

# FortiGate/FortiWiFi® 90D Series

FortiGate 90D, 90D-POE, FortiWiFi 90D, 90D-POE

Enterprise Branch Secure SD-WAN Unified Threat Management



The FortiGate 90D 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
3.5 Gbps	50 Mbps	30 Mbps	25 Mbps	Multiple GE RJ45   WiFi Variants   Variants with PoE Interfaces

Refer to specification table for details.  $\,^{\star}$  Not applicable for certain models

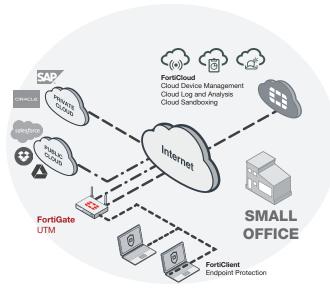
### DEPLOYMENT



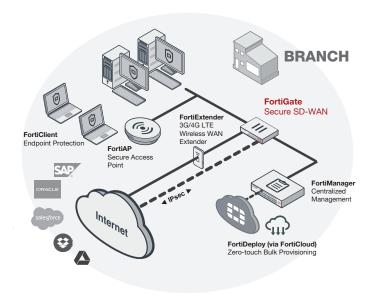
- Consolidated security and networking for small businesses
- Consistently top-rated protection to stop threats
- Integrated wired and wireless networking to simplify IT
- Purpose-built hardware for industry best performance
- Cloud management for easy administration



- 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



FortiWiFi 90D deployment in small office (UTM)

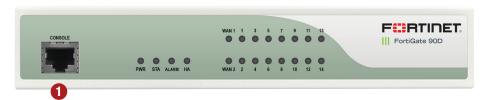


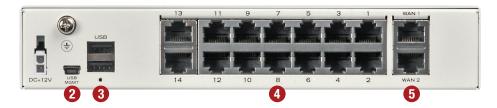
FortiGate 90D deployment in branch office (Secure SD-WAN)

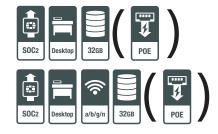
2 www.fortinet.com

# **HARDWARE**

# FortiGate/FortiWiFi 90D(-POE)







### Interfaces

- 1. Console Port
- 2. USB Management Port
- 3. 2x USB Ports

# Powered by SPU SoC2

 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

- 4. 14x GE RJ45 Switch Ports / 10x GE RJ45 Switch and 4x RJ45 PoE Ports on PoE Models
- 5. 2x GE RJ45 WAN Ports

# Install in Minutes with FortiExplorer

The FortiExplorer™ wizard enables you to easily and quickly set up and configure FortiGate and FortiWiFi platforms with easy-to-follow instructions. The application runs on Windows, Mac OS X desktops and laptops as well as popular mobile devices. Simply connect to the appropriate USB port on the appliance, and be fully protected in minutes.

# 3G/4G WAN Connectivity

The FortiGate/FortiWiFi 90D 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.

# **Superior Wireless Coverage**

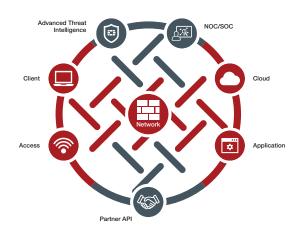
A built-in dual-band, dual-stream access point with internal antennas is integrated on the FortiWiFi 90D and provides speedy 802.11n coverage on both 2.4 GHz and 5 GHz bands. The dual-band chipset addresses the PCI-DSS compliance requirement for rogue AP wireless scanning, providing maximum protection for regulated environments.

# **FORTINET SECURITY FABRIC**

### **Security Fabric**

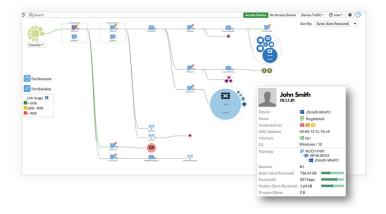
The Security Fabric allows security to dynamically expand and adapt as more and more workloads and data are added. Security seamlessly follows and protects data, users, and applications as they move between IoT, devices, and cloud environments throughout the network.

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.



#### **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<sup>™</sup> 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<sup>™</sup> 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

4 www.fortinet.com

# **SPECIFICATIONS**

	FORTIGATE 90D	FORTIWIFI 90D	FORTIGATE 90D-P0E	FORTIWIFI 90D-POE
Hardware Specifications				
GE RJ45 WAN Ports	2	2	2	2
GE RJ45 Switch Ports	14	14	10	10
GE RJ45 PoE Ports	_	_	4	4
Wireless Interface	-	802.11 a/b/g/n	_	802.11 a/b/g/n
USB Ports (Client / Server)	1/2	1/2	1/2	1/2
Console (RJ45)	1	1	1	1
Internal Storage	32 GB	32 GB	32 GB	32 GB
System Performance				
Firewall Throughput (1518 / 512 / 64 byte UDP packets)		3.5 / 3.5	/ 3.5 Gbps	
Firewall Latency (64 byte UDP packets)	4 μs			
Firewall Throughput (Packets Per Second)	5.3 Mpps			
Concurrent Sessions (TCP)	2 Million			
New Sessions/Second (TCP)	4,000			
Firewall Policies	5,000			
IPsec VPN Throughput (512 byte) 1	1 Gbps			
Gateway-to-Gateway IPsec VPN Tunnels	200			
Client-to-Gateway IPsec VPN Tunnels	2,500			
SSL-VPN Throughput	35 Mbps			
Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode)	200			
SSL Inspection Throughput (IPS, HTTP) <sup>3</sup>		18	Mbps	
Application Control Throughput (HTTP 64K) <sup>2</sup>	100 Mbps			
CAPWAP Throughput (1444 byte, UDP)		260	) 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		1	00	
Maximum Number of Registered FortiClients	200			
High Availability Configurations	Active / Active / Passive, Clustering			
System Performance — Optimal Traffic Mix				
IPS Throughput <sup>2</sup>	275 Mbps			
System Performance — Enterprise Traffic Mix				
IPS Throughput <sup>2</sup>	50 Mbps			
NGFW Throughput <sup>2,4</sup>	30 Mbps			
Threat Protection Throughput <sup>2,5</sup>	25 Mbps			
Dimensions				
Height x Width x Length (inches)	1.72 x 8.5 x 8.78	1.72 x 9.2 x 8.78	1.72 x 8.5 x 8.78	1.72 x 9.2 x 8.78
Height x Width x Length (mm)	44 x 216 x 223	44 x 234 x 223	44 x 216 x 223	44 x 234 x 223
Weight	3.5 lbs (1.6 kg)	3.5 lbs (1.6 kg)	3.5 lbs (1.6 kg)	3.5 lbs (1.6 kg)
Form Factor	Desktop	Desktop	Desktop	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 test uses TLS v1.2 with AES128-SHA256.

- 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 90D	FORTIWIFI 90D	FORTIGATE 90D-P0E	FORTIWIFI 90D-P0E
Operating Environment and Certifications				
Power Required	100-240V AC, 50-60 Hz			
Maximum Current	110 V / 1.5 A, 220 V / 0.75 A	110 V / 1.5 A, 220 V / 0.75 A	110 V / 2 A, 220 V / 1 A	110 V / 2 A, 220 V / 1 A
Total Available PoE Power Budget*	_	_	61.6 W	61.6 W
Power Consumption (Average / Maximum)	18 / 22 W	21 / 25 W	59 / 89 W	60 / 90 W
Heat Dissipation	74 BTU / h	85 BTU/h	303 BTU/h	307 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	35 dBA	35 dBA
Operating Altitude	Up to 7,400 ft (2,250 m)			
Compliance	FCC Part 15 Class B/A, C-Tick, VCCI, CE, UL/cUL, CB			
Certifications	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN; USGv6/IPv6			

<sup>\*</sup> Maximum loading on each PoE port is 15.4 W (802.3af)

### ORDER INFORMATION

Product	SKU	Description
FortiGate 90D	FG-90D	16x GE RJ45 ports (2x WAN ports, 14x Switch ports), 32 GB onboard storage. Max managed FortiAPs (Total / Tunnel) 32 / 16.
FortiWiFi 90D	FWF-90D	16x GE RJ45 ports (2x WAN ports, 14x Switch ports), Wireless (802.11a/b/g/n), 32 GB onboard storage. Max managed FortiAPs (Total / Tunnel) 32 / 16.
FortiGate 90D-P0E	FG-90D-POE	16x GE RJ45 ports (including 2x WAN ports, 10x Switch ports, 4x PoE ports), 32 GB SSD onboard storage. Max managed FortiAPs (Total / Tunnel) 32 / 16.
FortiWiFi 90D-P0E	FWF-90D-P0E	16x GE RJ45 ports (including 2x WAN ports, 10x Switch ports, 4x PoE ports), Wireless (802.11a/b/g/n), 32 GB SSD onboard storage. Max managed FortiAPs (Total / Tunnel) 32 / 16.
Optional Accessory		
Rack mount tray	SP-RACKTRAY-01	Rack mount tray for FG-30D, FG-40C, FG-50/51E, FG-60C, FG-60D/-POE, FG-70D, FG-80D, FG-90D/-POE, FAD-100E, FRC-100D, FWB-100D, FWB-100D, FWE-100E.



#### **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.



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