



# SonicWall Gen 7 NSa Series

SonicWall Generation 7 (Gen 7) Network Security Appliance (NSa) next-generation firewalls (NGFWs) offers medium- to large-sized enterprises industry-leading performance at the lowest total cost of ownership in their class.

With comprehensive security features such as intrusion prevention, VPN, application control, malware analysis, URL filtering, DNS Security, Geo-IP and Bot-net services, it protects the perimeter from advanced threats without becoming a bottleneck.

## HIGHLIGHTS

- 1 RU – Form Factor
- Support for 40G/25G/10G/5G/2.5G/1G ports
- Multi-gigabit Threat and Malware Analysis Throughput
- Superior TLS performance (sessions and throughput)
- Expandable storage
- Enterprise Internet Edge Ready
- Latest Generation 7 SonicOS support
- Secure SD-WAN capability
- Intuitive single pane of glass management
- TLS 1.3 support
- Best-in-class price-performance
- Fast DPI performance
- Low TCO in its class
- High port density for easy networking
- SonicWall Switch, SonicWave Access Point and Capture Client integration
- Redundant power



Gen 7 NSa Series Spec Preview. [View full specs »](#)

Up to  
19 Gbps

Threat Prevention  
Throughput

Up to  
8 Million

Connections

40G/25G/10G/  
5G/2.5G/1G

Ports

Find the right SonicWall solution for  
your enterprise:

[sonicwall.com/products](https://sonicwall.com/products)

---

**Featuring a high port density including multiple 40 GbE and 10 GbE ports, the solution supports network and hardware redundancy with high availability, and dual power supplies.**

---

SonicWall Generation 7 (Gen 7) Network Security Appliance (NSa) next-generation firewalls (NGFWs) offers medium- to large-sized enterprises industry-leading performance at the lowest total cost of ownership in their class.

With comprehensive security features such as intrusion prevention, VPN, application control, malware analysis, URL filtering, DNS Security, Geo-IP and Bot-net services, it protects the perimeter from advanced threats without becoming a bottleneck.

The Gen 7 NSa Series has been built from the ground up with the latest hardware components, all designed to deliver multi-gigabit threat prevention throughput — even for encrypted traffic. Featuring a high port density including multiple 40 GbE and 10 GbE ports, the solution supports network and hardware redundancy with high availability, and dual power supplies.

### **Generation 7 – SonicOS 7.0 and Security Services**

The Gen 7 NSa Series runs on SonicOS 7.0, a new operating system built from the ground up to deliver a modern user interface, intuitive workflows and user-first design principles. SonicOS 7.0 provides multiple features designed to facilitate enterprise-level workflows. It offers easy policy configuration, zero-touch deployment and flexible management — all of which allow enterprises to improve both their security and operational efficiency.

The Gen 7 NSa Series supports advanced networking features, such as SD-WAN, dynamic routing, layer 4-7 high-availability and high-speed VPN functionality. In addition to integrating firewall and switch capabilities, the appliance provides a single-pane-of-glass interface to manage both switches and access points.



Built to mitigate the advanced cyberattacks of today and tomorrow, the Gen 7 NSa Series offers access to SonicWall's advanced firewall security services, allowing you to protect your entire IT infrastructure. Solutions and services such as Cloud Application Security, Capture Advanced Threat Protection (ATP) cloud-based sandboxing, Real-Time Deep Memory Inspection (RTDMI™) and Reassembly-Free Deep Packet Inspection (RFDPI) — for all traffic including TLS 1.3 — offer comprehensive gateway protection from most stealthy and dangerous malware, including zero-day and encrypted threats.

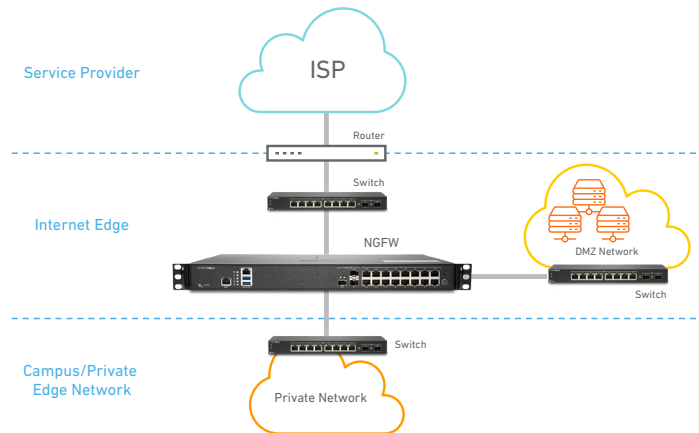
## Deployments

The Gen 7 NSa Series has two main deployment options for medium and distributed enterprises:

### Internet Edge Deployment

In this standard deployment option, the Gen 7 NSa Series NGFW protects private networks from malicious traffic coming from the internet, allowing you to:

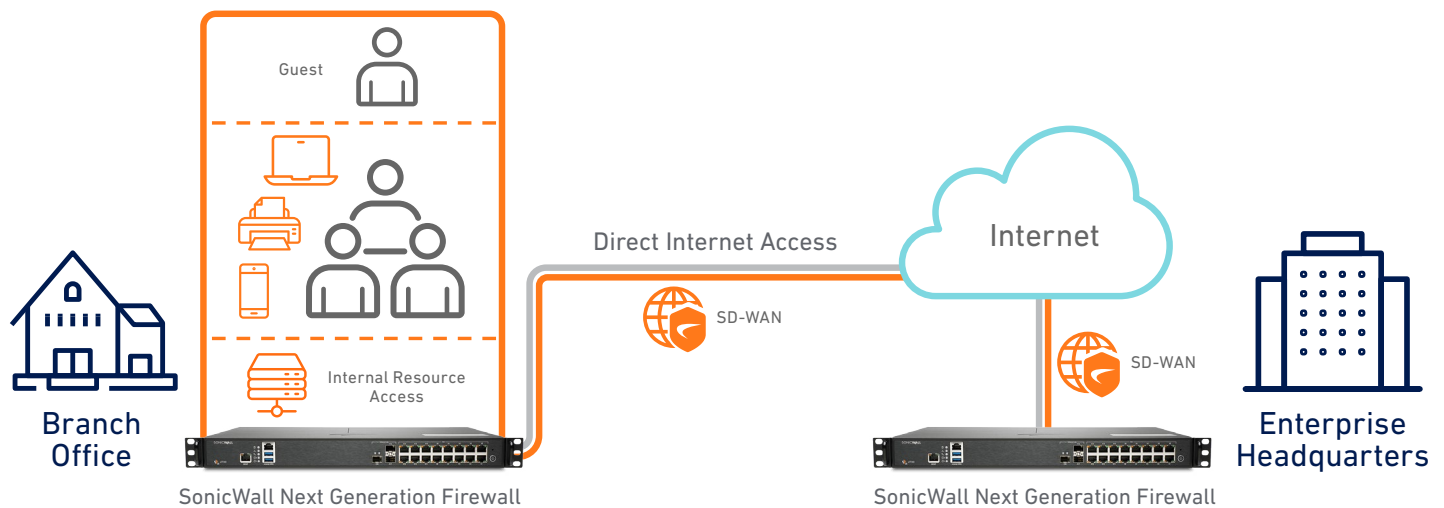
- Deploy a proven NGFW solution with highest performance and port density (including 40 GbE and 10 GbE connectivity) in its class
- Gain visibility and inspect encrypted traffic, including TLS 1.3, to block evasive threats coming from the Internet — all without compromising performance
- Protect your enterprise with integrated security, including malware analysis, cloud app security, URL filtering and reputation services
- Save space and money with an integrated NGFW solution that includes advanced security and networking capabilities
- Reduce complexity and maximize efficiency using a central management system delivered through an intuitive single-pane-of-glass user interface



### Medium and Distributed Enterprises

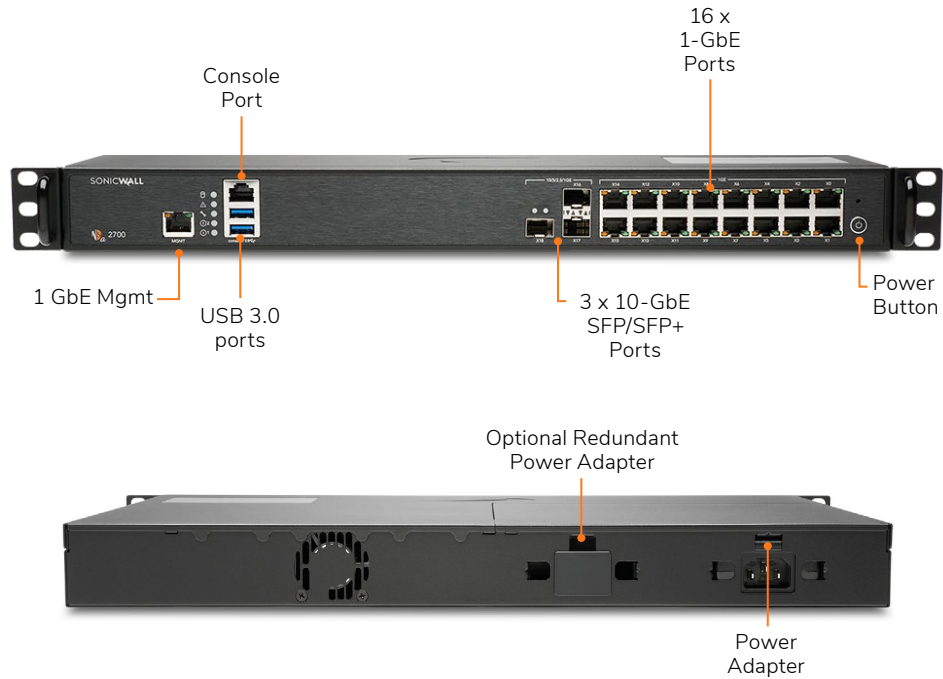
The SonicWall Gen 7 NSa Series supports SD-WAN and can be centrally managed, making it an ideal fit for medium and distributed enterprises. This deployment allows organizations to:

- Future-proof against an ever-changing threat landscape by investing in a NGFW with multi-gigabit threat analysis performance
- Provide direct and secure internet access to distributed branch offices instead of back-hauling through corporate headquarters
- Allow distributed branch offices to securely access internal resources in corporate headquarters or in a public cloud, significantly improving application latency
- Automatically block threats that use encrypted protocols such as TLS 1.3, securing networks from the most advanced attacks.
- Reduce complexity and maximize efficiency using a central management system delivered through an intuitive single pane of glass user interface
- Leverage high port density that includes 40 GbE and 10 GbE connectivity to support a distributed enterprise and wide area networks

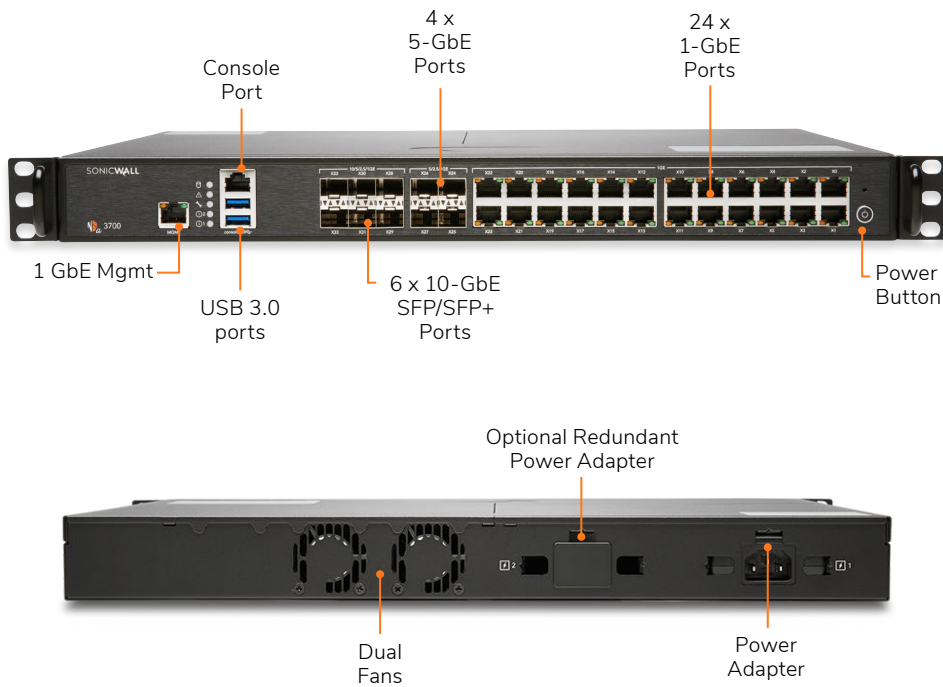


## SonicWall Gen 7 NSa Series

### NSa 2700

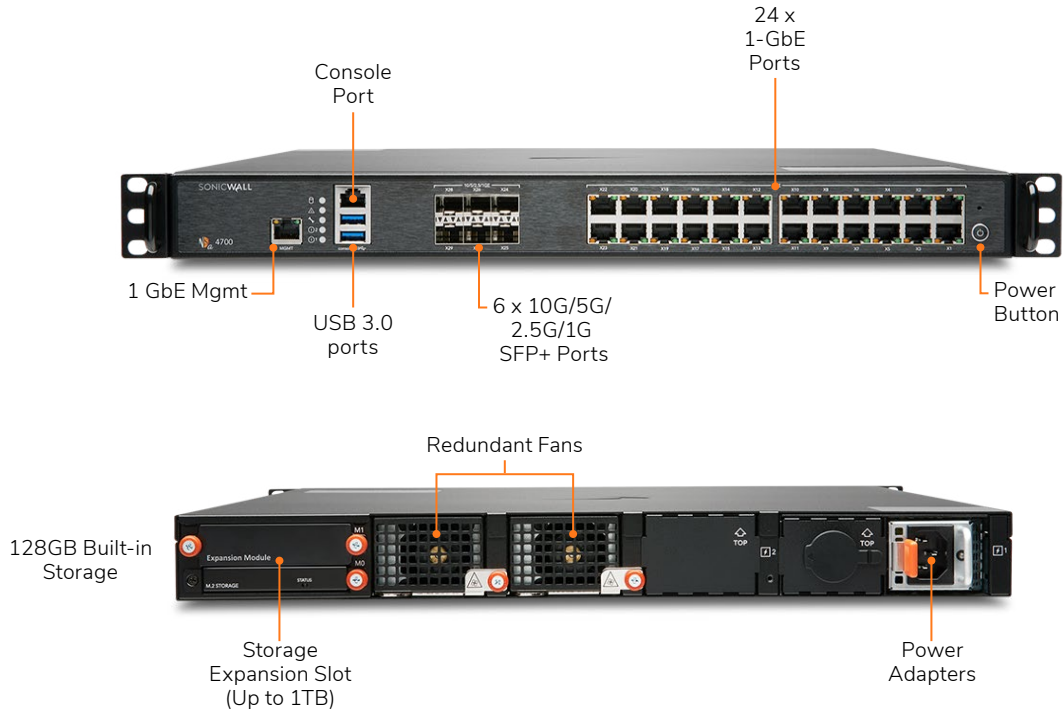


### NSa 3700

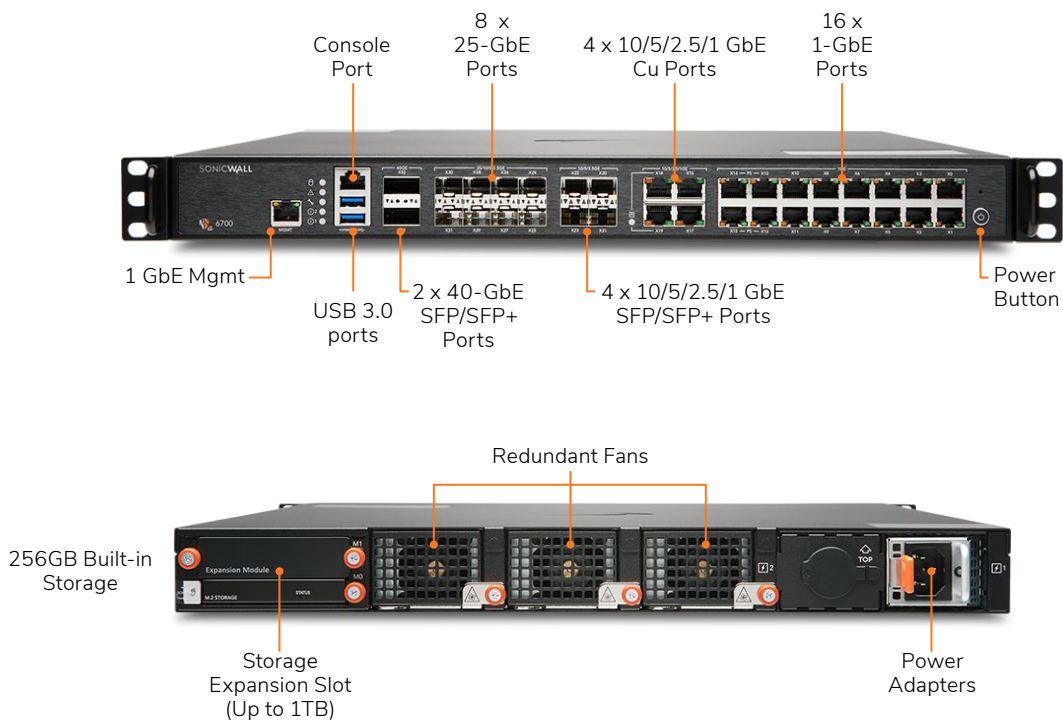


## SonicWall Gen 7 NSa Series Cont'd

### NSa 4700



### NSa 6700



## Gen 7 NSa Series System Specifications

Firewall	NSa 2700	NSa 3700	NSa 4700	NSa 6700
Operating system	SonicOS 7.0			
Interfaces	16x1GbE, 3x10G SFP+, 2 USB 3.0, 1 Console, 1 Management port	24x1GbE, 6x10G SFP+, 4x5G SFP+, 2 USB 3.0, 1 Console, 1 Mgmt. port	6 x 10G/5G/2.5G/1G (SFP+); 24 x 1GbE Cu 2 USB 3.0, 1 Console, 1 Management port	2x40G; 8x25G, 4 x10G/5G/2.5/1G SFP+, 4 x 10G/5G/2.5G/1G (Cu); 16 x 1GbE (Cu) 2 USB 3.0, 1 Console, 1 Mgmt. port
Storage	64GB M.2	128GB M.2	128GB	256GB M.2
Expansion	Storage Expansion Slot (Up to 256GB)	Storage Expansion Slot (Up to 256GB)	Storage Expansion Slot (Up to 1TB)	Storage Expansion Slot (Up to 1TB)
VLAN interfaces	256	256	512	512
Access points supported (maximum)	32	32	512	512
<b>Firewall/VPN Performance</b>				
Firewall inspection throughput <sup>1</sup>	5.2 Gbps	5.5 Gbps	18 Gbps	36 Gbps
Threat Prevention throughput <sup>2</sup>	3.0 Gbps	3.5 Gbps	9.5 Gbps	19 Gbps
Application inspection throughput <sup>2</sup>	3.6 Gbps	4.2 Gbps	11 Gbps	20 Gbps
IPS throughput <sup>2</sup>	3.4 Gbps	3.8 Gbps	10 Gbps	20 Gbps
Anti-malware inspection throughput <sup>2</sup>	2.9 Gbps	3.5 Gbps	9.5 Gbps	18.5 Gbps
TLS/SSL inspection and decryption throughput (DPI SSL) <sup>2</sup>	800 Mbps	850 Mbps	5 Gbps	9 Gbps
IPSec VPN throughput <sup>3</sup>	2.10 Gbps	2.2 Gbps	11 Gbps	19 Gbps
Connections per second	21,500	22,500	115,000	153,000
Maximum Connections (SPI)	1,500,000	2,000,000	4,000,000	8,000,000
MAX DPI-SSL Connections	125,000	150,000	350,000	750,000
Maximum connections (DPI)	500,000	750,000	2,000,000	6,000,000
<b>VPN</b>				
Site-to-site VPN tunnels	2,000	3,000	4,000	6,000
IPSec VPN clients (max)	50 (1000)	50 (1000)	500 (3000)	2000 (6000)
SSL VPN licenses (max)	2 (500)	2 (500)	2 (1000)	2 (1500)
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	Windows 10		Microsoft® Windows Vista 32/64-bit, Windows 7 32/64-bit, Windows 8.0 32/64-bit, Windows 8.1 32/64-bit, Windows 10	
NetExtender	Windows 10 and Linux		Microsoft Windows Vista 32/64-bit, Windows 7, Windows 8.0 32/64-bit, Windows 8.1 32/64-bit, Mac OS X 10.4+, Linux FC3+/Ubuntu 7+/OpenSUSE	
Mobile Connect	Apple iOS, Mac OS X, Android, Kindle Fire, Chrome OS, Windows 10		Apple® iOS, Mac OS X, Google® Android™, Kindle Fire, Chrome, Windows 8.1 (Embedded)	
<b>Security services</b>				
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	Supported			

## Gen 7 NSa Series System Specifications

Firewall	NSa 2700	NSa 3700	NSa 4700	NSa 6700
Application Visualization			Yes	
Application Control			Yes	
Capture Advanced Threat Protection			Yes	
<b>Networking</b>				
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	BGP4, 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	250	250	2500	3200
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			
Certifications (pending)	FIPS 140-2 (with Suite B) Level 2, UC APL, VPNC, IPv6 (Phase 2), ICSA Network Firewall, ICSA Anti-virus, Common Criteria NDPP (Firewall and IPS)			
Common Access Card (CAC)	Supported			
High availability	Active/Passive with stateful synchronization			
<b>Hardware</b>				
Form factor	1U Rack Mountable			
Fans	1	2	2 (removable)	2 (removable)
Power supply	60W	90W	1x350W	1x350W
Maximum power consumption (W)	21.5	36.3	135.8	139.2
Input power	100-240 VAC, 50-60 Hz			
Total heat dissipation	73.32 BTU	123.78 BTU	463.1	474.7
Dimensions	43 x 32.5 x 4.5 (cm) 16.9 x 12.8 x 1.8 in		43 x 46.5 x 4.5 (cm) 16.9 x 18.1 x 1.8 in	
Weight	4.0 kg / 8.8 lbs	4.6 kg / 10.2 lbs	7.8 Kg	8.1 Kg
WEEE weight	4.2 kg / 9.3 lbs	4.8 kg / 10.6 lbs	9.6 Kg	9.9 Kg
Shipping weight	6.4 kg / 14.1 lbs	7 kg / 15.4lbs	13.5 Kg	13.8 Kg
Environment (Operating/Storage)	32°-105° F (0°-40° C)/-40° to 158° F (-40° to 70° C)			
Humidity	5-95% non-condensing		0-90% R.H non-condensing	
<b>Regulatory</b>				
Major regulatory compliance	FCC Class A, CE (EMC, LVD, RoHS), C-Tick, VCCI Class A, MSIP/KCC Class A, UL, cUL, TUV/GS, CB, Mexico CoC by UL, WEEE , REACH, ANATEL, BSMI			

1. Testing Methodologies: Maximum performance based on RFC 2544 (for firewall). Actual performance may vary depending on network conditions and activated services.

2. Threat Prevention/Gateway AV/Anti-Spyware/IPS throughput measured using industry standard Spirent WebAvalanche HTTP performance and Ixia test tools. Testing done with multiple flows through multiple port pairs. Threat Prevention throughput measured with Gateway AV, Anti-Spyware, IPS and Application Control enabled.

3. VPN throughput measured with UDP traffic using 1418 byte packet size AESGMAC16-256 Encryption adhering to RFC 2544. All specifications, features and availability are subject to change.

### PARTNER ENABLED SERVICES

**Need help to plan, deploy or optimize your SonicWall solution? SonicWall Advanced Services Partners are trained to provide you with world class professional services. Learn more at:**

[www.sonicwall.com/PES](http://www.sonicwall.com/PES)

# SonicOS 7.0 Feature Summary

## Firewall

- Stateful packet inspection
- Reassembly-Free Deep Packet Inspection
- DDoS attack protection (UDP/ICMP/SYN flood)
- IPv4/IPv6 support
- Biometric authentication for remote access
- DNS proxy
- Full API support
- SonicWall Switch integration
- SD-WAN scalability
- SD-WAN Usability Wizard<sup>1</sup>
- Connections scalability (SPI, DPI, DPI SSL)
- Enhanced dashboard<sup>1</sup>
- Enhanced device view
- Top traffic and user summary
- Insights to threats
- Notification center

## TLS/SSL/SSH decryption and inspection

- TLS 1.3 with enhanced security<sup>1</sup>
- Deep packet inspection for TLS/SSL/SSH
- Inclusion/exclusion of objects, groups or hostnames
- SSL control
- Enhancements for DPI-SSL with CFS
- Granular DPI SSL controls per zone or rule
- Capture advanced threat protection<sup>2</sup>
- Real-Time Deep Memory Inspection
- Cloud-based multi-engine analysis<sup>2</sup>
- Virtualized sandboxing
- Hypervisor level analysis
- Full system emulation
- Broad file type examination
- Automated and manual submission
- Real-time threat intelligence updates<sup>2</sup>
- Block until verdict
- Capture Client<sup>2</sup>

## Intrusion prevention<sup>2</sup>

- Signature-based scanning
- Automatic signature updates
- Bi-directional inspection
- Granular IPS rule capability
- GeolP enforcement

- Botnet filtering with dynamic list
- Regular expression matching

## Anti-malware<sup>2</sup>

- Stream-based malware scanning
- Gateway anti-virus
- Gateway anti-spyware
- Bi-directional inspection
- No file size limitation
- Cloud malware

## Application identification<sup>2</sup>

- Application control
- Application bandwidth management
- Custom application signature creation
- Data leakage prevention
- Application reporting over NetFlow/IPFIX
- Comprehensive application signature database

## Traffic visualization and analytics

- User activity
- Application/bandwidth/threat usage
- Cloud-based analytics

## HTTP/HTTPS Web content filtering<sup>2</sup>

- URL filtering
- Proxy avoidance
- Keyword blocking
- Policy-based filtering (exclusion/inclusion)
- HTTP header insertion
- Bandwidth manage CFS rating categories
- Unified policy model with app control
- Content Filtering Client

## VPN

- Secure SD-WAN
- Auto-provision VPN
- IPSec VPN for site-to-site connectivity
- SSL VPN and IPSec client remote access
- Redundant VPN gateway
- Mobile Connect for iOS, Mac OS X, Windows, Chrome, Android and Kindle Fire
- Route-based VPN (OSPF, RIP, BGP)

## Networking

- PortShield
- Jumbo frames
- Path MTU discovery
- Enhanced logging
- VLAN trunking
- Port mirroring (SonicWall Switch)
- Layer-2 QoS
- Port security
- Dynamic routing (RIP/OSPF/BGP)
- SonicWall wireless controller
- Policy-based routing (ToS/metric and ECMP)
- NAT
- DHCP server
- Bandwidth management
- A/P high availability with state sync
- Inbound/outbound load balancing
- High availability - Active/Standby with state sync
- L2 bridge, wire/virtual wire mode, tap mode, NAT mode
- Asymmetric routing
- Common Access Card (CAC) support

## VoIP

- Granular QoS control
- Bandwidth management
- DPI for VoIP traffic
- H.323 gatekeeper and SIP proxy support

## Management, monitoring and support

- Capture Security Appliance (CS<sub>a</sub>) support
- Capture Threat Assessment (CTA) v2.0
- New design or template
- Industry and global average comparison
- New UI/UX, Intuitive feature layout<sup>1</sup>
- Dashboard
- Device information, application, threats
- Topology view
- Simplified policy creation and management
- Policy/Objects usage statistics<sup>1</sup>
- Used vs Un-used
- Active vs Inactive
- Global search for static data
- Storage support<sup>1</sup>



## SonicOS 7.0 Feature Summary cont'd

### Management, monitoring and support cont'd

- Internal and external storage management<sup>1</sup>
- WWAN USB card support (5G/LTE/4G/3G)
- Network Security Manager (NSM) support
- Web GUI
- Command line interface (CLI)
- Zero-Touch registration & provisioning
- CSC Simple Reporting<sup>1</sup>
- SonicExpress mobile app support
- SNMPv2/v3
- Centralized management and reporting with SonicWall Global Management System (GMS)<sup>2</sup>
- API for reporting and analytics
- Logging
- Netflow/IPFix exporting
- Cloud-based configuration backup

- BlueCoat security analytics platform
- Application and bandwidth visualization
- IPv4 and IPv6 management
- CD management screen
- Dell N-Series and X-Series switch management including cascaded switches

### Debugging and diagnostics

- Enhanced packet monitoring
- SSH terminal on UI

### Wireless

- SonicWave AP cloud management
- WIDS/WIPS
- Rogue AP prevention
- Fast roaming (802.11k/r/v)
- 802.11s mesh networking
- Auto-channel selection
- RF spectrum analysis

- Floor plan view
- Topology view
- Band steering
- Beamforming
- AirTime fairness
- Bluetooth Low Energy
- MiFi extender
- RF enhancements and improvements
- Guest cyclic quota

<sup>1</sup> New feature, available on SonicOS 7.0

<sup>2</sup> Requires added subscription

## Learn more about SonicWall Gen 7 NSa Series

[www.sonicwall.com/products/firewalls](http://www.sonicwall.com/products/firewalls)

### About SonicWall

SonicWall delivers Boundless Cybersecurity for the hyper-distributed era and a work reality where everyone is remote, mobile and unsecure. By knowing the unknown, providing real-time visibility and enabling breakthrough economics, SonicWall closes the cybersecurity business gap for enterprises, governments and SMBs worldwide. For more information, visit [www.sonicwall.com](http://www.sonicwall.com) or follow us on [Twitter](#), [LinkedIn](#), [Facebook](#) and [Instagram](#).



#### SonicWall, Inc.

1033 McCarthy Boulevard | Milpitas, CA 95035  
Refer to our website for additional information.  
[www.sonicwall.com](http://www.sonicwall.com)

[View More Datasheets](#)

SONICWALL®

© 2021 SonicWall Inc. ALL RIGHTS RESERVED.

SonicWall is a trademark or registered trademark of SonicWall Inc. and/or its affiliates in the U.S.A. and/or other countries. All other trademarks and registered trademarks are property of their respective owners. The information in this document is provided in connection with SonicWall Inc. and/or its affiliates' products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of SonicWall products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, SONICWALL AND/OR ITS AFFILIATES ASSUME NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL SONICWALL AND/OR ITS AFFILIATES BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF SONICWALL AND/OR ITS AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SonicWall and/or its affiliates make no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. SonicWall Inc. and/or its affiliates do not make any commitment to update the information contained in this document.