



FortiGate® 90/91E
Distributed Enterprise Firewall



FortiGate 90/91E

The Fortinet Enterprise Firewall Solution

The Fortinet Enterprise Firewall Solution delivers end-to-end network security with one platform, one network security operating system and unified policy management with a single pane of glass — for the industry’s best protection against the most advanced security threats and targeted attacks.

One Enterprise Firewall Solution across the Extended Enterprise

The FortiGate family of network appliances represents the industry’s broadest range of enterprise firewall platforms. FortiGate 90E appliance provides optimal balance between high performance and enterprise grade security features, while delivering industry-leading security effectiveness routinely validated by independent real-world tests. Targeted for distributed enterprises, the FortiGate 90E series contains consolidated security and networking functionality and various connectivity options.

Highlights

	Firewall	IPS	NGFW	Threat Protection	Interfaces
	Enterprise Traffic Mix				
FG-90/91E	4.0 Gbps	440 Mbps	350 Mbps	210 Mbps	Multiple GE RJ45

Validated Security

One Network OS

Performance

Single Pane of Glass

Universal Platform Support



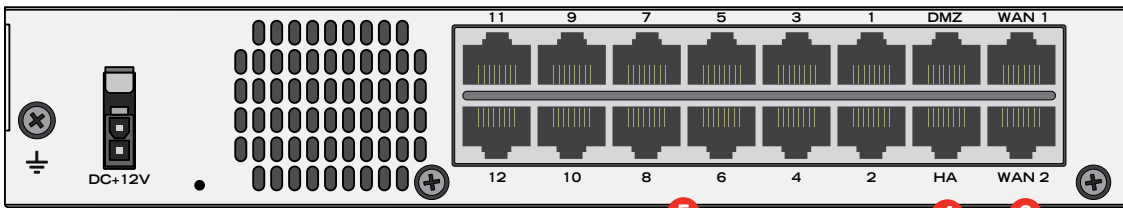
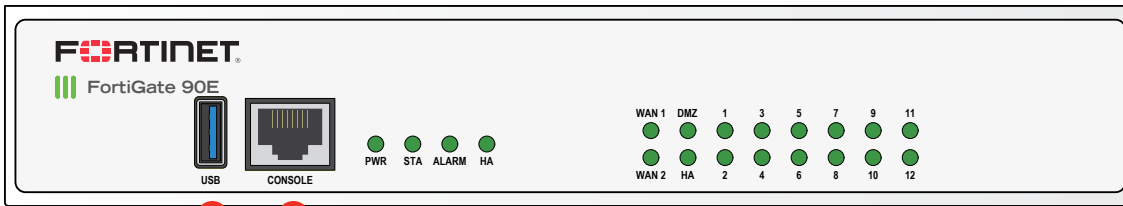
FortiGate appliances, interconnected with the Fortinet Security Fabric, form the backbone of the Fortinet Enterprise Solution

forti.net/sf



HARDWARE

FortiGate 90/91E



Interfaces

- 1. USB Management Port
- 2. Console Port
- 3. 2x GE RJ45 WAN Ports
- 4. 2x GE RJ45 DMZ/HA Ports
- 5. 12x GE RJ45 Ports

Install in Minutes with FortiExplorer

The FortiExplorer™ wizard enables easy setup and configuration coupled with easy-to-follow instructions. FortiExplorer runs on popular mobile devices like Android and iOS. Using FortiExplorer is as simple as starting the application and connecting to the appropriate USB port on the FortiGate. By using FortiExplorer, you can be up and running and protected in minutes.

3G/4G WAN Connectivity

The FortiGate 90/91E includes USB ports that allow 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 simply place the FortiGate 90/91E on a desktop. It is small, lightweight yet highly reliable with superior MTBF (Mean Time Between Failure), minimizing the chance of a network disruption.

Built-in Fan

The FortiGate 90/91E comes with a built-in fan for additional reliability and is suitable for enclosed environment.

SOFTWARE

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 ICISA validated security and performance.
- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings.
- Detect, contain and block advanced attacks automatically in minutes with integrated advanced threat protection framework.
- Solve your networking needs with extensive routing, switching, WiFi, LAN and WAN capabilities.
- Activate all the ASIC-boosted capabilities you need on the fastest firewall platform available.



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, other network and security vendors, as well as law enforcement agencies:

- **Real-time Updates** — 24x7x365 Global Operations research security intelligence, distributed via Fortinet Distributed Network to all Fortinet platforms.
- **Security Research** — FortiGuard Labs have discovered over 170 unique zero-day vulnerabilities to date, totaling millions of automated signature updates monthly.
- **Validated Security Intelligence** — Based on FortiGuard intelligence, Fortinet's network security platform is tested and validated by the world's leading third-party testing labs and customers globally.

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:

- **Enhanced Support** — For customers who need support during local business hours only.
- **Comprehensive Support** — For customers who need around-the-clock mission critical support, including advanced exchange hardware replacement.
- **Advanced Services** — For global or regional customers who need an assigned Technical Account Manager, enhanced service level agreements, extended software support, priority escalation, on-site visits and more.
- **Professional Services** — For customers with more complex security implementations that require architecture and design services, implementation and deployment services, operational services and more.



Enterprise 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 the FortiGuard Enterprise Bundle. This bundle contains the full set of FortiGuard security services plus FortiCare service and support offering the most flexibility and broadest range of protection all in one package.

SPECIFICATIONS

	FORTIGATE 90E	FORTIGATE 91E
Hardware Specifications		
GE RJ45 Ports	16	16
USB Ports	1	1
Console (RJ45)	1	1
Internal Storage	—	128 GB
System Performance		
Firewall Throughput	4.0 Gbps	
Firewall Latency (64 byte UDP Packets)	182 µs	
Firewall Throughput (Packets Per Second)	375 Kpps	
Concurrent Sessions (TCP)	1.2 Million	
New Sessions/Second (TCP)	27,500	
Firewall Policies	5,000	
IPSec VPN Throughput (512 byte Packets)	160 Mbps	
Gateway-to-Gateway IPSec VPN Tunnels	200	
Client-to-Gateway IPSec VPN Tunnels	1,000	
SSL-VPN Throughput	95 Mbps	
Concurrent SSL-VPN Users (Recommended Maximum)	200	
IPS Throughput (HTTP / Enterprise Mix) ¹	950 / 440 Mbps	
SSL Inspection Throughput ²	300 Mbps	
Application Control Throughput ³	450 Mbps	
NGFW Throughput ⁴	350 Mbps	
Threat Protection Throughput ⁵	210 Mbps	
CAPWAP Throughput ⁶	2.2 Gbps	
Virtual Domains (Default / Maximum)	10 / 10	
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, Active / Passive, Clustering	

	FORTIGATE 90E	FORTIGATE 91E
Dimensions		
Height x Width x Length (inches)	1.7 x 8.5 x 7.0	
Height x Width x Length (mm)	43.9 x 216 x 178.5	
Form Factor	Desktop	
Weight	2.884 lbs (1.308 kg)	2.917 lbs (1.323 kg)
Environment		
Power Required	100–240V AC, 60–50 Hz (External DC Power Adapter)	
Maximum Current	100V AC / 1.5A	240V AC / 0.75A
Power Consumption (Average / Maximum)	22.8 W / 27.36 W	23.7 W / 28.44 W
Heat Dissipation	77.7936 BTU/h	80.8644 BTU/h
Operating Temperature	32–104°F (0–40°C)	
Storage Temperature	-31–158°F (-35–70°C)	
Humidity	20–90% non-condensing	
Noise Level	38.8 at 25°C @ 1m (Maximum: 40 dB at 25°C)	
Operating Altitude	Up to 7,400 ft (2,250 m)	
Compliance		
	FCC Part 15 Class B, C-Tick, VCCI, CE, UL/cUL, CB	
Certifications		
	ICSA Labs: Firewall, IPSec, IPS, Antivirus, SSL VPN; USGv6/IPv6	

Note: All performance values are "up to" and vary depending on system configuration. IPSec VPN performance is based on 512 byte UDP packets using AES-256+SHA1. 1. IPS performance is measured using 1 Mbyte HTTP and Enterprise Traffic Mix. 2. SSL Inspection is measured with IPS enabled and HTTP traffic, using TLS v1.2 with AES256-SHA. 3. Application Control performance is measured with 64 Kbytes HTTP traffic. 4. NGFW performance is measured with IPS and Application Control enabled, based on Enterprise Traffic Mix. 5. Threat Protection performance is measured with IPS and Application Control and Malware protection enabled, based on Enterprise Traffic Mix. 6. CAPWAP performance is based on 1444 byte UDP packets.

ORDER INFORMATION

Product	SKU	Description
FortiGate 90E	FG-90E	16x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x HA port, 12x switch ports). Maximum managed FortiAPs (Total / Tunnel) 32 / 16.
FortiGate 91E	FG-91E	16x GE RJ45 ports (including 2x WAN ports, 1x DMZ port, 1x HA port, 12x switch ports), 128 GB SSD onboard storage. Maximum managed FortiAPs (Total / Tunnel) 32 / 16.



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