# SonicWall SuperMassive Series

Uncompromising, high-performance, next-generation firewall protection for your enterprise network.

The SonicWall SuperMassive Series is SonicWall's next-generation firewall (NGFW) platform designed for large networks to deliver scalability, reliability and deep security at multi-gigabit speeds with near zero latency.

Built to meet the needs of enterprise, government, education, retail, healthcare and service provider, the SuperMassive Series is ideal for securing distributed enterprise networks, data centers and service providers.

The combination of SonicWall's SonicOS operating system, patented* Reassembly-Free Deep Packet Inspection® (RFDPI) technology and massively multi-core, highly scalable hardware architecture, the SuperMassive E10000 and 9000 Series deliver industry-leading application control, intrusion prevention, malware protection and TLS/SSL decryption and inspection at multi-gigabit speeds. The SuperMassive Series is thoughtfully designed with power, space and cooling (PSC) in mind, providing the leading Gbps/watt NGFW in the industry for high performance packet and data processing, application control and threat prevention.

The SonicWall RFDPI engine scans every byte of every packet across all ports, delivering full content inspection of the entire stream while providing high performance and low latency. This technology is superior to proxy designs that reassemble content using sockets bolted to anti-malware programs, which are plagued with inefficiencies and the overhead of socket memory thrashing, which leads to high latency, low performance and file size limitations. The RFDPI engine delivers full content inspection to eliminate various forms of malware before they enter the network and provides protection against evolving threats — without file size, performance or latency limitations.

The RFDPI engine also performs full decryption and inspection of TLS/SSL and SSH encrypted traffic as well as non-proxyable applications, enabling complete protection regardless of transport or protocol. It looks deep inside every packets (the header and data part) searching for protocol non-compliance, threats, zero-days, intrusions, and even defined criteria to detect and prevent hidden attacks that leverage cryptography, block encrypted malware downloads, cease the spread of infections, and thwart command and control (C&C) communications and data exfiltration. Inclusion and exclusion rules allow total control to customize which traffic is subject to decryption and inspection based on specific organizational compliance and/or legal requirements.

Application traffic analytics enable the identification of productive and unproductive application traffic in real time, and traffic can then be controlled through powerful application-level policies. Application control can be exercised on both a per-user and per-group basis, along with schedules and exception lists. All application, intrusion prevention and malware signatures are constantly updated by the SonicWall Threats Research Team. Additionally, SonicOS, an advanced purpose-built operating system, provides integrated tools that allow for custom application identification and control.

*SuperMassive E10000 Series*

*SuperMassive 9000 Series*

## Benefits:

- Gets complete breach prevention including high performance intrusion prevention, low latency malware protection and network sandboxing
- Gains full granular application identification, control and visualization
- Find and blocks hidden threats with decryption and inspection of TLS/SSL and SSH encrypted traffic without performance problems
- Scalable security designed for10/40 Gbps infrastructures
- Adapts to service-level increases and ensures network services and resources are available and protected

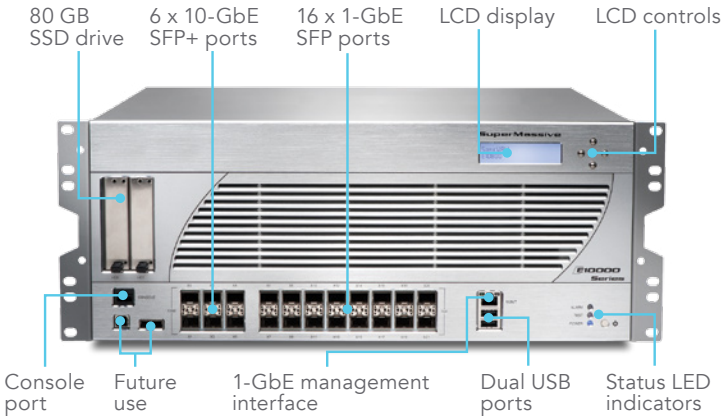
**U.S. Patents 7,310,815; 7,600,257; 7,738,380; 7,835,361*

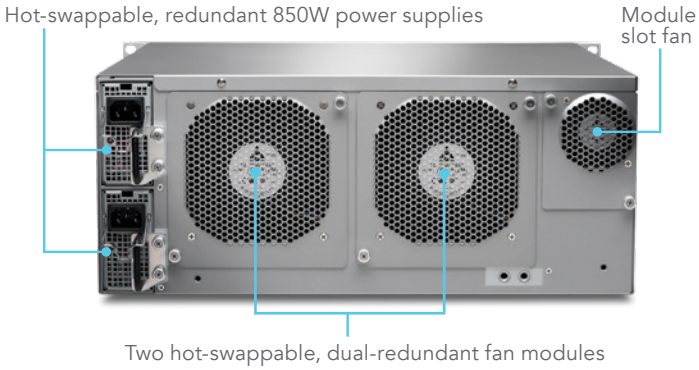
## Series lineup

The SonicWall SuperMassive E10000 Series chassis includes 6 x 10-GbE SFP+ and 16 x 1-GbE SFP ports, redundant 850W AC power supplies and hot-swappable, dual-redundant fan modules, and it massively scales up to 96 processing cores. It is also field upgradeable, future-proofing the security infrastructure investment as network bandwidth and security requirements increase.

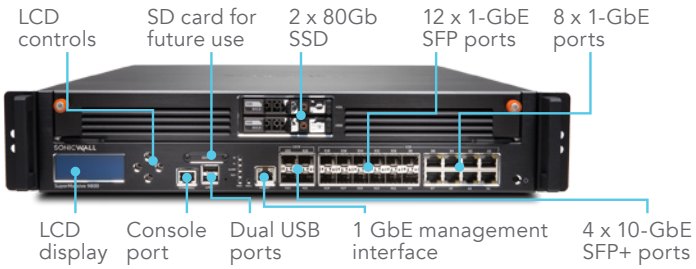
The SonicWall SuperMassive 9000 Series features 4 x 10-GbE SFP+, up to 12 x 1-GbE SFP, 8 x 1-GbE copper and 1 GbE management interfaces, with an expansion port for an additional 2 x 10-GbE SFP+ interfaces (future release). The 9000 Series features hot-swappable fan modules and power supplies.

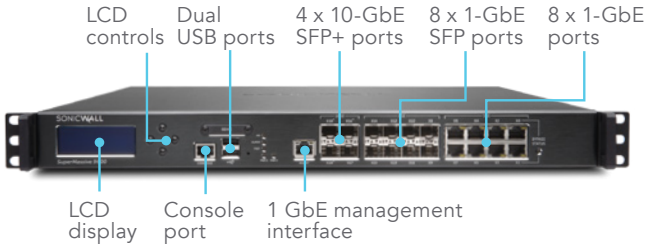
## SuperMassive E10000 Series



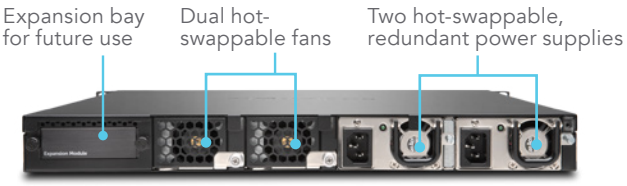




## SuperMassive 9000 Series



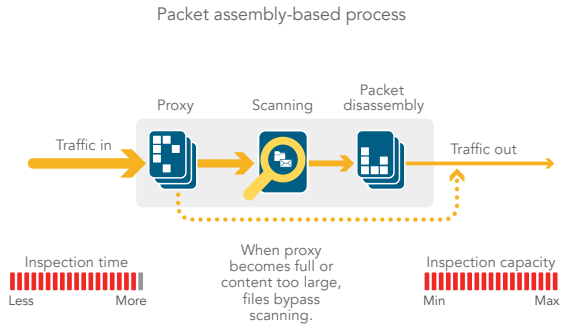




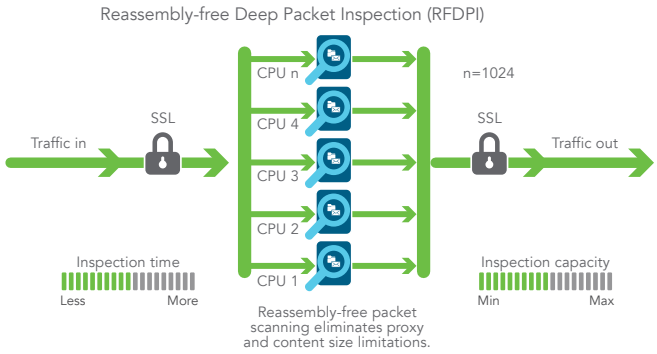

| Capability | 9200 | 9400 | 9600 | 9800 | E10400 | E10800 |
|---|---|---|---|---|---|---|
| Processing cores | 24 | 32 | 32 | 64 | 48 | 96 |
| Firewall throughput | 15 Gbps | 20 Gbps | 20 Gbps | 40 Gbps | 20 Gbps | 40 Gbps |
| Application intelligence throughput | 5 Gbps | 10 Gbps | 11.5 Gbps | 24 Gbps | 15 Gbps | 28 Gbps |
| Intrusion prevention system (IPS) throughput | 5 Gbps | 10 Gbps | 11.5 Gbps | 24 Gbps | 15 Gbps | 30 Gbps |
| Anti-malware | 3.5 Gbps | 4.5 Gbps | 5 Gbps | 10 Gbps | 6 Gbps | 12 Gbps |
| Maximum DPI connections | 1.25 M | 1.25 M | 1.5 M | 2.5 M | 5 M | 10 M |
| **Deployment modes** | **9200** | **9400** | **9600** | **9800** | **E10400** | **E10800** |
| L2 bridge mode | Yes | Yes | Yes | Yes | Yes | Yes |
| Wire mode | Yes | Yes | Yes | Yes | Yes | Yes |
| Gateway/NAT mode | Yes | Yes | Yes | Yes | Yes | Yes |
| Tap mode | Yes | Yes | Yes | Yes | Yes | Yes |
| Transparent mode | Yes | Yes | Yes | Yes | Yes | Yes |

## Reassembly-Free Deep Packet Inspection engine

RFDPI is a single-pass, low latency inspection system that performs stream-based, bi-directional traffic analysis at high speed without proxying or buffering to effectively uncover intrusion attempts, malware and identify application traffic regardless of port and protocol. This proprietary engine relies on streaming traffic payload inspection in order to detect threats at Layers 3-7. The RFDPI engine takes network streams through extensive and repeated normalization and decryption in order to neutralize advanced obfuscation and evasion techniques that seek to confuse detection engines and sneak malicious code into the network.




**Competitive proxy-based architecture**



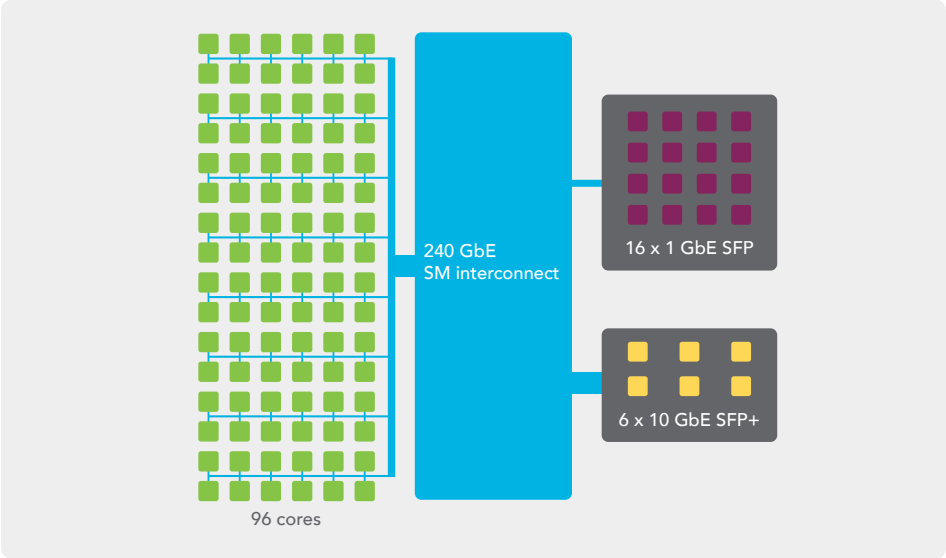

**SonicWall stream-based architecture**

Once a packet undergoes the necessary pre-processing, including TLS/SSL decryption, it is analyzed against a single proprietary memory representation of multiple signature databases: intrusion attacks, malware, botnet and applications. The connection state is then advanced to represent the position of the stream relative to these databases until it encounters a state of attack, or other "match" event, at which point a preset action is taken. In most cases, the connection is terminated and proper logging and notification events are created. However, the engine can also be configured for inspection only or, in the case of application detection, to provide Layer 7 bandwidth management services for the remainder of the application stream as soon as the application is identified.

## Extensible architecture for extreme scalability and performance

The RFDPI engine is purposely designed with a keen focus on providing security scanning at a high level of performance, to match both the inherently parallel and ever growing nature of network traffic. When combined with 24-, 32-, 48-, 64- or 96-core processor systems, this parallelism-centric software architecture scales up perfectly to address the demands of deep packet inspection (DPI) at high traffic loads. The SuperMassive platform relies on processors that, unlike x86, are optimized for packet, crypto and network processing while retaining flexibility and programmability in the field — a weak point for ASICs systems.

This flexibility is essential when new code and behavior updates are necessary to protect against new attacks that require updated and more sophisticated detection techniques. Another aspect of the platform design is the unique ability to establish new connections on any core in the system, providing ultimate scalability and the ability to deal with traffic spikes. This approach delivers extremely high new session establishment rates (new conn/sec) while deep packet inspection is enabled — a key metric that is often a bottleneck for data center deployments.




## Security and protection

The dedicated, in-house SonicWall Threats Research Team works on researching and developing countermeasures to deploy to the firewalls in the field for up-to-date protection. The team leverages more than one million sensors across the globe for malware samples and for telemetry feedback on the latest threat information, which in turn is fed into the intrusion prevention, anti-malware and application detection capabilities.

SonicWall NGFW customers with the latest security capabilities are provided continuously updated threat protection around the clock, with new updates taking effect immediately without reboots or interruptions. The signatures on the appliances protect against wide classes of attacks, covering up to tens of thousands of individual threats with a single signature.

In addition to the countermeasures on the appliance, SuperMassive firewalls also have access to the SonicWall CloudAV Service, which extends the onboard signature intelligence with more than seventeen million signatures, and growing. This CloudAV database is accessed via a proprietary, lightweight protocol by the firewall to augment the inspection done on the appliance. With Capture Advanced Threat Protection, a cloud-based network sandbox, organizations can examine suspicious files and code in an isolated environment to stop advanced threats such as zero-day attacks.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## Application intelligence and control

Application intelligence informs administrators of application traffic traversing their network so they can schedule application controls based on business priority, throttle unproductive applications and block potentially dangerous applications. Real-time visualization identifies traffic anomalies as they happen, enabling immediate countermeasures against potential inbound or outbound attacks or performance bottlenecks.

SonicWall Application Traffic Analytics provide granular insight into application traffic, bandwidth utilization and security threats, as well as powerful troubleshooting and forensics capabilities. Additionally, secure single sign-on (SSO) capabilities ease the user experience, increase productivity and reduce support calls. Management of application intelligence and control is simplified by the intuitive web-based interface.

## Global management and reporting

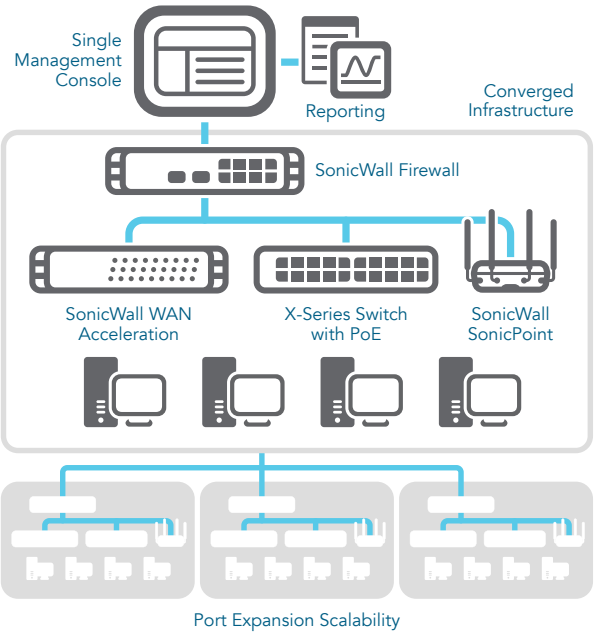
For highly regulated organizations wanting to achieve a fully coordinated security governance, compliance and risk management strategy, the optional SonicWall Global Management System (GMS®) provides administrators a unified, secure and extensible platform to manage SonicWall firewalls, wireless access points and switches through a correlated and auditable workstream process. GMS enables enterprises to easily consolidate the management of security appliances, reduce administrative and troubleshooting complexities, and govern all operational aspects of the security infrastructure, including centralized policy management and enforcement; real-time event monitoring; user activities; application identifications; flow analytics and forensics; compliance and audit reporting; and more. GMS also meets the firewall


change management requirements of enterprises through a workflow automation feature. With GMS workflow automation, all enterprises will gain agility and confidence in deploying the right firewall policies, at the right time and in conformance to compliance regulations. GMS provides a coherent way to manage network security by business processes and service levels, dramatically simplifying lifecycle management of your overall security environments as compared to managing on a device-by-device basis.

### SonicWall GMS Secure Compliance Enforcement

**Benefits**

- Centralized management
- Error-free policy management
- Strong access control
- Comprehensive audit trails
- PCI, HIPAA, SOX report templates
- Lower operating costs

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## Features

| RFDPI engine | |
|---|---|
| Feature | Description |
| Reassembly-Free Deep Packet Inspection (RFDPI) | This high-performance, proprietary and patented inspection engine performs stream-based, bi-directional traffic analysis, without proxying or buffering, to uncover intrusion attempts and malware and to identify application traffic regardless of port. |
| Bi-directional inspection | Scans for threats in both inbound and outbound traffic simultaneously to ensure that the network is not used to distribute malware and does not become a launch platform for attacks in case an infected machine is brought inside. |
| Stream-based inspection | Proxy-less and non-buffering inspection technology provides ultra-low latency performance for DPI of millions of simultaneous network streams without introducing file and stream size limitations, and can be applied on common protocols as well as raw TCP streams. |
| Highly parallel and scalable | The unique design of the RFDPI engine works with the multi-core architecture to provide high DPI throughput and extremely high new session establishment rates to deal with traffic spikes in demanding networks. |
| Single-pass inspection | A single-pass DPI architecture simultaneously scans for malware, intrusions and application identification, drastically reducing DPI latency and ensuring that all threat information is correlated in a single architecture. |

| Firewall and networking | |
|---|---|
| Feature | Description |
| Threat API | All the firewall to receive and leverage any and all proprietary, original equipment manufacturer and third-party intelligence feeds to combat advanced threats such as zero-day, malicious insider, compromised credentials, ransomware and advanced persistent threats. |
| Stateful packet inspection | All network traffic is inspected, analyzed and brought into compliance with firewall access policies. |
| High availability/clustering | The SuperMassive Series supports Active/Passive (A/P) with state synchronization, Active/Active (A/A) DPI and Active/Active clustering high availability modes. Active/Active DPI offloads the deep packet inspection load to cores on the passive appliance to boost throughput. |
| DDoS/DoS attack protection | SYN flood protection provides a defense against DOS attacks using both Layer 3 SYN proxy and Layer 2 SYN blacklisting technologies. Additionally, it protects against DOS/DDoS through UDP/ICMP flood protection and connection rate limiting. |
| IPv6 support | Internet Protocol version 6 (IPv6) is in its early stages to replace IPv4. With the latest SonicOS 6.2, the hardware will support filtering and wire mode implementations. |
| Flexible deployment options | The SuperMassive Series can be deployed in traditional NAT, Layer 2 bridge, wire and network tap modes. |
| WAN load balancing | Load-balances multiple WAN interfaces using Round Robin, Spillover or Percentage methods. Policy-based routing Creates routes based on protocol to direct traffic to a preferred WAN connection with the ability to fail back to a secondary WAN in the event of an outage. |
| Advanced quality of service (QoS) | Guarantees critical communications with 802.1p, DSCP tagging, and remapping of VoIP traffic on the network. |
| H.323 gatekeeper and SIP proxy support | Blocks spam calls by requiring that all incoming calls are authorized and authenticated by H.323 gatekeeper or SIP proxy. |
| Integrated Dell X-Series network switch management | Manage security settings of additional ports, including Portshield, HA, POE and POE+, under a single pane of glass using the SuperMassive management dashboard for Dell's X series network switch. |
| Biometric Authentication | Supports mobile device authentication such as fingerprint recognition that cannot be easily duplicated or shared to securely authenticate the user identity for network access. |
| Open Authentication and Social Login | Enable guest users to use their credential from social networking service such as Facebook, Twitter, or Google+ to sign in and access the Internet and other guest services through a host's wireless, LAN or DMZ zones using pass-through authentication. |

| Management and reporting | |
|---|---|
| Feature | Description |
| Global Management System | SonicWall GMS monitors, configures and reports on multiple SonicWall appliances through a single management console with an intuitive interface, reducing management costs and complexity. |
| Powerful single device management | An intuitive web-based interface allows quick and convenient configuration, in addition to a comprehensive command-line interface and support for SNMPv2/3. |
| IPFIX/NetFlow application flow reporting | Exports application traffic analytics and usage data through IPFIX or NetFlow protocols for real-time and historical monitoring and reporting with tools such as SonicWall Scrutinizer or other tools that support IPFIX and NetFlow with extensions. |

## Features

| Virtual private networking (VPN) | |
|---|---|
| Feature | Description |
| Auto-provision VPN | Simplifies and reduces complex distributed firewall deployment down to a trivial effort by automating the initial site-to-site VPN gateway provisioning between SonicWall firewalls while security and connectivity occurs instantly and automatically. |
| VPN for site-to-site connectivity | High-performance IPSec VPN allows the SuperMassive Series to act as a VPN concentrator for thousands of other large sites, branch offices or home offices. |
| SSL VPN or IPSec client remote access | Utilizes clientless SSL VPN technology or an easy-to-manage IPSec client for easy access to email, files, computers, intranet sites and applications from a variety of platforms. |
| Redundant VPN gateway | When using multiple WANs, a primary and secondary VPN can be configured to allow seamless, automatic failover and failback of all VPN sessions. |
| Route-based VPN | The ability to perform dynamic routing over VPN links ensures continuous uptime in the event of a temporary VPN tunnel failure, by seamlessly re-routing traffic between endpoints through alternate routes. |

| Content/context awareness | |
|---|---|
| Feature | Description |
| User activity tracking | User identification and activity are made available through seamless AD/LDAP/Citrix1/Terminal Services1 SSO integration combined with extensive information obtained through DPI. |
| GeoIP country traffic identification | Identifies and controls network traffic going to or coming from specific countries to either protect against attacks from known or suspected origins of threat activity, or to investigate suspicious traffic originating from the network. Ability to create custom country and Botnet lists to override an incorrect country or Botnet tag associated with an IP address. |
| Regular expression DPI filtering | Prevents data leakage by identifying and controlling content crossing the network through regular expression matching. |

| Capture advanced threat protection | |
|---|---|
| Feature | Description |
| Multi-Engine Sandboxing | The multi-engine sandbox platform, which includes virtualized sandboxing, full system emulation, and hypervisor level analysis technology, executes suspicious code and analyzes behavior, providing comprehensive visibility to malicious activity |
| Broad File Type Analysis | Supports analysis of a broad range of file types, including executable programs (PE), DLL, PDFs, MS Office documents, archives, JAR, and APK plus multiple operating systems including Windows, Android, Mac OSX and multi-browser environments. |
| Rapid Deployment of Signatures | When a file is identified as malicious, a signature is immediately deployed to firewalls with SonicWall Capture subscriptions and GRID Gateway Anti-Virus and IPS signature databases and the URL, IP and domain reputation databases within 48 hours. |
| Block Until Verdict | To prevent potentially malicious files from entering the network, files sent to the cloud for analysis can be held at the gateway until a verdict is determined. |

| Encrypted Threat Protection | |
|---|---|
| Feature | Description |
| TLS/SSL decryption and inspection | Decrypts and inspects SSL traffic on the fly, without proxying, for malware, intrusions and data leakage, and applies application, URL and content control policies in order to protect against threats hidden in TLS/SSL encrypted traffic. Included with security subscriptions for all models except SOHO. Sold as a separate license on SOHO. |
| SSH inspection | Deep packet inspection of SSH (DPI-SSH) decrypts and inspect data traversing over SSH tunnel to prevent attacks that leverage SSH. |

| Intrusion prevention | |
|---|---|
| Feature | Description |
| Countermeasure-based protection | Tightly integrated intrusion prevention system (IPS) leverages signatures and other countermeasures to scan packet payloads for vulnerabilities and exploits, covering a broad spectrum of attacks and vulnerabilities. |
| Automatic signature updates | The SonicWall Threat Research Team continuously researches and deploys updates to an extensive list of IPS countermeasures that covers more than 50 attack categories. The new updates take effect immediately, without any reboot or service interruption required. |
| Intra-zone IPS protection | Bolsters internal security by segmenting the network into multiple security zones with intrusion prevention, preventing threats from propagating across the zone boundaries. |
| Botnet command and control (CnC) detection and blocking | Identifies and blocks command and control traffic originating from bots on the local network to IPs and domains that are identified as propagating malware or are known CnC points. |
| Protocol abuse/anomaly detection and prevention | Identifies and blocks attacks that abuse protocols in an attempt to sneak past the IPS. |
| Zero-day protection | Protects the network against zero-day attacks with constant updates against the latest exploit methods and techniques that cover thousands of individual exploits. |
| Anti-evasion technology | Extensive stream normalization, decoding and other techniques ensure that threats do not enter the network undetected by utilizing evasion techniques in Layers 2-7. |

## Features

| Threat prevention | |
|---|---|
| Feature | Description |
| Gateway anti-malware | The RFDPI engine scans all inbound, outbound and intra-zone traffic for viruses, Trojans, key loggers and other malware in files of unlimited length and size across all ports and TCP streams. |
| CloudAV malware protection | A continuously updated database of over 17 million threat signatures resides in the SonicWall cloud servers and is referenced to augment the capabilities of the onboard signature database, providing RFDPI with extensive coverage of threats. |
| Around-the-clock security updates | New threat updates are automatically pushed to firewalls in the field with active security services, and take effect immediately without reboots or interruptions. |
| Bi-directional raw TCP inspection | The RFDPI engine is capable of scanning raw TCP streams on any port bi-directionally preventing attacks that they to sneak by outdated security systems that focus on securing a few well-known ports. |
| Extensive protocol support | Identifies common protocols such as HTTP/S, FTP, SMTP, SMBv1/v2 and others, which do not send data in raw TCP, and decodes payloads for malware inspection, even if they do not run on standard, well-known ports. |

| Application intelligence and control | |
|---|---|
| Feature | Description |
| Application control | Control applications, or individual application features, that are identified by the RFDPI engine against a continuously expanding database of over thousands of application signatures, to increase network security and enhance network productivity. |
| Custom application identification | Control custom applications by creating signatures based on specific parameters or patterns unique to an application in its network communications, in order to gain further control over the network. |
| | Application bandwidth management Granularly allocate and regulate available bandwidth for critical applications or application categories while inhibiting nonessential application traffic. |
| Granular control | Control applications, or specific components of an application, based on schedules, user groups, exclusion lists and a range of actions with full SSO user identification through LDAP/AD/Terminal Services/Citrix integration. |

| Content filtering | |
|---|---|
| Feature | Description |
| Inside/outside content filtering | Enforce acceptable use policies and block access to websites containing information or images that are objectionable or unproductive with Content Filtering Service. |
| Enforced content filtering client | Extend policy enforcement to block internet content for Windows, Mac and Android devices located outside the firewall perimeter. |
| Granular controls | Block content using the predefined categories or any combination of categories. Filtering can be scheduled by time of day, such as during school or business hours, and applied to individual users or groups. |
| Web caching | URL ratings are cached locally on the SonicWall firewall so that the response time for subsequent access to frequently visited sites is only a fraction of a second. |

| Enforced anti-virus and anti-spyware | |
|---|---|
| Feature | Description |
| Multi-layered protection | Utilize the firewall capabilities as the first layer of defense at the perimeter, coupled with endpoint protection to block, viruses entering network through laptops, thumb drives and other unprotected systems. |
| Automated enforcement option | Ensure every computer accessing the network has the most recent version of anti-virus and anti-spyware signatures installed and active, eliminating the costs commonly associated with desktop anti-virus and anti-spyware management. |
| Automated deployment and installation option | Machine-by-machine deployment and installation of anti-virus and anti-spyware clients is automatic across the network, minimizing administrative overhead. |
| Always on, automatic virus protection | Frequent anti-virus and anti-spyware updates are delivered transparently to all desktops and file servers to improve end user productivity and decrease security management. |
| Spyware protection | Powerful spyware protection scans and blocks the installation of a comprehensive array of spyware programs on desktops and laptops before they transmit confidential data, providing greater desktop security and performance. |

## 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
- Threat API

### SSL/SSH decryption and inspection[2]

- Deep packet inspection for TLS/SSL/SSH
- Inclusion/exclusion of objects, groups or hostnames
- SSL Control

### Capture advanced threat protection[2]

- Cloud-based multi-engine analysis
- Virtualized sandboxing
- Hypervisor level analysis
- Full system emulation
- Broad file type examination
- Automated and manual submission
- Real-time threat intelligence updates
- Auto-block capability

### Intrusion prevention[2]

- Signature-based scanning
- Automatic signature updates
- Bi-directional inspection engine
- Granular IPS rule set
- GeoIP/Botnet filtering
- Regular expression matching

### Anti-malware[2]

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

### Application identification[2]

- Application control
- Application traffic visualization
- Application component blocking
- Application bandwidth management
- Custom application signature creation
- Data leakage prevention
- Application reporting over NetFlow/IPFIX
- User activity tracking (SSO)
- Comprehensive application signature database

### Web content filtering[2]

- URL filtering
- Anti-proxy technology
- Keyword blocking
- Bandwidth management for CFS categories
- Unified policy model with app control
- 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)

### Networking

- PortShield
- Jumbo frames
- Path MTU discovery
- Enhanced logging
- VLAN trunking
- Port mirroring
- Layer-2 QoS
- Port security
- Dynamic routing
- SonicPoint wireless controller[1]
- Policy-based routing
- NAT
- DHCP server
- Bandwidth management
- Link aggregation
- Port redundancy
- A/P high availability with state sync
- A/A clustering
- Inbound/outbound load balancing
- L2 bridge, wire mode, tap mode, NAT mode
- 3G/4G WAN failover (not on SuperMassive 9800)
- 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 and monitoring

- Web GUI
- Command-line interface (CLI)
- SNMPv2/v3
- Centralized management and reporting with SonicWall Global Management System (GMS)[2]
- Logging
- Netflow/IPFix exporting
- Single sign-on (SSO)
- Terminal service/Citrix support[1]
- BlueCoat security analytics platform
- Application and bandwidth visualizer
- IPv4 and IPv6 Management
- LCD management screen
- Dell X-Series switch management

### IPv6

- IPv6 filtering
- 6rd (rapid deployment)
- DHCP prefix delegation
- Wire mode
- BGP

[1] *Supported on SonicOS 6.1 and 6.2. Not supported on SonicOS 6.2.1.*
[2] *Requires added subscription.*

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## SuperMassive E10000 Series system specifications

| | E10400 | E10800 |
|---|---|---|
| Operating system | SonicOS | |
| Security processing cores | 48 | 96 |
| 10 GbE interfaces | 6 x 10-GbE SFP+ | |
| 1 GbE interfaces | 16 x 1-GbE SFP | |
| Management interfaces | 1 GbE, 1 console | |
| Memory (RAM) | 32 GB | 64 GB |
| Storage | 80 GB SSD, flash | |
| Firewall inspection throughput[1] | 20 Gbps | 40 Gbps |
| Application inspection throughput[2] | 15 Gbps | 30 Gbps |
| IPS throughput[2] | 15 Gbps | 28 Gbps |
| Anti-malware inspection throughput[2] | 6 Gbps | 12 Gbps |
| IMIX performance | 4.3 Gbps | 9 Gbps |
| SSL-DPI performance | 3 Gbps | 5 Gbps |
| VPN throughput[3] | 7.5 Gbps | 11 Gbps |
| Latency | 24µs | |
| Connections per second | 200,000/sec | 400,000/sec |
| Maximum connections (SPI) | 6 M | 12 M |
| Maximum connections (DPI) | 5 M | 10 M |
| SSO users | 40,000 | 60,000 |
| **VPN** | **E10400** | **E10800** |
| Site-to-site tunnels | 10,000 | |
| IPSec VPN clients (max) | 2,000 (10,000) | |
| Encryption | DES, 3DES, AES (128, 192, 256-bit) | |
| Authentication | MD5, SHA-1, Common Access Card (CAC) | |
| Key exchange | Diffie Hellman Groups 1, 2, 5, 14 | |
| Route-based VPN | RIP, OSPF | |
| **Networking** | **E10400** | **E10800** |
| IP address assignment | Static, internal DHCP server, DHCP relay | |
| NAT modes | 1:1, many:1, 1:many, flexible NAT (overlapping IPs), PAT, transparent mode | |
| VLAN interfaces | 1024 | 2048 |
| Routing protocols | BGP, OSPF, RIPv1/v2, static routes, policy-based routing, multicast | |
| QoS | Bandwidth priority, max bandwidth, guaranteed bandwidth, DSCP marking, 802.1p | |
| Authentication | XAUTH/RADIUS, Active Directory, SSO, LDAP, Novell, internal user database, Terminal Services, Citrix | |
| VoIP | Full H323-v1-5, SIP | |
| Standards | TCP/IP, ICMP, HTTP, HTTPS, IPSec, ISAKMP/IKE, SNMP, DHCP, PPPoE, L2TP, PPTP, RADIUS, IEEE 802.3 | |
| Certifications | FIPS 140-2, Common Criteria NDPP, IPv6 Phase 2, VPAT, VPNC | |
| Third-party verification | NSS NGFW Recommended and NSS IPS Recommended | |
| **Hardware** | **E10400** | **E10800** |
| Power supply | Dual-redundant, hot-swappable, 850 W | |
| Fans | Dual-redundant, hot-swappable | |
| Display | Front LED display | |
| Input power | 100-240 VAC, 60-50 Hz | |
| Maximum power consumption (W) | 550 | 750 |
| MTBF @25°C in hours | 120,790 | |
| MTBF @25°C in years | 13.789 | |
| Form factor | 4U Rack Mountable | |
| Dimensions | 17x18x7 in (43x43.5x17.8 cm) | |
| Weight | 61 lb (27.7 kg) | 67 lb (30.3 k |
| WEEE weight | 62 lb (28.1 kg) | 68 lb (30.8 kg) |
| Shipping weight | 82 lb (37.2 kg) | 88 lb (39.9 kg) |
| Major regulatory | FCC Class A, CE, C-Tick, VCCI, Compliance MIC, UL, cUL, TUV/GS, CB, NOM, RoHS, WEEE | |
| Environment | 40-105 F, 5-40 deg C | |
| Humidity | 10-90% non-condensing | |

*[1] Testing methodologies: Maximum performance based on RFC 2544 (for firewall). Actual performance may vary depending on network conditions and activated services. [2] Full DPI/Gateway AV/Anti-Spyware/IPS throughput measured using industry standard Spirent WebAvalanche HTTP performance test and Ixia test tools. Testing done with multiple flows through multiple port pairs. [3] VPN throughput measured using UDP traffic at 1280 byte packet size adhering to RFC 2544. All specifications, features and availability are subject to change.*

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## SuperMassive 9000 Series system specifications

| Firewall General | 9200 | 9400 | 9600 | 9800 |
|---|---|---|---|---|
| Operating system | SonicOS | | | |
| Security processing cores | 24 | 32 | | 64 |
| Interfaces | 4x10GbE SFP+, 8x1GbE SFP, 1GbE Management, 1 Console | 4x10GbE SFP+, 8x1GbE SFP, 8x1GbE, 1GbE Management, 1 Console | 4x10GbE SFP+, 8x1GbE SFP, 8x1GbE, 1GbE Management, 1 Console | 4x10GbE SFP+, 12x1GbE SFP, 8x1GbE, 1GbE Management, 1 Console |
| Memory (RAM) | 8 GB | 16 GB | 32 GB | 64 GB |
| Storage | Flash | | | 2x 80GB SSD, Flash |
| Expansion | 1 expansion slot (rear)*, SD card* | | | |
| Management | CLI, SSH, GUI, GMS | | | |
| SSO users | 80,000 | 90,000 | 100,000 | 110,000 |
| Maximum SonicPoints supported | 128 | | | - |
| Logging | Analyzer, Local Log, Syslog | | | |
| Hardware Failover | Active/Passive with State Sync, Active/Active DPI with State Sync | | | |
| **Firewall/VPN Performance** | **9200** | **9400** | **9600** | **9800** |
| Firewall Inspection Throughput1 | 15 Gbps | 20 Gbps | 20 Gbps | 40 Gbps |
| Full DPI Performance2 (GAV/GAS/IPS) | 3 Gbps | 4.4 Gbps | 4.5 Gbps | 10 Gbps |
| Application Inspection Throughput2 | 5 Gbps | 10 Gbps | 11.5 Gbps | 24 Gbps |
| IPS Throughput2 | 5 Gbps | 10 Gbps | 11.5 Gbps | 24 Gbps |
| Anti-Malware Inspection Throughput1 | 3.5 Gbps | 4.5 Gbps | 5.0 Gbps | 10 Gbps |
| IMIX performance | 4.4 Gbps | 5.5 Gbps | 5.5 Gbps | 9 Gbps |
| SSL DPI Performance | 1.0 Gbps | 2.0 Gbps | 2.0 Gbps | 5 Gbps |
| VPN Throughput3 | 5 Gbps | 10 Gbps | 11.5 Gbps | 18 Gbps |
| Connections per second | 100,000/sec | 130,000/sec | 130,000/sec | 280,000/sec |
| Maximum connections (SPI) | 1.25M | 1.25M | 1.5M | 3.0M |
| Maximum connections (DPI) | 1.0M | 1.0M | 1.25M | 2.5M |
| SSL DPI Connections | 8,000 | 10,000 | 12,000 | 48,000 |
| **VPN** | **9200** | **9400** | **9600** | **9800** |
| Site-to-Site VPN Tunnels | 10,000 | | | 25,000 |
| IPSec VPN clients (max) | 2,000(4,000) | 2,000(6,000) | 2,000(10,000) | |
| SSL VPN NetExtender Clients (Maximum) | 2 (3,000) | 2 (3,000) | 50 (3,000) | 50 (50) |
| Encryption/authentication | DES, 3DES, AES (128, 192, 256-bit)/MD5, SHA-1, Suite B, Common Access Card (CAC) | | | |
| Key exchange | Diffie Hellman Groups 1, 2, 5, 14v | | | |
| Route-based VPN | RIP, OSPF | | | |
| **Networking** | **9200** | **9400** | **9600** | **9800** |
| IP address assignment | Static, DHCP, PPPoE, L2TP and PPTP client, internal DHCP server, DHCP relay[4] | | | |
| NAT modes | 1:1, many:1, 1:many, flexible NAT (overlapping IPs), PAT, transparent mode | | | |
| VLAN interfaces | 512 | | | |
| Routing protocols | BGP, OSPF, RIPv1/v2, static routes, policy-based routing, multicast | | | |
| QoS | Bandwidth priority, max bandwidth, guaranteed bandwidth, DSCP marking, 802.1p | | | |
| Authentication | XAUTH/RADIUS, Active Directory, SSO, LDAP, Novell, internal user database, Terminal Services[5], Citrix[5] | | | |
| VoIP | Full H323-v1-5, SIP | | | |
| Standards | TCP/IP, ICMP, HTTP, HTTPS, IPSec, ISAKMP/IKE, SNMP, DHCP, PPPoE, L2TP, PPTP, RADIUS, IEEE 802.3 | | | |
| Certifications | UC APL[4], ICSA Enterprise Firewall, IPV6 Phase 2, VPNC, VPAT, FIPS 140-2[4], Common Criteria NDPP[4] | | | |
| Certifications pending | ICSA Anti-Virus | | | |
| **Hardware** | **9200** | **9400** | **9600** | **9800** |
| Power supply | Dual-redundant, hot-swappable, 300 W | | | Dual-redundant, hot-swappable, 500 W |
| Fans | Dual-redundant, hot-swappable | | | |
| Display | Front LED display | | | |
| Input power | 100-240 VAC, 60-50 Hz | | | |
| Maximum power consumption (W) | 200 | | | 350 |
| MTBF @25°C in hours | 188,719 | 187,702 | 186,451 | 126,144 |
| MTBF @25°C in years | 21.53 | 21.43 | 21.28 | 14.40 |
| Form factor | 1U rack-mountable | | | 2U rack-mountable |
| Dimensions | 17x19.1x1.75 in (43.3x48.5x4.5 cm) | | | 17x24x3.5 in (9x60x43 cm) |
| Weight | 18.1 lb (8.2 kg) | | | 40.5 lb (18.38 kg) |
| WEEE weight | 23 lb (10.4 kg) | | | 49.5 lb (22.4 kg) |
| Shipping weight | 29.3 lb (13.3 kg) | | | 65 lb (29.64 kg) |
| 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, CU | | | |
| Environment | 15-40 deg C | | | |
| Humidity | 10-90% non-condensing | | | |

*[1] Testing Methodologies: Maximum performance based on RFC 2544 (for firewall). Actual performance may vary depending on network conditions and activated services. [2] Full DPI/Gateway AV/Anti-Spyware/IPS throughput measured using industry standard Spirent WebAvalanche HTTP performance test and Ixia test tools. Testing done with multiple flows through multiple port pairs. [3] VPN throughput measured using UDP traffic at 1280 byte packet. [4] Applies to SuperMassive 9200, 9400 and 9600. SuperMassive 9800 UC APL certification is pending. [5] Supported on SonicOS 6.1 and 6.2. *Future use. All specifications, features and availability are subject to change.*

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## SuperMassive E10000 Series ordering information

| Product | SKU |
|---|---|
| SuperMassive E10400, 6 SFP+ 10GbE ports, 16 SFP 1GbE ports, dual fans, dual AC power supplies | 01-SSC-8881 |
| SuperMassive E10800, 6 SFP+ 10GbE ports, 16 SFP 1GbE ports, dual fans, dual AC power supplies | 01-SSC-8856 |
| **System upgrades** | **SKU** |
| SuperMassive E10200 to E10400 upgrade | 01-SSC-9497 |
| SuperMassive E10400 to E10800 upgrade | 01-SSC-9498 |
| **SuperMassive E10400 support and security subscriptions** | **SKU** |
| Threat Prevention: Intrusion Prevention, Gateway Anti-Virus, Gateway Anti-Spyware, Cloud Anti-Virus for E10400 (1-year) | 01-SSC-9536 |
| Application Intelligence and Control: Application Intelligence, Application Control, App Flow Visualization for E10400 (1-year) | 01-SSC-9542 |
| Content Filtering Premium Business Edition for E10400 (1-year) | 01-SSC-9539 |
| Platinum Support for the SuperMassive E10400 (1-year) | 01-SSC-9548 |
| Comprehensive Gateway Security Suite: Application Intelligence, Threat Prevention, Content Filtering with Support for E10400 (1-year) | 01-SSC-9551 |
| **SuperMassive E10800 support and security subscriptions** | **SKU** |
| Application Intelligence and Control: Application Intelligence, Application Control, App Flow Visualization for E10800 (1-year) | 01-SSC-9560 |
| Threat Prevention: Intrusion Prevention, Gateway Anti-Virus, Gateway Anti-Spyware, Cloud Anti-Virus for E10800 (1-year) | 01-SSC-9554 |
| Content Filtering Premium Business Edition for E10800 (1-year) | 01-SSC-9557 |
| Platinum Support for the SuperMassive E10800 (1-year) | 01-SSC-9566 |
| Comprehensive Gateway Security Suite: Application Intelligence, Threat Prevention, Content Filtering with Support for E10800 (1-year) | 01-SSC-9569 |
| **Modules and accessories*** | **SKU** |
| SuperMassive E10000 Series system fan field replaceable unit (FRU) | 01-SSC-8885 |
| SuperMassive E10000 Series SSD fan module | 01-SSC-8886 |
| SuperMassive E10000 Series power supply FRU | 01-SSC-8887 |
| 10GBASE-SR SFP+ Short Reach Module | 01-SSC-9785 |
| 10GBASE-LR SFP+ Long Reach Module | 01-SSC-9786 |
| 10GBASE SFP+ 1M Twinax Cable | 01-SSC-9787 |
| 10GBASE SFP+ 3M Twinax Cable | 01-SSC-9788 |
| 1000BASE-SX SFP Short Haul Module | 01-SSC-9789 |
| 1000BASE-LX SFP Long Haul Module | 01-SSC-9790 |
| 1000BASE-T SFP Copper Module | 01-SSC-9791 |
| **Management and reporting** | **SKU** |
| SonicWall GMS 10-node software license | 01-SSC-3363 |
| SonicWall GMS E-Class 24x7 Software Support for 10 nodes (1-year) | 01-SSC-6514 |
| SonicWall Scrutinizer virtual appliance with Flow Analytics Module software license for up to 5 nodes (includes one year of 24x7 Software Support) | 01-SSC-3443 |
| SonicWall Scrutinizer with Flow Analytics Module software license for up to 5 nodes (includes one year of 24x7 Software Support) | 01-SSC-4002 |
| SonicWall Scrutinizer Advanced Reporting Module software license for up to 5 nodes (includes one year of 24x7 Software Support) | 01-SSC-3773 |

**Please consult with a SonicWall SE for a complete list of supported SFP and SFP+ modules.*

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## SuperMassive 9000 Series ordering information

| Product | SKU |
|---|---|
| SuperMassive 9800 | 01-SSC-0200 |
| SuperMassive 9800 High Availability | 01-SSC-0801 |
| SuperMassive 9600 | 01-SSC-3880 |
| SuperMassive 9600 High Availability | 01-SSC-3881 |
| SuperMassive 9400 | 01-SSC-3800 |
| SuperMassive 9400 High Availability | 01-SSC-3801 |
| SuperMassive 9200 | 01-SSC-3810 |
| SuperMassive 9200 High Availability | 01-SSC-3811 |
| **SuperMassive 9200 support and security subscriptions** | **SKU** |
| Advanced Gateway Security Suite – Capture ATP, Threat Prevention, Content Filtering and 24x7 Support for SuperMassive 9200 (1-year) | 01-SSC-1570 |
| Capture Advanced Threat Protection for SuperMassive 9200 (1-year) | 01-SSC-1575 |
| Comprehensive Gateway Security Suite: Application Intelligence, Threat Prevention, Content Filtering with Support for 9200 (1-year) | 01-SSC-4172 |
| Intrusion Prevention, Anti-Malware, CloudAV, Application Intelligence, Control and Visualization for SuperMassive 9200 (1-year) | 01-SSC-4202 |
| Content Filtering Premium Business Edition for 9200 (1-year) | 01-SSC-4184 |
| Platinum Support for the SuperMassive 9200 (1-year) | 01-SSC-4178 |
| **SuperMassive 9400 support and security subscriptions** | **SKU** |
| Advanced Gateway Security Suite – Capture ATP, Threat Prevention, Content Filtering and 24x7 Support for SuperMassive 9400 (1-year) | 01-SSC-1580 |
| Capture Advanced Threat Protection for SuperMassive 9400 (1-year) | 01-SSC-1585 |
| Comprehensive Gateway Security Suite: Application Intelligence, Threat Prevention, Content Filtering with Support for 9400 (1-year) | 01-SSC-4136 |
| Intrusion Prevention, Anti-Malware, CloudAV, Application Intelligence, Control and Visualization for SuperMassive 9400 (1-year) | 01-SSC-4166 |
| Content Filtering Premium Business Edition for 9400 (1-year) | 01-SSC-4148 |
| Platinum Support for the SuperMassive 9400 (1-year) | 01-SSC-4142 |
| **SuperMassive 9600 support and security subscriptions** | **SKU** |
| Advanced Gateway Security Suite – Capture ATP, Threat Prevention, Content Filtering and 24x7 Support for SuperMassive 9600 (1-year) | 01-SSC-1590 |
| Capture Advanced Threat Protection for SuperMassive 9600 (1-year) | 01-SSC-1595 |
| Comprehensive Gateway Security Suite: Application Intelligence, Threat Prevention, Content Filtering with Support for 9600 (1-year) | 01-SSC-4100 |
| Intrusion Prevention, Anti-Malware, CloudAV, Application Intelligence, Control and Visualization for SuperMassive 9600 (1-year) | 01-SSC-4130 |
| Content Filtering Premium Business Edition for 9600 (1-year) | 01-SSC-4112 |
| Platinum Support for the SuperMassive 9600 (1-year) | 01-SSC-4106 |
| **SuperMassive 9800 support and security subscriptions** | **SKU** |
| Comprehensive Gateway Security Suite: Application Intelligence, Threat Prevention, Content Filtering with Support for 9800 (1-year) | 01-SSC-0809 |
| Intrusion Prevention, Anti-Malware, CloudAV, Application Intelligence, Control and Visualization for SuperMassive 9800 (1-year) | 01-SSC-0827 |
| Content Filtering Premium Business Edition for 9800 (1-year) | 01-SSC-0821 |
| Gold 24x7 Support for the SuperMassive 9800 (1-year) | 01-SSC-0815 |
| **Modules and accessories*** | **SKU** |
| SonicWall SuperMassive 9800 Series system fan FRU | 01-SSC-0204 |
| SonicWall SuperMassive 9800 Series power supply AC FRU | 01-SSC-0203 |
| SonicWall SuperMassive 9000 Series system fan FRU | 01-SSC-3876 |
| SonicWall SuperMassive 9000 Series power supply AC FRU | 01-SSC-3874 |
| 10GBASE-SR SFP+ Short Reach Module | 01-SSC-9785 |
| 10GBASE-LR SFP+ Long Reach Module | 01-SSC-9786 |
| 1000BASE-SX SFP Short Haul Module | 01-SSC-9789 |
| 1000BASE-LX SFP Long Haul Module | 01-SSC-9790 |
| 1000BASE-T SFP Copper Module | 01-SSC-9791 |
| **Management and reporting** | **SKU** |
| SonicWall GMS 10-node software license | 01-SSC-3363 |
| SonicWall GMS E-Class 24x7 Software Support for 10 nodes (1-year) | 01-SSC-6514 |
| SonicWall Scrutinizer virtual appliance with Flow Analytics Module software license for up to 5 nodes (includes one year of 24x7 Software Support) | 01-SSC-3443 |
| SonicWall Scrutinizer with Flow Analytics Module software license for up to 5 nodes (includes one year of 24x7 Software Support) | 01-SSC-4002 |
| SonicWall Scrutinizer Advanced Reporting Module software license for up to 5 nodes (includes one year of 24x7 Software Support) | 01-SSC-3773 |

**Please consult with a SonicWall SE for a complete list of supported SFP and SFP+ modules.*

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## About Us

Over a 25 year history, SonicWall has been the industry's trusted security partner. From network security to access security to email security, SonicWall has continuously evolved its product portfolio, enabling organizations to innovate, accelerate and grow. With over a million security devices in almost 200 countries and territories worldwide, SonicWall enables its customers to confidently say yes to the future.

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Datasheet-SuperMassive-US-KJ-27279

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