

FORTINET FortiGate 90G

Fortinet FortiGate-90G Network Security Appliance User Manual

Model: FortiGate 90G | Brand: FORTINET

1. OVERVIEW

The Fortinet FortiGate-90G is a network security appliance designed to provide robust protection against various cyber threats. This device integrates firewall capabilities with advanced security services, including Unified Threat Protection (UTP) and FortiCare Premium support, to secure enterprise environments. Its compact form factor and high performance make it suitable for diverse network deployments.

This manual outlines the essential steps for setting up, operating, maintaining, and troubleshooting your FortiGate-90G appliance to ensure optimal network security and performance.

2. PRODUCT FEATURES

- **Comprehensive Hardware and Service Package:** Includes the FortiGate-90G appliance with 3 years of FortiCare Premium and FortiGuard Unified Threat Protection (UTP).
- **Unified Threat Protection (UTP) Bundle:** Offers robust web security services that protect against web-borne threats, including sophisticated DNS-based threats.
- **Advanced Filtering and Security Features:** Features ATP, DNS filtering, URL filtering, video filtering, and anti-botnet and C2 communications services, securing your organization against a range of advanced threats.
- **Extended Web Security:** Effectively blocks malicious URLs and filters content to maintain high security standards and regulatory compliance.
- **Ideal for Various Enterprise Environments:** Suitable for businesses seeking to enhance their defense against increasingly complex security threats.

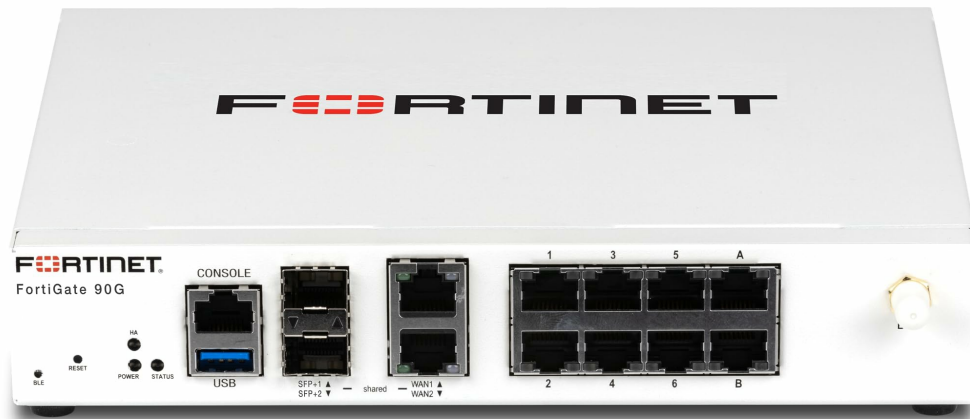


Figure 2.1: Front view of the FortiGate-90G Network Security Appliance.

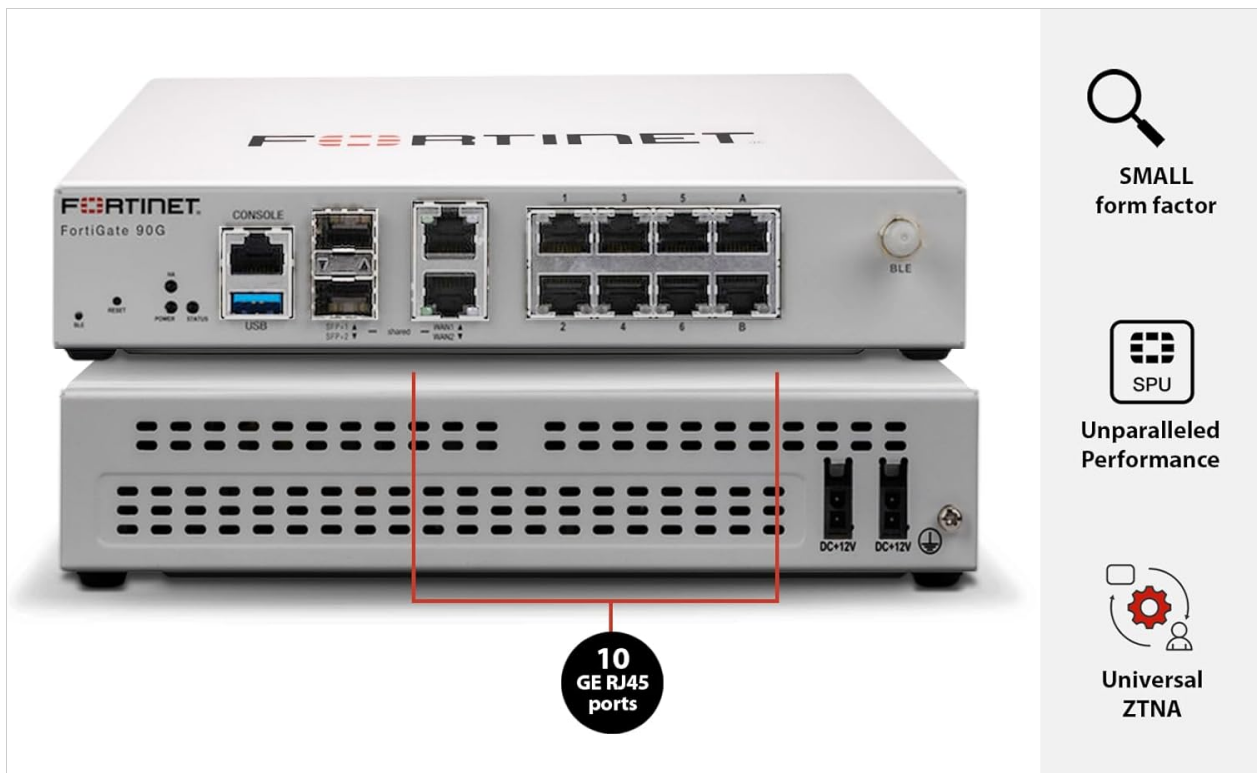


Figure 2.2: Front and back view highlighting the 10 GE RJ45 ports and other interfaces.

3. SETUP

Proper setup is crucial for the optimal performance and security of your FortiGate-90G appliance. Follow these general steps for initial configuration:

3.1 Initial Connection

1. **Connect Power:** Connect the provided power adapter to the FortiGate-90G and plug it into a power outlet.
2. **Network Connection:** Connect the WAN port of the FortiGate-90G to your internet service provider's modem or router.
3. **Local Connection:** Connect a computer to any of the internal LAN ports (e.g., port 1) on the FortiGate-90G using an Ethernet cable.

3.2 Device Registration and Initial Configuration

You can register and configure your device using one of the following methods:

A. Local Setup

- A. Connect port 1 to your computer.
- B. Ensure DHCP is enabled on your computer or set your IP to 192.168.1.1, subnet 255.255.255.0.
- C. Visit 192.168.1.99 in a web browser.

B. Cloud Setup

- A. Visit forticloud.com in a web browser and log in using your FortiNetOne credentials.
- B. Click Add FortiGate and enter the FortiCloud Key.

C. iOS Setup

- A. Download and launch the FortiExplorer iOS App.
- B. Connect the USB port to your iOS device using an Apple Lightning to USB-B cable.
- C. Tap the device when it appears in FortiExplorer.

Alternatively, use FortiExplorer to scan the QR code or manually enter the Cloud Key to add your device.

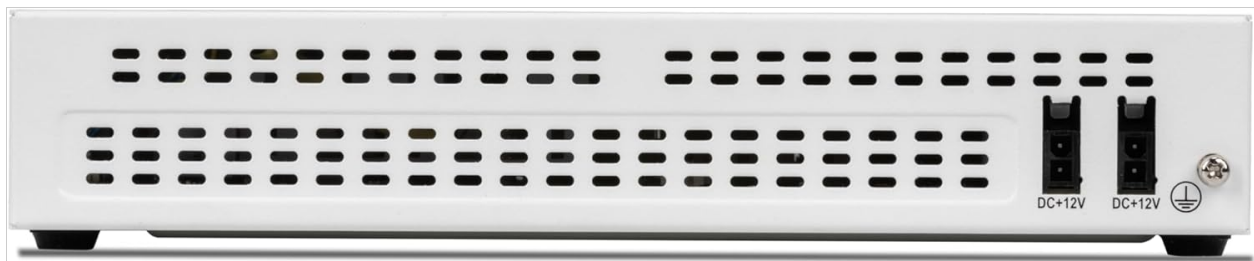


Figure 3.1: Back view of the FortiGate-90G showing DC+12V power inputs.

4. OPERATING INSTRUCTIONS

Once your FortiGate-90G is set up, you can manage its operations through the web-based interface or FortiCloud. The interface allows you to configure security policies, monitor network traffic, and manage user access.

4.1 Web-based Management

Access the FortiGate web interface by navigating to its IP address in your browser (e.g., 192.168.1.99). Log in with your administrator credentials. From here, you can:

- Configure firewall policies to control network traffic.
- Set up Virtual Private Networks (VPNs) for secure remote access.
- Monitor system performance and security logs.

- Manage user accounts and access permissions.
- Apply FortiGuard security services for threat protection.

4.2 FortiGuard Unified Threat Protection (UTP)

Your FortiGate-90G includes 3 years of FortiGuard UTP, which provides real-time threat intelligence and protection. Ensure these services are active and configured according to your network's security requirements. UTP features include:

- Antivirus and Anti-Malware Protection
- Web Filtering and URL Filtering
- Intrusion Prevention System (IPS)
- Application Control
- Anti-Spam

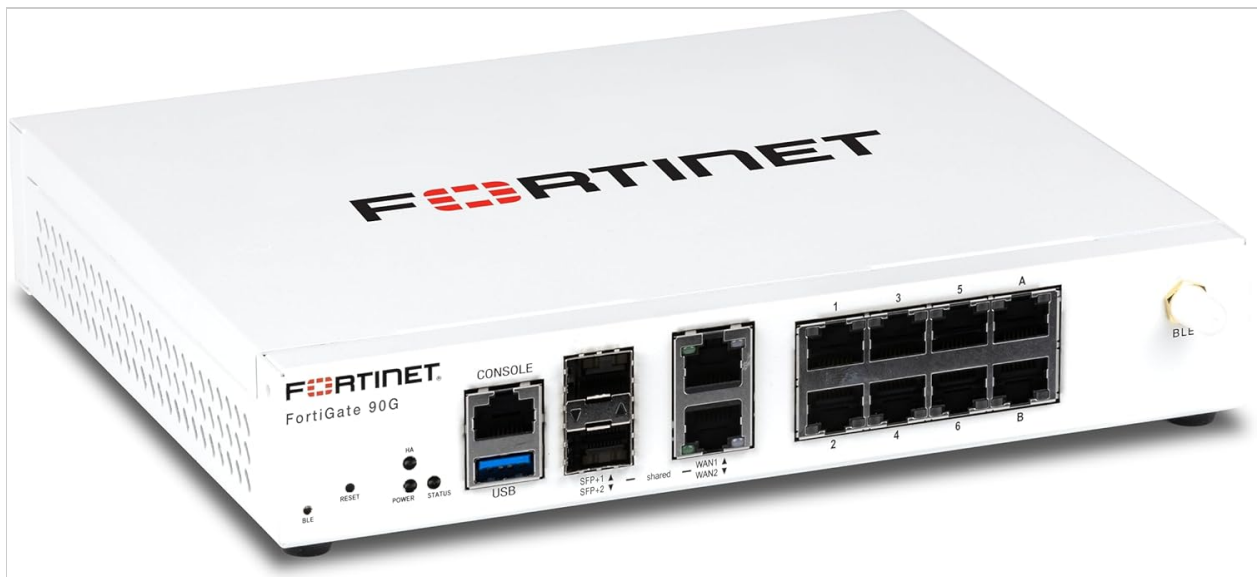


Figure 4.1: Overview of FortiGuard and FortiCare subscription services.

5. MAINTENANCE

Regular maintenance ensures the longevity and continued effectiveness of your FortiGate-90G appliance.

- **Firmware Updates:** Periodically check for and apply the latest firmware updates from Fortinet to ensure you have the most current security features and bug fixes.
- **Configuration Backups:** Regularly back up your device configuration. This allows for quick restoration in case of unexpected issues or hardware failure.
- **Physical Inspection:** Ensure the device is in a well-ventilated area, free from dust and obstructions. Keep all cables securely connected.
- **Log Monitoring:** Regularly review system logs and security reports for any unusual activity or potential threats.

6. TROUBLESHOOTING

If you encounter issues with your FortiGate-90G, refer to the following basic troubleshooting steps:

- **No Power:** Verify the power adapter is securely connected to both the device and a working power outlet. Check the power LED on the device.

- **No Network Connectivity:** Check all Ethernet cable connections. Ensure the WAN port is connected to your internet source and LAN ports are connected to your internal network devices. Verify network settings on connected devices.
- **Cannot Access Web Interface:** Ensure your computer's IP address is compatible with the FortiGate's management IP (e.g., 192.168.1.x if the FortiGate is 192.168.1.99). Try clearing your browser's cache or using a different browser.
- **Slow Performance:** Check network utilization and resource usage on the FortiGate. Ensure firmware is up to date. Review security logs for any ongoing attacks that might consume resources.
- **Reset to Factory Defaults:** If all else fails, you may need to reset the device to factory defaults. Refer to the Fortinet documentation for the specific procedure, as this will erase all configurations.

For advanced troubleshooting or persistent issues, contact Fortinet support as detailed in the Warranty and Support section.

7. SPECIFICATIONS

The following table details the technical specifications of the FortiGate-90G Network Security Appliance:



Figure 7.1: Physical dimensions and weight of the FortiGate-90G.

FortiGate 90G Specifications

IPS Throughput	4.5 Gbps
NGFW Throughput	2.5 Gbps
Threat Protection Throughput	2.2 Gbps
Firewall Throughput (1518 / 512 / 64 byte UDP packets)	28/28/27.9 Gbps
Firewall Throughput (Packets Per Second)	41.85 Mpps
IPsec VPN Throughput (512 byte)	25 Gbps

Figure 7.2: Key performance specifications for the FortiGate-90G.

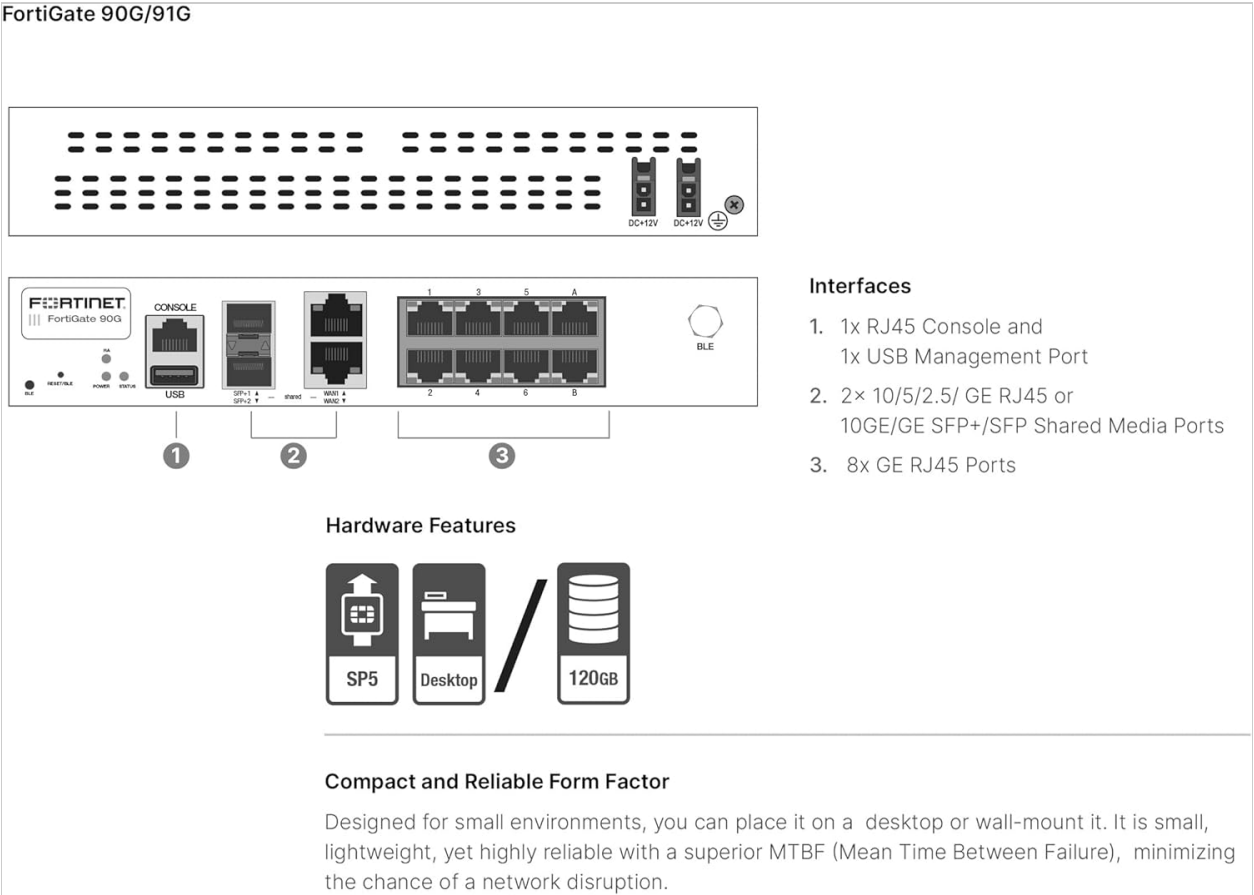


Figure 7.3: Diagram illustrating the interfaces and hardware features of the FortiGate-90G.

Feature	Detail
Model Name	FG-90G
Item Model Number	FortiGate 90G Firewall
Package Dimensions	12 x 9 x 6 inches
Item Weight	5 pounds
Manufacturer	Fortinet
Connectivity Technology	Wi-Fi (for management/specific features)
Wireless Communication Standard	802.11n
Frequency Band Class	Tri-Band
Antenna Type	Fixed
Color	White
IPS Throughput	4.5 Gbps
NGFW Throughput	2.5 Gbps
Threat Protection Throughput	2.2 Gbps

Feature	Detail
Firewall Throughput (1518 / 512 / 64 byte UDP packets)	28/28/27.9 Gbps
Firewall Throughput (Packets Per Second)	41.85 Mpps
IPsec VPN Throughput (512 byte)	25 Gbps
Interfaces	1x RJ45 Console, 1x USB Management Port, 2x 10/5/2.5/ GE RJ45 or 10GE/GE SFP+/SFP Shared Media Ports, 8x GE RJ45 Ports
Hardware Features	SP5 ASIC, Desktop form factor, 120GB storage

8. WARRANTY AND SUPPORT

Your FortiGate-90G appliance includes 3 years of FortiCare Premium and FortiGuard Unified Threat Protection (UTP).

- **FortiCare Premium:** Provides enhanced support services, including 24x7 technical support, advanced hardware replacement, and access to firmware updates.
- **FortiGuard UTP:** Ensures continuous protection with real-time threat intelligence updates for antivirus, web filtering, IPS, and other security services.

For detailed warranty information, service terms, and to access support resources, please visit the official Fortinet website or contact your Fortinet reseller. Ensure your device is registered to activate your support and protection services.