



Wireless Network Security

Secure, high-speed wireless solutions

Dell SonicWALL Wireless Network Security solutions combine high-performance IEEE 802.11ac wireless technology with industry-leading next-generation firewalls. As a result, they deliver enterprise-class wireless performance and security while dramatically simplifying network setup and management.

The solutions are based on:

- Dell SonicPoint AC Series wireless access points (SonicPoint ACe and SonicPoint ACi), which support the 802.11 a/b/g/n/ac standards
- Dell SonicWALL TZ, NSA and SuperMassive firewalls, which use deep packet inspection technology to detect and eliminate threats over both wired and wireless networks

Enterprise-level performance

Dell SonicPoints take advantage of the latest capabilities in 802.11ac to deliver up to 1.3 Gbps of wireless throughput – three times that of 802.11n. This enterprise-level performance enables WiFi-ready devices to connect from greater distances and use bandwidth-intensive mobile apps, such as video and voice, in higher density environments without experiencing signal degradation.

Built-in dual radios allow the SonicPoint ACe and ACi to dedicate one radio to the less crowded 5 GHz frequency band, ensuring minimal interference and a higher signal quality, while the second radio operates at the 2.4 GHz band to support legacy 802.11b/g/n clients. With multiple antennas at the transmitter and

receiver and support for 3x3 MIMO, SonicPoints are engineered to optimise signal quality, range and reliability.

For organisations with a substantial long-term investment in 802.11n, the Dell SonicPoint N2 features an enterprise wireless chipset, dual radios, high-speed performance and all the advantages that Dell SonicWALL Wireless Network Security solutions offer.

Comprehensive security

In addition to intrusion prevention, SSL decryption and inspection, application control and content filtering, the Wireless Network Security solution also integrates additional security-related features, including wireless intrusion detection and prevention, virtual access points, wireless guest services, cloud access control list and more.

Easy setup and centralised management

Dell SonicWALL Wireless Network Security solutions greatly simplify deployment and setup while reducing total cost of ownership (TCO). Integrated into every Dell SonicWALL firewall is a wireless controller that auto-detects and auto-provisions SonicPoints across the network.

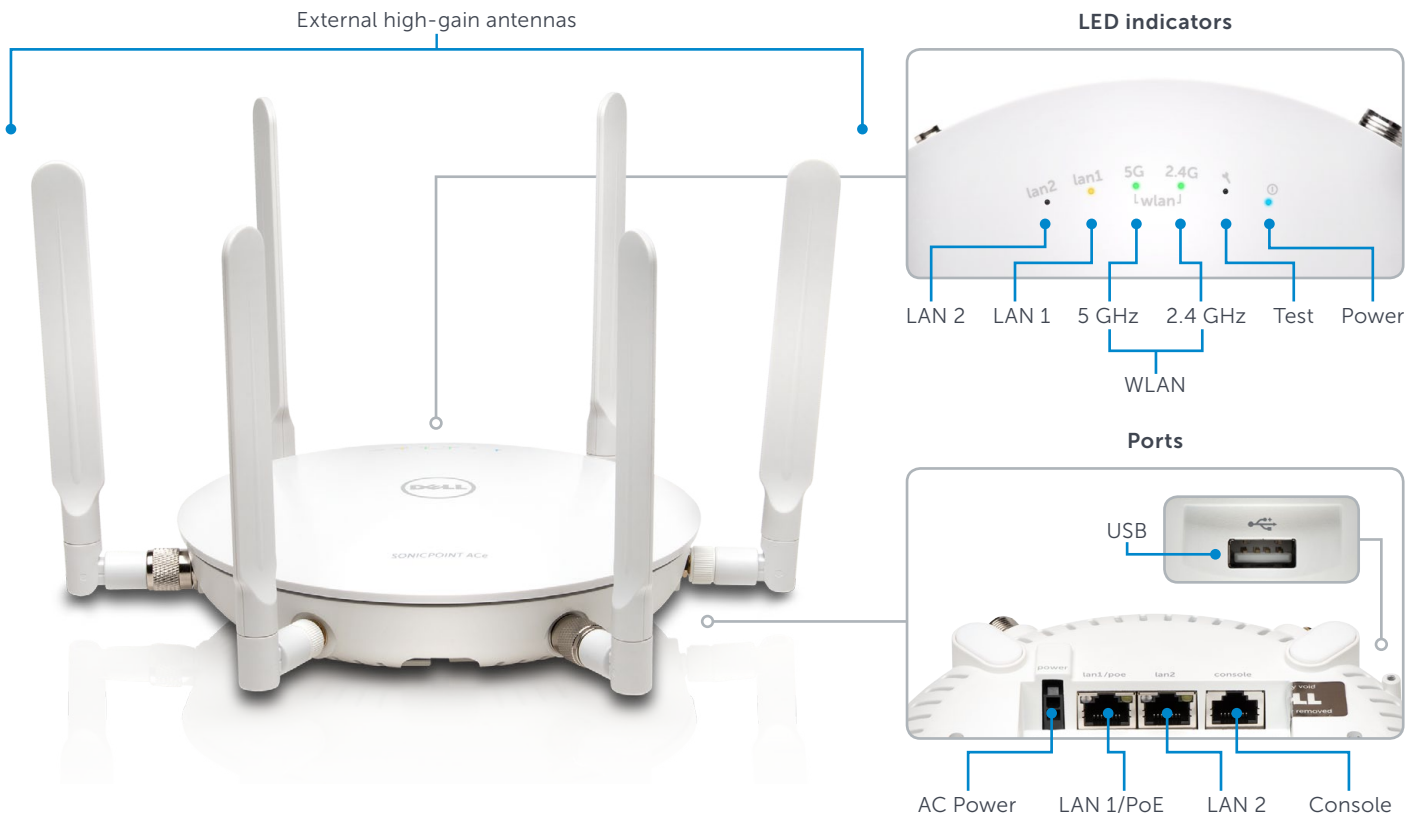
Ongoing management and monitoring of SonicPoints and security are handled centrally through the firewall or through the Dell SonicWALL Global Management System, providing network administrators with a single pane of glass from which to manage all aspects of the network – both wired and wireless.



Benefits:

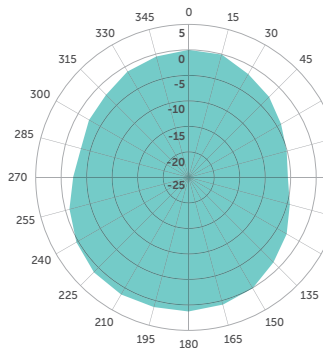
- Superior wireless performance and range
 - Enhanced signal quality
 - Increased wireless reliability
 - FairNet wireless bandwidth allocation
- Comprehensive wireless security
 - Deep packet inspection technology
 - Granular security policy enforcement
 - Virtual access point segmentation
 - Wireless intrusion detection and prevention
 - Cloud access control list
- Easy setup and centralised WLAN management
 - Flexible wireless deployment options
 - Broad standards and protocols support
 - Multiple hardware platforms
- Low total cost of ownership

SonicPoint ACe

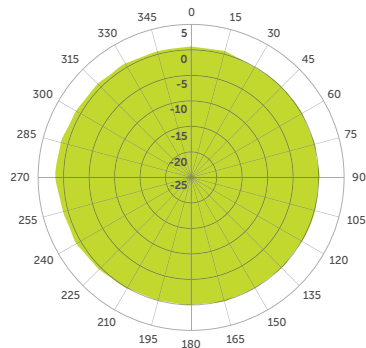


Radio frequency coverage maps

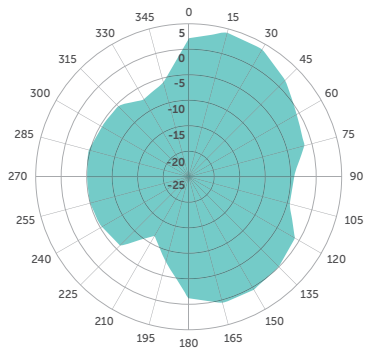
2.4 GHz Vertical



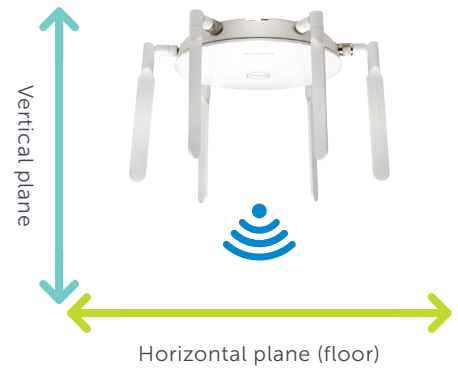
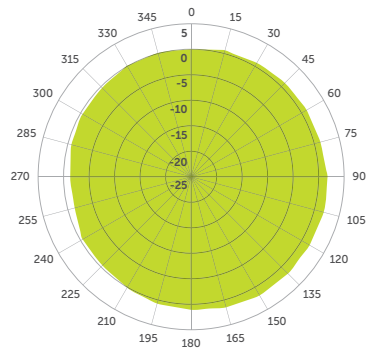
2.4 GHz Horizontal



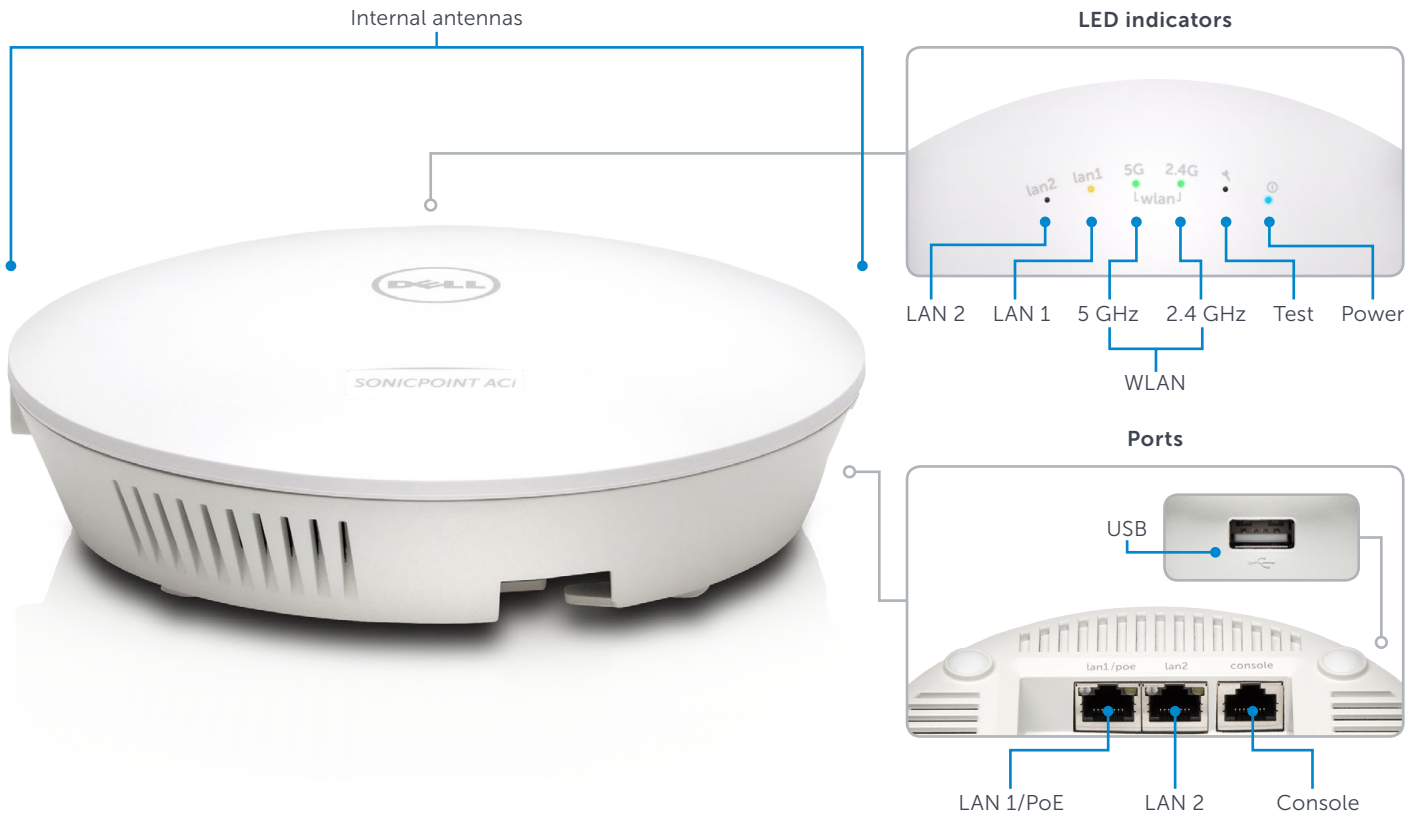
5 GHz Vertical



5 GHz Horizontal

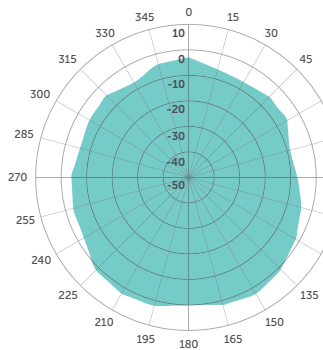


SonicPoint ACi

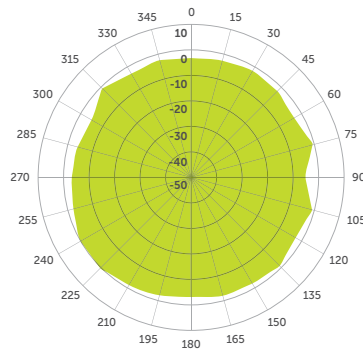


Radio frequency coverage maps

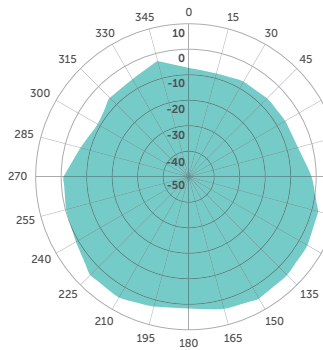
2.4 GHz Vertical



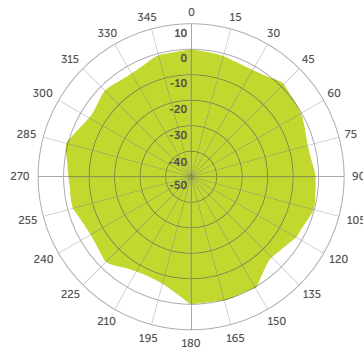
2.4 GHz Horizontal



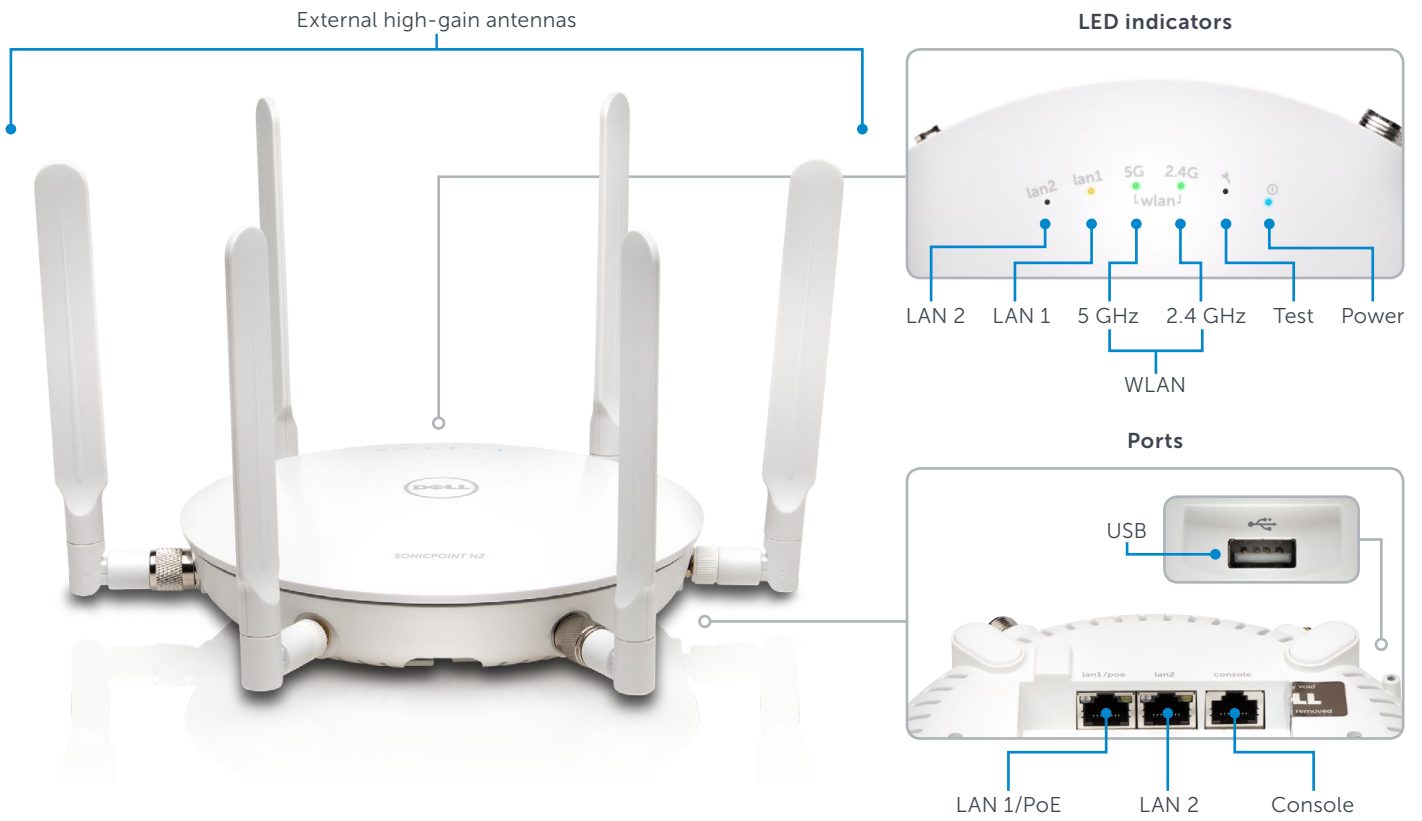
5 GHz Vertical



5 GHz Horizontal

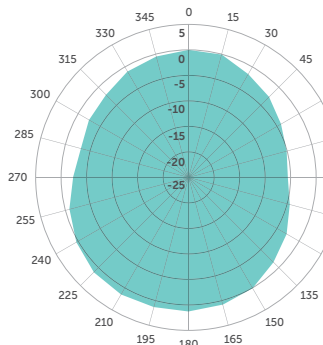


SonicPoint N2

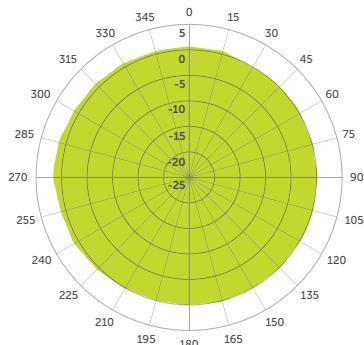


Radio frequency coverage maps

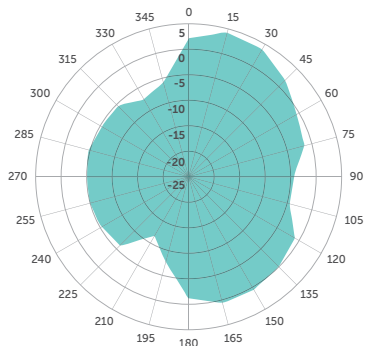
2.4 GHz Vertical



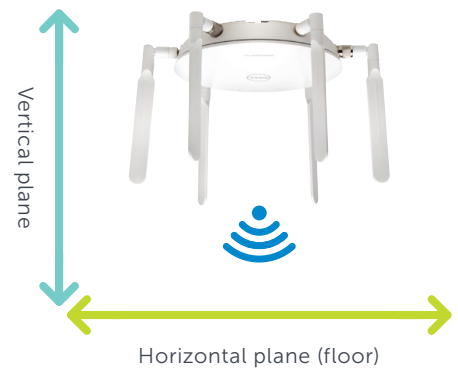
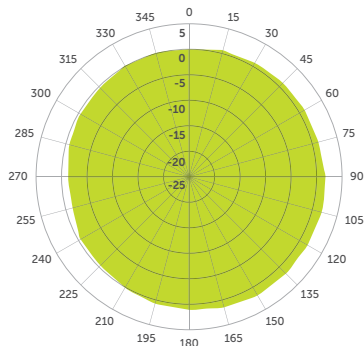
2.4 GHz Horizontal



5 GHz Vertical



5 GHz Horizontal



SonicPoint feature summary

Enterprise-level wireless performance, range and reliability

Feature	Description
Superior wireless performance and range	The SonicPoint ACe and SonicPoint ACi are based on the 802.11ac standard, which can achieve a data rate of up to 1.3 Gbps, or 3x that of 802.11n, while maintaining a higher performance level at greater ranges depending on environmental conditions.
Enhanced signal quality	The 802.11ac standard operates in the 5 GHz frequency band, which has fewer wireless devices competing for airspace and is therefore less prone to signal interference. In addition, 802.11ac uses wider 80 MHz channels and has more non-overlapping channels than 802.11n, which operates in the 2.4 GHz frequency band. All of these features combined yield a higher quality signal.
Increased wireless reliability	The increase in bandwidth capacity and greater number of spatial streams combined with 3x3 MIMO and the improved processing offered by 802.11ac, result in more reliable wireless coverage.
FairNet wireless bandwidth allocation	SonicPoints support FairNet, which guarantees a minimum amount of bandwidth to each wireless client in order to prevent disproportionate bandwidth consumption by a single user.

Comprehensive wireless security

Feature	Description
Reassembly-Free Deep Packet Inspection technology	Dell SonicWALL next-generation firewalls tightly integrate Reassembly-Free Deep Packet Inspection® (RFDPI) technology to scan all inbound and outbound traffic on wired and wireless networks and eliminate intrusions, spyware, viruses and other threats before they enter the network.
Wireless intrusion detection and prevention	Wireless intrusion detection and prevention scans the wireless network for unauthorised (rogue) access points and then the managing firewall automatically takes countermeasures, such as preventing any connections to the device.
Wireless guest services	Wireless guest services enables administrators to provide internet-only access for guest users. This access is separate from internal access and requires guest users to securely authenticate to a virtual access point before access is granted.
Lightweight hotspot messaging	Lightweight hotspot messaging extends the Dell SonicWALL wireless guest services model of differentiated internet access for guest users, enabling extensive customisation of the authentication interface and the use of any kind of authentication scheme.
Captive portal	Captive portal forces a user's device to view a page and provide authentication through a web browser before internet access is granted.
Virtual access point segmentation	Administrators can create up to eight SSIDs on the same access point, each with its own dedicated authentication and privacy settings. This provides logical segmentation of secure wireless network traffic and secure customer access.
Cloud ACL	An extension to local ACL, cloud ACL is deployed and managed from a centralised RADIUS server in the cloud. This eliminates local ACL scalability issues, enabling organisations to configure authentication accounts based on their specific requirements. In addition, MAC authentication can be enforced on all WiFi-enabled devices even if they are not capable of 802.1x support. This adds another layer of protection to the wireless network.

Multi-RADIUS Authentication	Multi-RADIUS Authentication provides enterprise-class redundancy by enabling organisations to deploy multiple RADIUS servers in active/passive mode for high availability. Should the primary RADIUS server fail, the managing Dell SonicWALL firewall discovers the failure and switches to the secondary server, ensuring wireless devices can continue to authenticate. Further, multi-RADIUS authentication can be supported on each virtual access point and configured for WPA-Enterprise, WPA2-Enterprise or WPA2-Auto-Enterprise mode.
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Granular security policy enforcement	Network administrators can implement and enforce firewall rules on all wireless traffic and control all wireless client communications to any host on the network – wired or wireless.
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Easy setup and flexible, centralised management

Feature	Description
Simplified setup and centralised management	SonicPoints are automatically detected, provisioned and updated by the wireless controller in the managing Dell SonicWALL SuperMassive, NSA or TZ Series firewall. WLAN administration is also handled directly from the managing firewall, simplifying setup and centralising ongoing management.
Plenum rated	SonicPoints are plenum rated for safe installation in air-handling spaces such as in or above suspended ceilings.
Multiple power options	SonicPoints are powered from a Dell SonicWALL IEEE 802.11at Power over Ethernet (PoE) Injector or third-party device for easy deployment where electrical outlets are not readily accessible. The SonicPoint ACe can also be powered directly through an AC adapter.
Light controls	With dimmable LEDs (excluding power), SonicPoints fit perfectly into environments that need discreet wireless coverage.
Broad standards and protocols support	SonicPoints support a wide range of wireless standards and security protocols, including 802.11 a/b/g/n/ac, WPA2 and WPA. This allows organisations to leverage prior investments in devices that are incapable of supporting higher encryption standards while easing migration to 802.11ac.

Low total cost of ownership

Feature	Description
Low TCO	Features such as simplified deployment, single pane of glass management for both wireless and security, and no need to purchase a separate wireless controller drastically reduce an organisation's cost to add wireless into a new or existing network infrastructure.
Green access points	SonicPoints reduce costs by supporting green access points, which enables both radios to enter sleep mode for power saving when no clients are actively connected. The SonicPoint will exit sleep mode once a client attempts to associate with it.

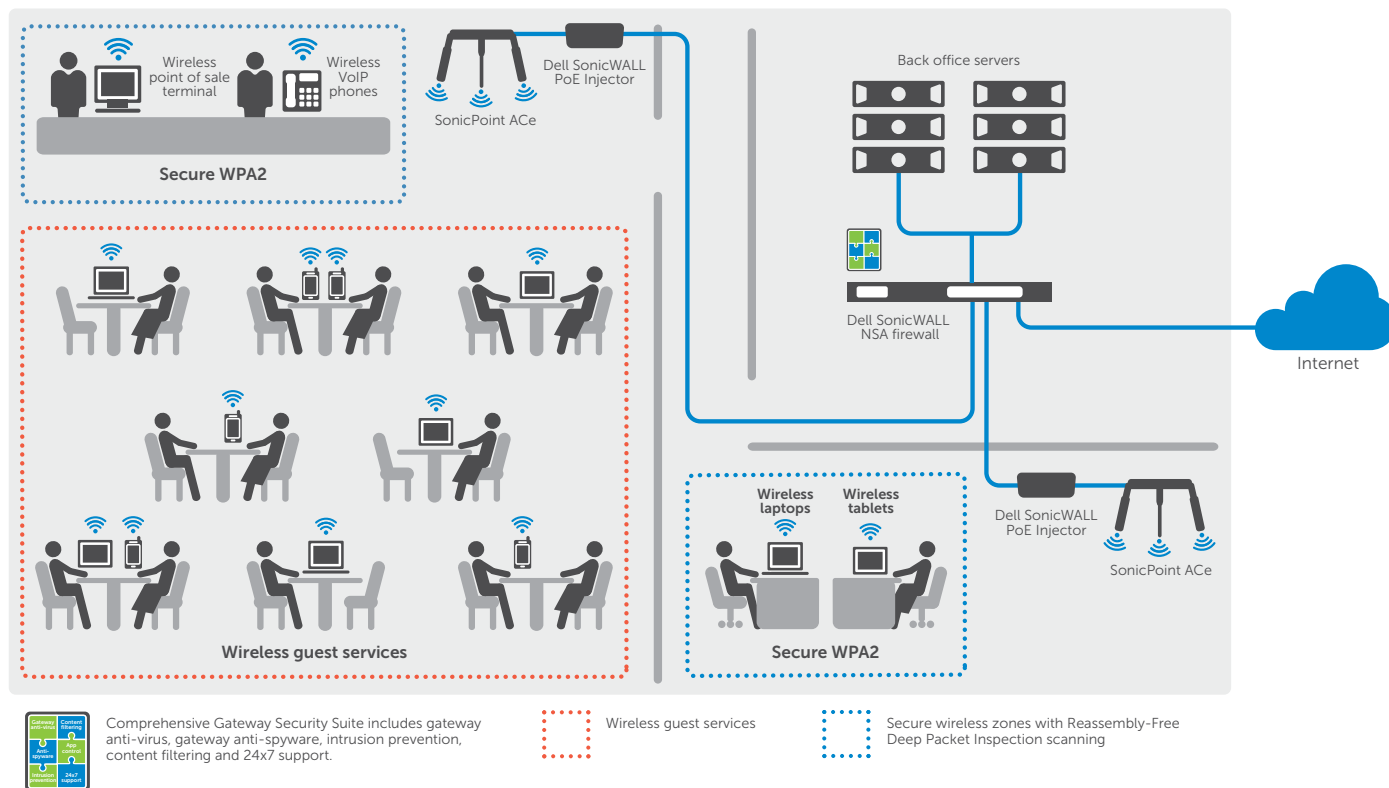


Wireless Network Security scenarios

Dell SonicWALL Wireless Network Security is the ideal solution for organisations of all sizes and types looking to build a secure, high-speed wireless network. Deploying SonicPoints in combination with a Dell SonicWALL next-generation firewall provides enterprise-class wireless performance and security for businesses, schools, hospitals and other organisations.

Small networks

Retail store/medical or dental office deployments



Dell SonicWALL Wireless Network Security is perfect for small offices, such as retail or point of sale (POS) businesses, school classrooms, medical/dental businesses and banks. By combining SonicPoint ACe and SonicPoint ACi wireless access points with a Dell SonicWALL firewall, these organisations can quickly extend wireless network access while providing deep packet inspection for both wired and wireless traffic at the gateway before allowing access to sensitive resources. Dell SonicWALL wireless guest services offers password-enforced customer access to the Internet, while virtual access points provide logical

segmentation of secure wireless network traffic and in-the-clear customer access.

Features

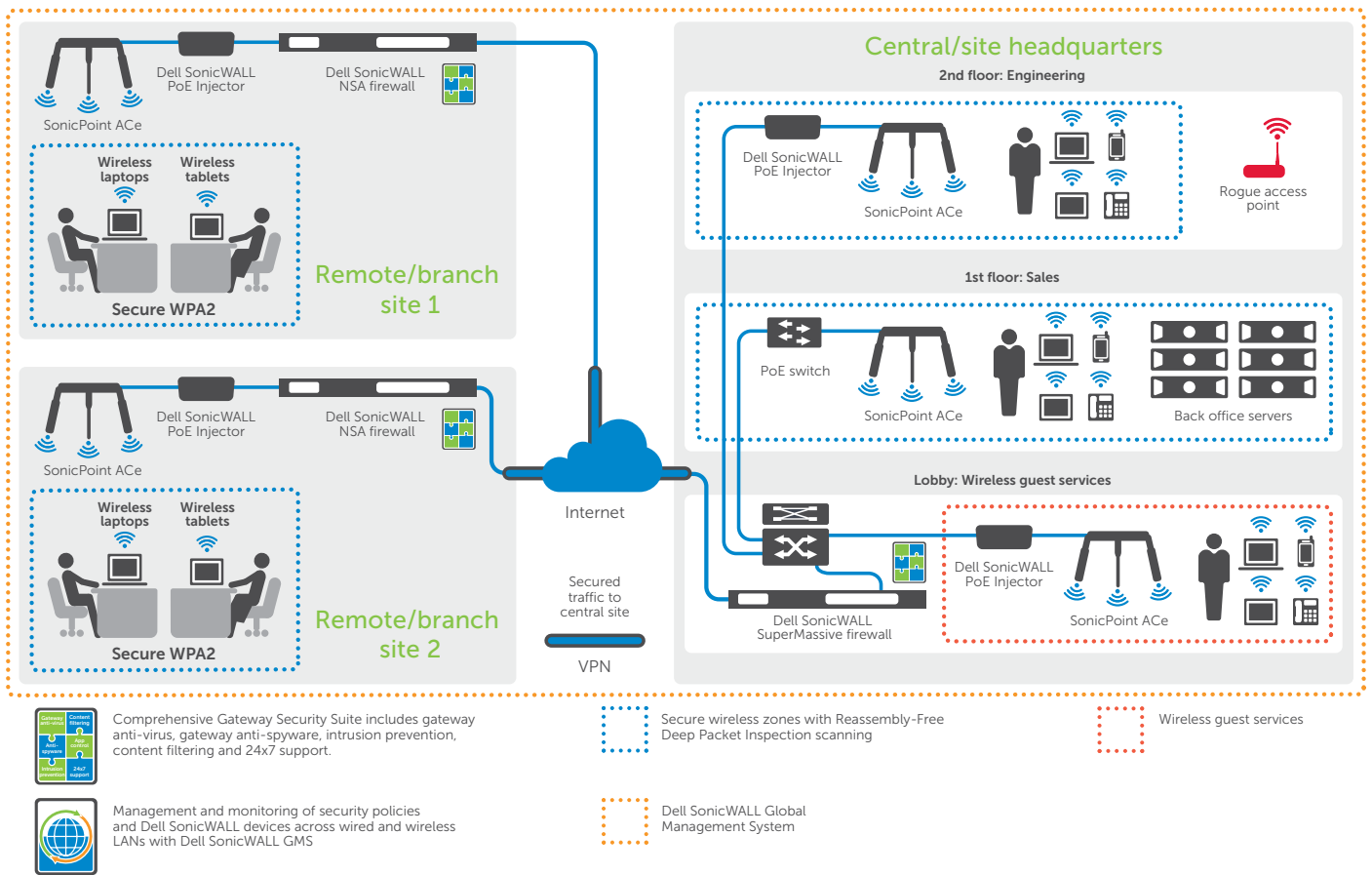
- SonicPoint ACe and SonicPoint ACi provide gigabit wireless performance with greater signal range and reliability.
- SonicPoint wireless access points are auto-discovered and auto-configured by the central management gateway, easing deployment.
- SonicPoint wireless access points enable employees to securely access network resources from the wireless network using SSL VPN or WPA2.
- Virtual access points create secure segmentation between trusted and

un-trusted wireless users by allowing broadcast of up to eight unique SSIDs.

- Deep packet inspection technology detects and eliminates vulnerabilities and threats across all inbound and outbound wireless traffic.
- Key security services, such as application control and content filtering, are enforced over the wired and wireless LANs.
- Dell SonicWALL wireless guest services and lightweight hotspot messaging enable organisations to offer customers wireless Internet access from a customised authentication interface.
- SonicPoints allow the dedication of one radio to rogue access detection while the other supports users, helping achieve and maintain regulatory compliance.

Distributed networks

Enterprise/campus deployments



In distributed network environments that have a higher density of client associations, such as businesses with remote and branch offices, college campuses, school districts and healthcare provider networks, SonicPoint wireless access points provide superior wireless signal performance, range and quality. Employees, students and customers can securely access network resources on the wireless network using SSL VPN or WPA2. Using Dell SonicWALL GMS, administrators can centrally manage every SonicPoint across the entire network, including creating and enforcing wireless policies, which eliminates the need for a separate wireless controller and reduces the total cost of ownership.

Features

- SonicPoint ACe and SonicPoint ACi provide gigabit wireless performance with greater signal range and reliability.
- SonicPoint wireless access points are auto-discovered and auto-configured by the central management gateway, easing deployment.
- SonicPoint wireless access points enable employees to securely access network resources from the wireless network using SSL VPN or WPA2.
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- Deep packet inspection technology detects and eliminates vulnerabilities and threats across all inbound and outbound wireless traffic.
- Key security services, such as application control and content filtering, are enforced over the wired and wireless LANs.
- Dell SonicWALL wireless guest services and lightweight hotspot messaging enable organisations to offer customers wireless Internet access from a customised authentication interface.
- Dell SonicWALL GMS provides central management and monitoring of the wired and wireless LANs, including the firewall and all SonicPoints that are connected to it.



Specifications

Hardware Specifications	SonicPoint ACe	SonicPoint ACi	SonicPoint N2
Dimensions	6.9 (D) x 1.5 (H) in 175 (D) x 38 (H) mm	6.7 (D) x 1.5 (H) in 175 (D) x 40 (H) mm	6.9 (D) x 1.5 (H) in 175 (D) x 38 (H) mm
Weight	0.53 kg / 1.2 lbs	0.48 kg / 1.1 lbs	0.53 kg / 1.2 lbs
WEEE weight	1.2 kg / 2.6 lbs	0.53 kg / 1.2 lbs	0.74 kg / 1.6 lbs
Shipping weight	1.74 kg / 3.8 lbs	0.79 kg / 1.8 lbs	1.1 kg / 2.4 lbs
PoE Power requirements	802.3at		
Power supply	802.3at + AC Adapter (12 v)	802.3at PoE	802.3at PoE
Maximum power consumption (W)	15.2 W	15.6 W	13.7 W
Status indicators	Six (6) LED (WLAN/Link) (LAN/Link) Power, Test		
Antennas	3+3 (SMA 2.4 GHz + TNC 5 GHz)	6 fully internal	3+3 (SMA 2.4 GHz + TNC 5 GHz)
Wired network ports	(2) 10/100/1000 auto-sensing RJ-45 for Ethernet and Power over Ethernet (PoE); (1) RJ-45 console; (1) USB 2.0		
Mechanical	Wall or ceiling mount kit		
Virtual access points	Up to 8 per SonicPoint		
Maximum clients supported	256 (128 per radio)		
Chassis	UL 2043 plenum rated		
Standards and compliance			
Compliance	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.11ac, IEEE 802.11i, IEEE 802.3e, IEEE 802.3i, IEEE 802.3at, WPA/WPA2, TKIP, AES		
Regulatory	FCC/ICES Class B, CE, RCM/ACMA, VCCI Class B, TELEC, BSMI, NCC, MSIP, ANATEL, Customs Union, RoHS (Europe/China), WEEE		
Certifications pending	WiFi, Dynamic Frequency Selection (DFS)		
Safety	UL, cUL, TUV/GS, CB, CE, BSMI, Mexico CoC, Customs Union		
Environmental			
Temperature range	32 to 104°F, 0 to 40°C		
Humidity	10 - 95%, non-condensing		
Radio specifications			
Radios	Dual: 3x3 11n + 3x3 11ac		Dual: 3x3 11n + 3x3 11n
Frequency bands	802.11a: 5.180-5.825 GHz 802.11b/g: 2.412-2.472 GHz 802.11n: 2.412-2.472 GHz, 5.180-5.825 GHz **802.11ac: 2.412-2.472 GHz, 5.180-5.825 GHz		
Operating channels	802.11a: US and Canada 12, Europe 11, Japan 4, Singapore 4, Taiwan 4 802.11b/g: US and Canada 1-11, Europe 1-13, Japan 1-14 (14-802.11b only) 802.11n (2.4 GHz): US and Canada 1-11, Europe 1-13, Japan 1-13 802.11n (5 GHz): US and Canada 36-48/149-165, Europe 36-48, Japan 36-48, Spain 36-48/52-64 **802.11ac: US and Canada 36-48/149-165, Europe 36-48, Japan 36-48, Spain 36-48/52-64		
Transmit output power	Based on the regulatory domain specified by the system administrator		
Transmit power control	Supported		
Data rates supported	802.11a: 6.9, 12, 18, 24, 36, 48, 54 Mbps per channel 802.11b: 1, 2, 5, 5.5, 11 Mbps per channel 802.11g: 6.9, 12, 18, 24, 36, 48, 54 Mbps per channel 802.11n: 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2, 15, 30, 45, 60, 90, 120, 135, 150 Mbps per channel **802.11ac: 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2, 86.7, 96.3, 15, 30, 45, 60, 90, 120, 135, 150, 180, 200, 32.5, 65, 97.5, 130, 195, 260, 292.5, 325, 390, 433.5, 65, 130, 195, 260, 390, 520, 585, 650, 780, 866.7 Mbps per channel		
Modulation technology spectrum	802.11a: Orthogonal Frequency Division Multiplexing (OFDM) 802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g: Orthogonal Frequency Division Multiplexing (OFDM)/Direct Sequence Spread Spectrum (DSSS) 802.11n: Orthogonal Frequency Division Multiplexing (OFDM) **802.11ac: Orthogonal Frequency Division Multiplexing (OFDM)		
Security			
Data encryption	WPA2; IPsec; 802.11i; WPA; 64/128/152-bit WEP; TKIP; AES; SSL VPN*		
Authentication			
Authentication	RADIUS, Active Directory, Novell e-Directory, SAMBA, single sign-on (SSO)		



SonicPoint ACe (includes PoE Injector and 1 year of SonicPoint Support)
01-SSC-0883

4-pack SonicPoint ACe (includes 3 years of SonicPoint Support for each SonicPoint)
01-SSC-0892

8-pack SonicPoint ACe (includes 3 years of SonicPoint Support for each SonicPoint)
01-SSC-0893



SonicPoint ACi (includes PoE Injector and 1 year of SonicPoint Support)
01-SSC-0886

4-pack SonicPoint ACi (includes 3 years of SonicPoint Support for each SonicPoint)
01-SSC-0894

8-pack SonicPoint ACi (includes 3 years of SonicPoint Support for each SonicPoint)
01-SSC-0895



SonicPoint N2 (includes PoE Injector and 1 year of SonicPoint Support)
01-SSC-0889

4-pack SonicPoint N2 (includes 3 years of SonicPoint Support for each SonicPoint)
01-SSC-0896

8-pack SonicPoint N2 (includes 3 years of SonicPoint Support for each SonicPoint)
01-SSC-0897



PoE Injector 802.3at Gigabit AC
01-SSC-5545

*When used with Dell SonicWALL Secure Remote Access Series appliance
**Available on SonicPoint ACe and SonicPoint ACi only

Hardware Specifications	PoE Injector
Number of ports	2: (1) Data In; (1) data and power out
Dimensions	1.22 (H) x 1.97 (W) x 6.30 (L) in; (31 (H) x 50 (W) x 160 (L) mm
Weight	0.5 lbs/(0.3 kg)
WEEE weight	0.85 lbs/(0.38 kg)
Shipping weight	0.87 lbs/(0.4 kg)
Connectors	Shielded RJ-45, EIA 568A and 568B
Indicators	System indicator: AC power (green); User indicator: channel power active (green)
Data rates	10/100/1000 Mbps
Power over LAN output	
Pin assignment and polarity	4/5 (+), 7/8 (-)
Output power voltage	-48 VDC
User port power	30 W minimum
Input power requirements	
AC input voltage	100 to 240 VAC
AC frequency	50 to 60 Hz
AC input current	0.8A at 100-240 VAC
Standards and compliance	
Regulatory compliance	CE, RoHS, WEEE
Electromagnetic emission and immunity	EN 55022 Class B (Emissions), FCC Part 15, Class B EN 55024 (Immunity), VCCI
Safety	UL/cUL 60950-1, GS Mark per IEC 60950-1
Environmental conditions	
Operating ambient temperature	32 to 104 °F, 0 to 40 °C
Operating humidity	Maximum 90%, non-condensing
Storage temperature	-4 to 158 °F, -20 to 70 °C
Storage humidity	Maximum 95%, non-condensing
Operating altitude	-1,000 to 10,000 ft. (-304.8 to 3,048 m)

For more information
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Datasheet-SonicWALL-WirlessNetworkSecrty-UK-MJ-25508

