	Mbps			
NGFW Throughput ^{2,4}		360 N	Mbps			
Threat Protection Throughput ^{2,5}		250 N	Mbps			
System Performance						
Firewall Throughput (1518 / 512 / 64 byte UDP packets)		4/4/4	1 Gbps			
Firewall Latency (64 byte UDP packets)		3 L				
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 Switches Supported		8				
Maximum Number of FortiAPs (Total / Tunnel Mode)		32 / 16				
Maximum Number of FortiTokens		100				
Maximum Number of Registered FortiClients		200				
High Availability Configurations	Active / Active / Passive, Clustering					
Dimensions						
Height x Width x Length (inches)		1.65 x 8	3.5 x 7			
Height x Width x Length (mm)		42 x 216 x 178				
Weight		2.65 lbs (1.2 kg)				
Form Factor		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.
- NGFW performance is measured with Firewall, IPS and Application Control enabled.
 Threat Protection performance is measured with Firewall, IPS, Application Control and Malware. Protection enabled.

SPECIFICATIONS

	FORTIGATE 80E	FORTIGATE 80E-P0E	FORTIGATE 81E	FORTIGATE 81E-POE
Environment				
Power Required		100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz	100-240V AC, 50-60 Hz
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, RCM, 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-P0E	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.



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	Threat Protection	UTM	Enterprise Protection
FortiCASB SaaS-only Service ^			•
FortiGuard Industrial Service ^			•
FortiGuard Security Rating Service* ^			•
FortiGuard Antispam		•	•
FortiGuard Web Filtering		•	•
FortiGuard Advanced Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR*, Virus Outbreak Protection* and FortiSandbox Cloud Service*	•	•	•
FortiGuard IPS Service	•	•	•
FortiCare + FortiGuard App Control Service	•	•	•

* Available when running FortiOS 6.0.1 and above ^ With new Q3-2018 SKUs





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