Sonicwall TZ470

SonicWall TZ470 Gen7 Firewall Instruction Manual

Model: TZ470 (02-SSC-2829)

1. INTRODUCTION

The SonicWall TZ470 Gen7 Firewall is a high-performance security appliance designed for mid-sized businesses and branch networks. It delivers robust threat prevention, multi-gigabit interfaces, and SD-Branch capabilities to secure your network infrastructure. This manual provides essential information for the setup, operation, maintenance, and troubleshooting of your TZ470 device.

Figure 1: SonicWall TZ470 Gen7 Firewall

2. SETUP AND CONNECTIONS

This section details the physical setup and initial connections for your SonicWall TZ470 Gen7 Firewall.

2.1 Front Panel Overview

Specification	SOHO 250	TZ270	TZ350	TZ370	TZ400	TZ470
Multi-gig interfaces & port density	5x1GbE	8x1GbE	5x1GbE	8x1GbE	7x1GbE	8x1GbE, 2x2.5GbE
Expandable storage & redundant power supply						
Expandable storage	No	Up to 256 GB	No	Up to 256 GB	No	Up to 256 GB
Redundant power	No	No	No	No	No	No
Performance						
Firewall inspection	600 Mbps	2 Gbps	1 Gbps	3 Gbps	1.3 Gbps	3.5 Gbps
DPI performance	200 Mbps	750 Mbps	335 Mbps	1 Gbps	600 Mbps	1.5 Gbps
IPSec VPN	200 Mbps	750 Mbps	430 Mbps	1.3 Gbps	900 Mbps	1.5 Gbps
Maximum connections						
per second	3,000	6,000	6,000	9,000	6,000	12,000
SPI	50,000	750,000	100,000	900,000	150,000	1,000,000
DPI	50,000	150,000	90,000	200,000	125,000	250,000
DPI-SSL	25,000	25,000	25,000	30,000	25,000	35,000
SSO users	350	1,000	500	1,000	500	2,500
Site-to-site VPN tunnels	10	50	15	100	20	150
VLAN interfaces	25	64	25	128	50	128
WiFi technology, Number of access points supported	802.11n, 4	802.11ac Wave 2, 16	802.11 ac Wave 1, 8	802.11ac Wave 2, 16	802.11ac Wave 1, 16	802.11ac Wave 2, 32
SonicOS 7.0	No	Yes	No	Yes	No	Yes
5G USB modem	No	Yes	No	Yes	No	Yes

Figure 2: TZ470 Front Panel

- **USB 3.0 SuperSpeed ports:** For connecting external storage or 5G/LTE WWAN modules.
- **Power LED:** Indicates power status.
- **Test LED:** For diagnostic purposes.
- **Security LED:** Indicates security status and alerts.
- **Storage LED:** Indicates activity on connected storage.
- **RJ45 Port LEDs:** Indicate link/activity status for RJ45 ports.
- **U0 WWAN LEDs:** Indicate status for 5G/LTE WWAN connectivity.
- **SFP/SFP+ Port LEDs:** Indicate link/activity status for SFP/SFP+ ports.

- **LAN/MGMT X0 Port LED:** Indicates link/activity for the X0 LAN/Management port.
- **WAN X1 and X2 Port LEDs:** Indicate link/activity for the X1 and X2 WAN ports.
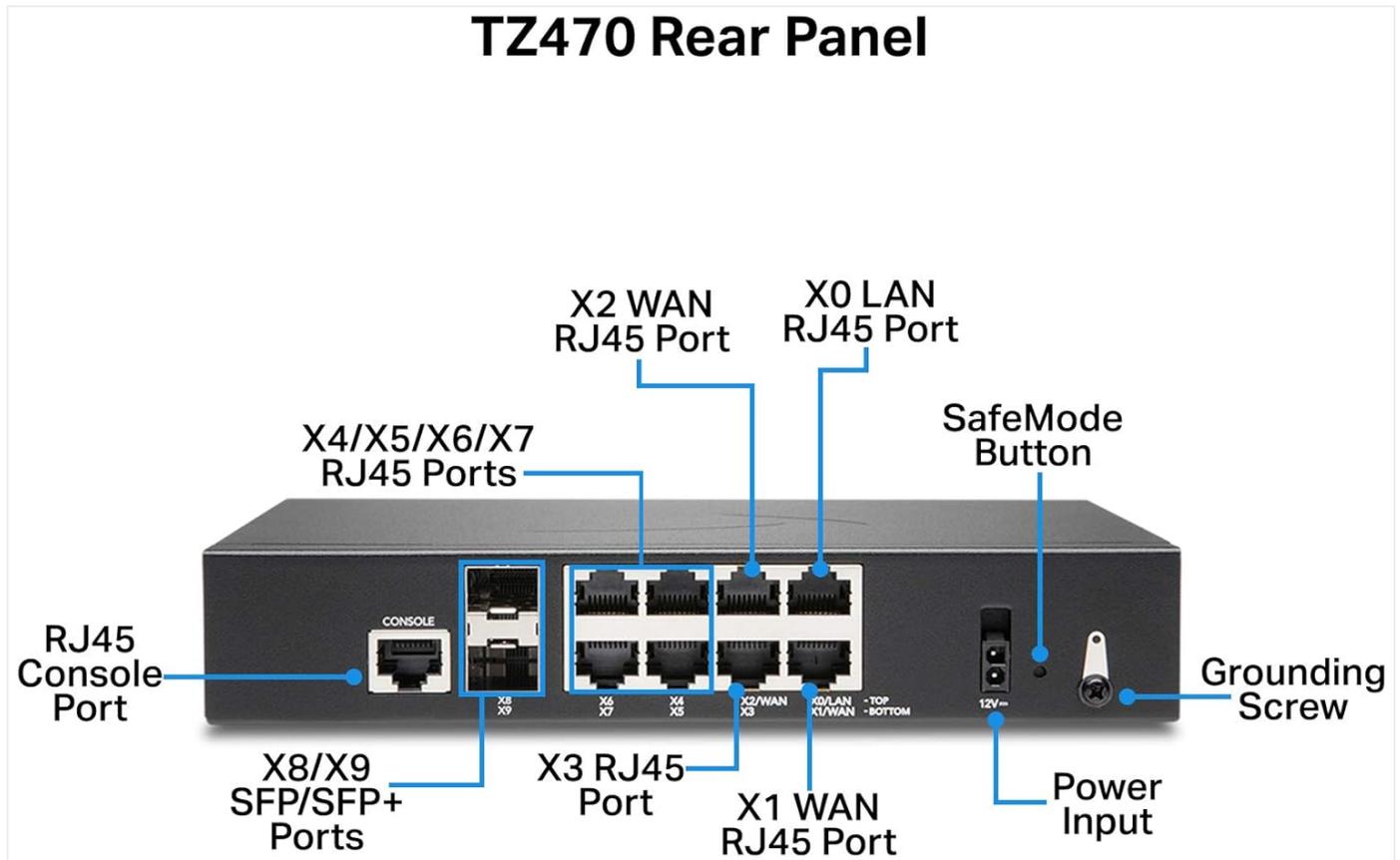
2.2 Rear Panel Overview

Figure 3: TZ470 Rear Panel

- **RJ45 Console Port:** For direct command-line interface (CLI) access.
- **X8/X9 SFP/SFP+ Ports:** High-speed fiber or copper connectivity.
- **X4/X5/X6/X7 RJ45 Ports:** Additional network interfaces.
- **X3 RJ45 Port:** Network interface.
- **X2 WAN RJ45 Port:** Secondary Wide Area Network connection.
- **X1 WAN RJ45 Port:** Primary Wide Area Network connection.
- **X0 LAN RJ45 Port:** Local Area Network or Management interface.
- **SafeMode Button:** For system recovery or factory reset.
- **Power Input:** Connects to the power adapter.
- **Grounding Screw:** For proper electrical grounding.

2.3 Initial Connection Steps

1. **Connect Power:** Connect the provided power adapter to the Power Input port on the rear panel and then to an electrical outlet.
2. **Connect Network Cables:**
   - Connect your internet service provider's modem/router to the X1 WAN RJ45 Port.
   - Connect a computer or network switch to the X0 LAN RJ45 Port for initial configuration.
3. **Power On:** The device will power on automatically once connected to power. Observe the Power LED on the front panel.

4. **Access Management Interface:** Refer to the SonicWall documentation for the default IP address and login credentials to access the web-based management interface (SonicOS 7.0).

3. OPERATING THE SONICWALL TZ470

The SonicWall TZ470 operates on SonicOS 7.0, providing a comprehensive suite of security features. Once configured, the device will actively protect your network by inspecting traffic, preventing sophisticated attacks, and managing network access.

- **Threat Prevention:** The TZ470 prevents sophisticated attacks, including ransomware and zero-day malware, using Capture ATP sandboxing with patented RTDMI memory inspection.
- **Multi-Gigabit Interfaces:** The device accommodates high-capacity traffic and future bandwidth needs for cloud and collaboration workloads through its multi-gigabit interfaces.
- **SD-WAN and VPN:** It includes SD-WAN, robust VPN, and TLS 1.3 decryption to secure encrypted traffic while optimizing application performance.
- **Centralized Management:** Centralized visibility and orchestration through Network Security Manager simplify operations and compliance reporting across sites.

Regularly monitor the device's status through the management interface and ensure all security services are active and up-to-date.

4. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your SonicWall TZ470 Gen7 Firewall.

- **Firmware Updates:** Regularly check for and apply the latest firmware updates from SonicWall to ensure you have the most current security features and bug fixes.
- **Configuration Backups:** Periodically back up your device configuration. This allows for quick restoration in case of an issue or misconfiguration.
- **Environmental Conditions:** Ensure the device is operated within its specified temperature and humidity ranges. Keep ventilation clear to prevent overheating.
- **Security Service Renewals:** Ensure all licensed security services (e.g., Capture ATP, Gateway Anti-Virus, Content Filtering) are renewed before expiration to maintain continuous protection.
- **Physical Inspection:** Occasionally inspect the device for any physical damage or loose cable connections.

5. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues you might encounter with your SonicWall TZ470.

5.1 No Power

- Verify the power adapter is securely connected to the device and a working electrical outlet.
- Check the power outlet with another device to ensure it is functional.
- Ensure the power adapter is the correct one supplied with the device.

5.2 No Network Connectivity

- Check all Ethernet cable connections to ensure they are secure and connected to the correct ports (WAN to modem, LAN to internal network).
- Observe the RJ45 Port LEDs on the front panel. A solid green or amber light indicates a link, and a blinking light indicates activity.

- Verify your network configuration settings within the SonicOS management interface.
- Restart the SonicWall device and your modem/router.

5.3 Unable to Access Management Interface

- Ensure your computer is connected to the X0 LAN port and its IP address is in the same subnet as the SonicWall's default LAN IP (e.g., 192.168.168.x).
- Clear your browser's cache or try a different browser.
- If you have forgotten the password, consider using the SafeMode button for a factory reset (*Note: This will erase all configurations. Proceed with caution.*).

For more advanced troubleshooting, consult the official SonicWall support documentation or contact SonicWall technical support.

6. SPECIFICATIONS

The following tables provide detailed technical specifications for the SonicWall TZ470 Gen7 Firewall.

6.1 General Specifications

Feature	Detail
Product Dimensions	5.31 x 7.48 x 1.38 inches
Item Weight	1.83 pounds
Model Number	TZ470
Manufacturer	SonicWall
Connectivity Technology	Ethernet
Operating System	SonicOS 7.0
Interfaces	8x1GbE, 2 USB 3.0, 1 Console
Wireless Support	2x 802.11ac Wave 2 (TZ470W - *Note: This model is TZ470, without W, so wireless support may vary*)
Storage Expansion Slot	Optional up to 256GB
Management	Network Security Manager, CLI, SSH, Web UI, GMS, REST APIs
Single Sign-On (SSO) Users	2,500
VLAN Interfaces	128
Access Points Supported (maximum)	32

6.2 Performance Specifications

SonicWall Gen 7 TZ series system specifications continued

FIREWALL/VPN PERFORMANCE	TZ270 SERIES	TZ370 SERIES	TZ470 SERIES	TZ570 SERIES	TZ670 SERIES
Firewall inspection throughput[1]	2 Gbps	3 Gbps	3.5 Gbps	4 Gbps	5 Gbps
Threat prevention throughput[2]	750 Mbps	1 Gbps	1.5 Gbps	2 Gbps	2.5 Gbps
Application inspection throughput[2]	1 Gbps	1.5 Gbps	2 Gbps	2.5 Gbps	3 Gbps
IPS throughput[2]	1 Gbps	1.5 Gbps	2 Gbps	2.5 Gbps	3 Gbps
Anti-malware inspection throughput[2]	750 Mbps	1 Gbps	1.5 Gbps	2 Gbps	2.5 Gbps
TLS/SSL inspection and decryption throughput (DPI SSL)[2]	300 Mbps	500 Mbps	600 Mbps	750 Mbps	800 Mbps
IPSec VPN throughput[3]	750 Mbps	1.3 Gbps	1.5 Gbps	1.8 Gbps	2.1 Gbps
Connections per second	6,000	9,000	12,000	16,000	25,000
Maximum connections (SPI)	750,000	900,000	1,000,000	1,250,000	1,500,000
Maximum connections (DPI)	150,000	200,000	250,000	400,000	500,000
Maximum connections (DPI SSL)	25,000	30,000	35,000	50,000	75,000

VPN	TZ270 SERIES	TZ370 SERIES	TZ470 SERIES	TZ570 SERIES	TZ670 SERIES
Site-to-site VPN tunnels	50	100	150	200	250
IPSec VPN clients (maximum)	5 (200)	5 (200)	5 (200)	10 (500)	10 (500)
SSL VPN licenses (maximum)	1 (50)	2 (100)	2 (150)	2 (200)	2 (250)
Encryption/authentication	DES, 3DES, AES (128, 192, 256-bit)/MD5, SHA-1, Suite B Cryptography				
Key exchange	Diffie Hellman Groups 1, 2, 5, 14v				
Route-based VPN	RIP, OSPF, BGP				
Certificate support	Verisign, Thawte, Cybertrust, RSA Keon, Entrust and Microsoft CA for SonicWall-to-SonicWall VPN, SCEP				
VPN features	Dead Peer Detection, DHCP Over VPN, IPSec NAT Traversal, Redundant VPN Gateway, Route-based VPN				
Global VPN client platforms supported	Microsoft® Windows 10				
NetExtender	Microsoft® Windows 10, Linux				
Mobile Connect	Apple® iOS, Mac OS X, Google® Android™, Kindle Fire, Chrome OS, Windows 10				

SECURITY SERVICES	TZ270 SERIES	TZ370 SERIES	TZ470 SERIES	TZ570 SERIES	TZ670 SERIES
Deep Packet Inspection services	Gateway Anti-Virus, Anti-Spyware, Intrusion Prevention, DPI SSL				
Content Filtering Service (CFS)	HTTP URL, HTTPS IP, keyword and content scanning, Comprehensive filtering based on file types such as ActiveX, Java, Cookies for privacy, allow/forbid lists				
Comprehensive Anti-Spam Service	Yes				
Application Visualization	Yes				
Application Control	Yes				
Capture Advanced Threat Protection	Yes				

NETWORKING	TZ270 SERIES	TZ370 SERIES	TZ470 SERIES	TZ570 SERIES	TZ670 SERIES
IP address assignment	Static (DHCP, PPPoE, L2TP and PPTP client), Internal DHCP server, DHCP relay				
NAT modes	1:1, 1:many, many:1, many:many, flexible NAT (overlapping IPs), PAT, transparent mode				
Routing protocols	BGP, OSPF, RIPv1/v2, static routes, policy-based routing				
QoS	Bandwidth priority, max bandwidth, guaranteed bandwidth, DSCP marking, 802.1e (WMM)				
Authentication	LDAP (multiple domains), XAUTH/RADIUS, SSO, Novell, internal user database, Terminal Services, Citrix, Common Access Card (CAC)				
Local user database	150	250	250	250	250
VoIP	Full H323-v1-5, SIP				
Standards	TCP/IP, UDP, ICMP, HTTP, HTTPS, IPSec, ISAKMP/IKE, SNMP, DHCP, PPPoE, L2TP, PPTP, RADIUS, IEEE 802.3				

Figure 4: TZ Series System Specifications (Part 1)

Figure 5: TZ Series System Specifications (Part 2)

Refer to Figures 4 and 5 for detailed performance metrics including firewall throughput, threat prevention, IPS, VPN, and maximum connections. These tables also outline supported security services, networking features, and standards compliance.

7. WARRANTY AND SUPPORT

For warranty information, please refer to the official SonicWall website or the documentation included with your purchase. Technical support is available through SonicWall's official support channels. Ensure you have your product's serial number and registration details ready when contacting support.

You can find more information and support resources on the SonicWall Support Portal.