



# SonicWall Gen 7 NSsp Series

The SonicWall Network Security services platform<sup>™</sup> (NS*sp*) series has next-generation firewalls with high port density and multi-gig speed interfaces, that can process several million connections for zero-day and advanced threats. Designed for large enterprise, higher education, government agencies and MSSPs, it eliminates attacks in real time without slowing performance. It is designed to be highly reliable and deliver uninterrupted services to organizations.

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## NSsp Spec Preview. View full specs »

## 100 GbE

Up to 100 Gbps

Ports

## Firewall inspection throughput

Max Connections (NS*sp* 15700)

**80M** 

## HIGHLIGHTS

#### SonicWall NSsp Series

- High port density
- 100 GbE ports
- Integrates with on-prem and cloud-based sandboxing
- Single pane of glass management
- 80+ Gbps Threat prevention throughput
- Redundant power
- Up to 100 Gbps firewall inspection throughput
- TLS 1.3 support
- Supports millions of simultaneous TLS connections
- Low TCO

Learn more about SonicWall Gen 7 NS*sp* Series:

sonicwall.com/NSsp

#### DATASHEET

## **Enterprise-Class Firewalls**

As businesses evolve along with an increase in managed and unmanaged devices, networks, cloud workloads, SaaS applications, users, Internet speeds, and encrypted connections, a firewall that can't support any one of these becomes a bottleneck. A firewall should be a source of strength and not a point of weakness.

The SonicWall NS*sp* firewall's multiple 100G/40G/25G/10G interfaces allow you to process several million simultaneous encrypted and unencrypted connections with unparallel threat prevention technology. With more than 70% of all sessions being encrypted, having a firewall that can process and examine this traffic without impacting the end user experience is critical to productivity and information security. The NS*sp*'s unified policy enables organizations to simply and intuitively create access and security policies in a single interface.

### Simplified management and reporting

Ongoing management, monitoring and reporting of network activities are handled through the SonicWall Network Security Manager. This provides an intuitive dashboard for managing firewall operations as well as provide historical reports – from a single source. Together, the simplified deployment and setup along with the ease of management enable organizations to lower their total cost of ownership and realize a high return on investment.

## Deployment

### **Next-Generation Firewall (NGFW)**

- Managed through a single pane of glass
- NS*sp* integrates with the rest of the SonicWall ecosystem of solutions
- Gain full visibility into your network to see what applications, devices, and users are doing to enforce policies as well as eliminate threats and bandwidth bottlenecks
- Integrate with Capture ATP with RTDMI for cloud-based sandboxing or Capture Security appliance for on-premise malware detection

## Deep Packet Inspection of SSL/ TLS (DPI-SSL) for hidden threats

- The NSsp provides inspection for over millions of simultaneous TLS/SSL and SSH encrypted connections regardless of port or protocol
- Inclusion and exclusion rules allow customization based on specific organizational compliance and/or legal requirements
- Support for TLS cipher suites up to TLS 1.3

## Segmentation and Networking

 Operate across several segmented networks, clouds, or service definitions, with unique templates, device groups, and policies across multiple devices and tenants • MSSPs can also support multiple customers with a clean pipe along with unique policies

## Multi-instance Firewall (only for NS*sp* 15700)

- Multi-instance is the next generation of multi-tenancy
- Each tenant is isolated with dedicated compute resources to avoid resource starvation
- It features physical and logical ports/tenants
- It supports independent tenant policy and configuration management
- Leverage version independence and High Availability (HA) support for tenants

#### Wire Mode Functionality

- Bypass Mode for the quick and relatively non-interruptive introduction of firewall hardware into a network
- Inspect Mode to extend Bypass Mode without functionally altering the low-risk, zero latency packet path
- Secure Mode to actively interposing the firewall's multi-core processors into the packet processing path
- Tap Mode to ingest a mirrored packet stream via a single switch port on the firewall, eliminating the need for physically intermediated insertion

## **Advanced Threat Protection**

- SonicWall Capture Advanced Threat Protection™ (ATP) is used by over 150,000 customers across the world through a variety of solutions and it helps to discover and stop over 1,200 new forms of malware each business day
- NSsp integrates with Capture Security appliance to detect and block unknown threats with on-premises sandboxing thats uses Real-Time Deep Memory Inspection™ (RTDMI).

#### **Capture Cloud Platform**

 SonicWall's Capture Cloud Platform delivers cloud-based threat prevention and network management plus reporting and analytics for organizations of any size

## **Content Filtering Services**

- Compare requested web sites against a massive database in the cloud containing millions of rated URLs, IP addresses and web sites
- Create and apply policies that allow or deny access to sites based on individual or group identity, or by time of day, for over 50 pre-defined categories



### Intrusion Prevention System (IPS)

- Delivers a configurable, high performance Deep Packet Inspection engine for extended protection of key network services such as Web, e-mail, file transfer, Windows services and DNS
- Designed to protect against application vulnerabilities as well as worms, trojans, and peer-to-peer, spyware and backdoor exploits
- The extensible signature language provides proactive defense against newly discovered application and protocol vulnerabilities
- SonicWall IPS offloads the costly and time-consuming burden of maintaining and updating signatures for new attacks through SonicWall's industryleading Distributed Enforcement Architecture (DEA)

#### **IoT and Application Control**

 The NSsp catalogs thousands of applications through App Control and monitors their traffic for anomalous behavior



## NSsp 11700



## SONICWALL

## NSsp 13700







10x fans

Hot Swappable Power Adapters



## SonicWall NSsp Series specifications

Firewall General	NS <i>sp</i> 10700	NS <i>sp</i> 11700	NS <i>sp</i> 13700	NS <i>sp</i> 15700
Operating System	SonicOS 7.0.1	SonicOS 7.0.1	SonicOS 7.0.1	SonicOSX 7.0
Interfaces	2x100G; 8x25G, 4x10G/5G/2.5G/1G (SFP+), 4 x 10G/5G/2.5G/1G (Cu); 16 x 1GbE (Cu) 2 USB 3.0, 1 Console, 1 Mgmt. port	2x100G; 8x25G, 4x10G/5G/2.5G/1G (SFP+), 4 x 10G/5G/2.5G/1G (Cu); 16 x 1GbE (Cu) 2 USB 3.0, 1 Console, 1 Mgmt. port	2x100/40-GbE QSFP28, 8x25/10/5/2.5-GbE SFP28, 4x10/5/2.5-GbE SFP+, 4x10/5/2.5/1-GbE Cu, 16x1-GbE 2 USB 3.0, 1 Console, 1 Mgmt. port	6 x 100-GbE QSFP28, 4 x 40-GbE QSFP+, 16 x 10 GbE SFP+
Built-in storage	1.5TB	1.5TB	1.5TB	2 x 480 GB SSD
Management	CLI, SSH, Web UI, REST APIs			
SSO Users	100,000			
Logging	Analyzer, Local Log, Syslog, IPFIX, NetFlow			
Firewall/VPN Performance	NS <i>sp</i> 10700	NS <i>sp</i> 11700	NS <i>sp</i> 13700	NS <i>sp</i> 15700

Firewall inspection throughput <sup>1</sup>	42	47	60 Gbps	105 Gbps
Threat Prevention throughput <sup>2</sup>	27	35	45.5 Gbps	82 Gbps
Application inspection throughput <sup>2</sup>	30	44	57 Gbps	86 Gbps
IPS throughput <sup>2</sup>	28	37	48 Gbps	76.5 Gbps
TLS/SSL inspection and decryption throughput (DPI SSL) <sup>2</sup>	10	11.5	16.5 Gbps	21 Gbps
VPN throughput <sup>3</sup>	22.5	26.7	29 Gbps	32 Gbps
Connections per second	280,000	280,000	280,000	800,000
Maximum connections (SPI)	15,000,000	20,000,000	25,000,000	80,000,000
Maximum connections (DPI)	12,000,000	17,000,000	22,000,000	50,000,000
Maximum connections (DPI SSL)	1,500,000	1,750,000	2,000,000	3,000,000
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VPN	NS <i>sp</i> 10700	NS <i>sp</i> 11700	NS <i>sp</i> 13700	NS <i>sp</i> 15700		
Site-to-site VPN tunnels	6,000	12,000	12,000	25,000		
IPSec VPN clients (max)	2000 (6000)	2000 (6000)	2,000 (6,000)	2,000 (10,000)		
SSL VPN licenses (max)	2 (3000)					
Encryption/authentication				8, 192, 256-bit)/MD5, 3 Cryptography		
Key exchange	Diffie Hellman Groups 1, 2, 5, 14v					
Route-based VPN	RIP, OSPF, BGP					
VPN features	Dead Peer Detection, DHCP Over VPN, IPSec NAT Traversal, Redundant VPN Gateway, Route-based VPN					
Global VPN client	Microsoft® Windows Vista 32/64-bit, Windows 7 32/64-bit,					
platforms supported	Windows 8.0 32/64-bit, Windows 8.1 32/64-bit, Windows 10					
NetExtender	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, Google® Android™, Kindle Fire, Chrome, Windows 8.1 (Embedded)					
Networking	NS <i>sp</i> 10700	NS <i>sp</i> 11700	NS <i>sp</i> 13700	NS <i>sp</i> 15700		
Multi Instance Firowall	NI/A	NI/A	Ν/Λ	Max Tenants per		

Multi-Instance Firewall	N/A	N/A	N/A	Max Tenants per Hardware: 12
IP address assignment	Static (DHC	P, PPPoE, L2TP and PPTP clie	ent), Internal DHCP serv	rer, DHCP Relay
NAT modes	1:1, many:1, 1:many, flexible NAT (overlapping IP), PAT, transparent mode			
VLAN interfaces	1024			

## SonicWall NSsp Series specifications

Networking	NS <i>sp</i> 10700	NS <i>sp</i> 11700	NS <i>sp</i> 13700	NS <i>sp</i> 15700	
Wire Mode	-	-	-	Yes	
Routing protocols	BGP4, OSPF, RIPv1/ v2, static routes, policy-based routing	BGP4, OSPF, RIPv1/ v2, static routes, policy-based routing	BGP4, OSPF, RIPv1/ v2, static routes, policy-based routing	BGP, OSPF, RIPv1/ v2, static routes, policy-based routing	
QoS	Bandwidth priority	y, max bandwidth, guarante	ed bandwidth, DSCP mark	ing, 802.1e (WMM)	
Authentication	LDAP (multiple domains), XAUTH/RADIUS, TACACS+, SSO, Radius accounting NTLM, internal user database, 2FA, Terminal Services, Citrix, Common Access Card (CAC) LDAP (multiple domains), XAUTH/RADI Novell, internal user database, Terminal Services, Citrix, Common Access Card (CAC)			user database, rvices, Citrix,	
VoIP		Full H323-	-v1-5, SIP		
Standards	ISAKM	TCP/IP, UDP, ICMP, H IP/IKE, SNMP, DHCP, PPPoE		E 802.3	
Certifications (in progress)	FIPS 140-2 (with Suite B), UC APL, IPv6 (Phase 2), ICSA Network Firewall, ICSA Anti-virus, Common Criteria NDPP (Firewall and IPS)		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)		
High availability	Active/Passive with stateful synchronization				
Hardware	NS <i>sp</i> 10700	NS <i>sp</i> 11700	NS <i>sp</i> 13700	NS <i>sp</i> 15700	
Power supply	2x350W	2x350W	2x350W	Dual, Redundant, 1,200W	
Fans	3 (removable)	3 (removable)	3 (removable)	10	
Redundant Power Supply		100-240 VA	C, 50-60 Hz		
Maximum power consumption (W)	155.3	155.3	181.2	1135.0	
Total heat dissipation	529.57 BTU	529.57 BTU	617.89 BTU	3870.35 BTU	
Form factor	1U Rack Mountable	1U Rack Mountable	1U Rack Mountable	2U Rack Mountable	
Dimensions	43 x 32.5 x 4.5 (cm) 16.9 x 12.8 x 1.8 in	43 x 32.5 x 4.5 (cm) 16.9 x 12.8 x 1.8 in	43 x 32.5 x 4.5 (cm) 16.9 x 12.8 x 1.8 in	68.6 x 43.8 x 8.8 (cm)	
Weight	9.1 Kg	9.1 Kg	9.1 Kg	26 Kg	
WEEE weight	11 Kg	11 Kg	11 Kg	30.1 Kg	
Shipping weight	14.9 Kg	14.9 Kg	14.9 Kg	37.3 Kg	
Environment (Operating/Storage)		32°-105° F (0°-40° C)/-40	° to 158° F (-40° to 70° C)		
Humidity	0-90% R.H non-condensing	0-90% R.H non-condensing	0-90% R.H non-condensing	10-95% non-condensing	

Regulatory	NS <i>sp</i> 10700	NS <i>sp</i> 11700	NS <i>sp</i> 13700	NS <i>sp</i> 15700
Regulatory model numbers	1RK54-118	1RK54-119	1RK54-118	2RK05-0FE
Major Regulatory	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	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	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	FCC Class A, ICES Class A, CE (EMC Class A, LVD, RoHS), C-Tick, VCCI Class A, MSIP/ KCC Class A, UL, cUL, TUV/GS, CB, Mexico UL DGN notification, WEEE, REACH, ANATEL, BSMI

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

<sup>2</sup> Threat Prevention/GatewayAV/Anti-Spyware/IPS throughput measured using industry standard Keysight HTTP performance 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.

<sup>3</sup> 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.

## SonicOSX and SonicOS 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
- REST APIs
- SonicWall Switch integration

## **Unified Security Policy**

- Unified Policy combines Layer 4 to Layer 7 rules:
- Source/Destination IP/Port/Service
- Application Control
- CFS/Web Filtering
- Single Pass Security Services enforcement
- IPS/GAV/AS/Capture ATP
- Rule management:
  - Cloning
  - Shadow rule analysis
  - In-cell editing
  - Group editing
- Managing views
  - Used/un-used rules
  - Active/in-active rules
  - Sections

## TLS/SSL/SSH decryption and inspection

- TLS 1.3
- Deep packet inspection for TLS/SSL/SSH
- Inclusion/exclusion of objects, groups or hostnames
- SSL control
- Granular DPI-SSL controls
  per zone or rule
- Decryption Policies for SSL/TLS and SSH

## Capture advanced threat protection<sup>1</sup>

- Real-Time Deep Memory Inspection
- Cloud-based multi-engine analysis

SonicWall Gen 7 NSsp Series

Virtualized sandboxing

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Hypervisor level analysis

- Full system emulation
- Broad file type examination
- Automated and manual submission
- Real-time threat intelligence updates
- Block until verdict
- Capture Client integration

### Intrusion prevention<sup>1</sup>

- Signature-based scanning
- Automatic signature updates
- Bi-directional inspection
- Granular IPS rule capability
- GeoIP enforcement
- Botnet filtering with dynamic list
- Regular expression matching

### Anti-malware<sup>1</sup>

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

## Application identification<sup>1</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>1</sup>

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

## VPN

- 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

- Multi-instance firewall (only on NSsp 15700)
- PortShield
- Jumbo frames
- Path MTU discovery
- Enhanced logging
- VLAN trunking
- Port mirroring
- Layer-2 QoS
- Port security
- Dynamic routing (RIP/OSPF/BGP)

Link aggregation (static and dynamic)

A/P high availability with state sync

Inbound/outbound load balancing

High availability - Active/Standby

Wire/virtual wire mode, tap

- Policy-based routing (ToS/ metric and ECMP)
- NAT

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VoIP

- DHCP server
- Bandwidth management

Port redundancy

with state sync

mode, NAT mode

Asymmetric routing

Granular QoS control

DPI for VoIP traffic

SIP proxy support

Web GUI

Rest API

Bandwidth management

H.323 gatekeeper and

Management and monitoring

Command line interface (CLI)

Zero-Touch registration & provisioning

SONICWALL

SonicExpress mobile app support

## Management and monitoring cont'd

- SNMPv2/v3
- Centralized management and reporting with SonicWall Network Security Manager (NSM)<sup>1</sup>
- Logging
- Netflow/IPFix exporting
- Cloud-based configuration backup
- Application and bandwidth visualization
- IPv4 and IPv6 management

<sup>1</sup> Requires added subscription



## Find the right SonicWall firewall for your enterprise

www.sonicwall.com/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 or follow us on Twitter, LinkedIn, Facebook and Instagram.



SONICWALL

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