

SonicWave and SonicPoint Series Wireless Access Points

Secure, cloud-managed wireless solutions

SonicWall SonicWave series wireless access points (APs) combine high-performance IEEE 802.11ac Wave 2 wireless technology with flexible deployment options. These APs can be managed via the cloud using SonicWall WiFi Cloud Manager (WCM) or through SonicWall's industry-leading next-generation firewalls. The result is a solution that could be untethered from the firewall to provide a superior experience for WiFi users that's as secure as any wired connection.

The SonicWave solution is based on:

- SonicWall SonicWave series indoor and outdoor APs which support the 802.11ac Wave 2 wireless standard
- SonicWall WCM is an intuitive, cloud-managed WiFi network management system suitable for networks of any size
- SonicWall TZ, NSA, NSsp, NSA and SuperMassive firewalls, which use deep packet inspection technology to detect and eliminate threats over wired and wireless networks

Intuitive cloud management

SonicWall WCM provides an intuitive user interface to manage all SonicWave APs from a single pane of glass via SonicWall Capture Security Center (CSC). Easily monitor and manage networks with alerts and rich analytics updated in real-time. Always stay up-to-date with the current features and enhancements from the latest firmware. Updates are pushed automatically to APs, eliminating manual updates and chances of human error.

Enhanced user experience

SonicWave APs take advantage of the capabilities in 802.11ac Wave 2 and advanced RF capabilities to deliver high-speed wireless performance. MU-MIMO technology allows the APs to communicate to multiple client devices at the same time, improving the overall network performance, efficiency and user experience. In combination, mesh technology supported on SonicWave APs enables ease of installation and deployment. Mesh networks are easy to set up, effortless to expand, and require fewer cables and less manpower to deploy, reducing installation costs.

With multiple transmitting and receiving antennas, SonicWave APs are engineered to optimize signal quality, range and reliability for wireless devices. SonicWave APs supports fast roaming, so that users can roam from one location to another seamlessly. Feature-rich portfolio includes air-time fairness, band steering, and signal analysis tools for monitoring and troubleshooting.

Best-in-class wireless security

SonicWall firewalls scan all wireless traffic coming into and going out of the network using deep packet inspection technology and then remove harmful threats such as malware and intrusions, even over SSL/TLS encrypted connections. Other security and control capabilities such as content filtering, application control and intelligence and Capture Advanced Threat Protection (ATP) provide added layers of protection.

Benefits:

- Intuitive cloud management
 - Alerts and rich analytics
 - Automatic firmware updates
- Enhanced user experience
 - 802.11ac Wave 2
 - Auto channel selection
 - RF spectrum analysis
 - AirTime Fairness
 - Fast roaming
- Best-in-class wireless security
 - Dedicated third scanning radio
 - Capture ATP and content filtering service
 - Deep packet inspection technology
 - SSL/TLS decryption and inspection
 - Wireless intrusion detection and prevention
- Simplified firewall management
 - Auto-detection and provisioning
 - Wireless signal analysis tools
 - Single-pane-of-glass management
- Zero-Touch Deployment powered by SonicWiFi app
 - Easy registration and onboarding
 - Auto-detection and auto-provisioning
 - App available on iOS and Android
- Design with WiFi Planner
 - Advanced wireless site survey
 - Cloud-based tool
- Ruggedized outdoor design
 - IP67 rated
 - Industrial-grade enclosure

Capture ATP is our award-winning multi-engine sandboxing service that features SonicWall's patent-pending Real-Time Deep Memory Inspection (RTDMI™) technology. The RTDMI engine of Capture ATP proactively detects and blocks mass market, zero-day threats and unknown malware by inspecting directly in memory. Because of the real-time architecture, SonicWall RTDMI technology is precise, minimizes false positives, and identifies and mitigates sophisticated attacks where the malware's weaponry is exposed for less than 100 nanoseconds. SonicWave APs perform advanced security services, including the Content Filtering Service (CFS) and Capture ATP sandbox service independently — even where firewalls are not deployed.

Most SonicWave APs includes three radios, where the third radio is dedicated to security and performs rogue AP detection, passive scanning and packet capturing. The SonicWave solution also integrates additional security-related features including wireless intrusion detection and prevention, virtual AP segmentation, wireless guest services, RF monitoring and wireless packet capture.

Simplified firewall management

Deployment and setup of APs are greatly simplified, reducing total cost of ownership. Optionally, SonicWave APs can be managed by SonicWall next-gen

firewalls. Integrated into every SonicWall firewall is a wireless controller that auto-detects and auto-provisions SonicWave APs across the network.

Management and monitoring for wireless and security are handled centrally through the firewall or through SonicWall Global Management System, providing network administrators with a single pane of glass from which to manage all aspects of the network.

Zero-Touch Deployment (ZTD) powered by SonicWiFi app

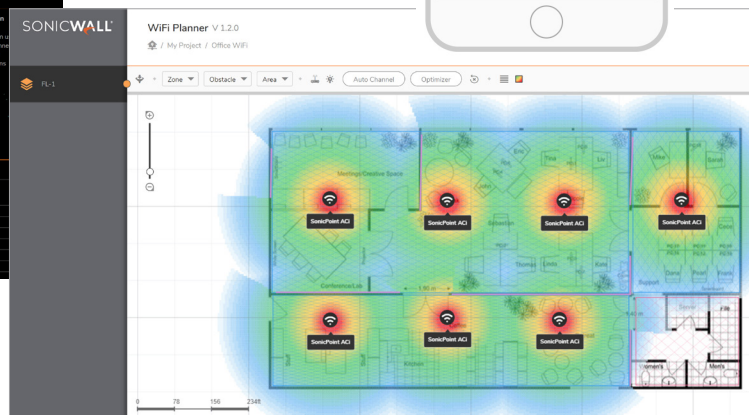
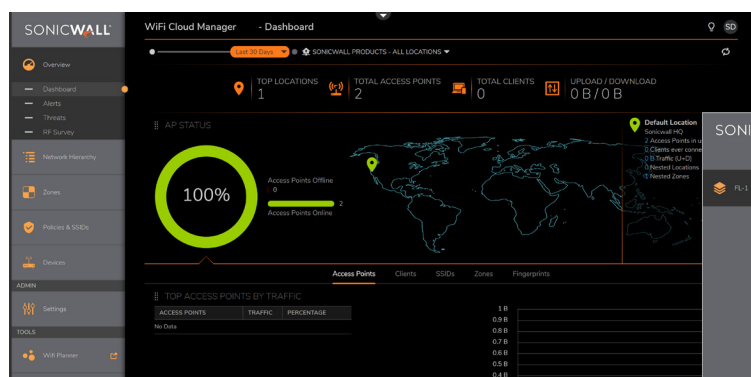
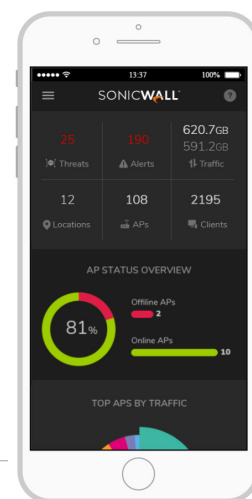
Easily register and onboard SonicWave APs with the help of SonicWall SonicWiFi mobile app. The APs are automatically detected and provisioned with Zero-Touch Deployment. Available on iOS and Android, SonicWiFi mobile app lets network admins monitor and manage networks, or set up mesh.

Design with WiFi Planner

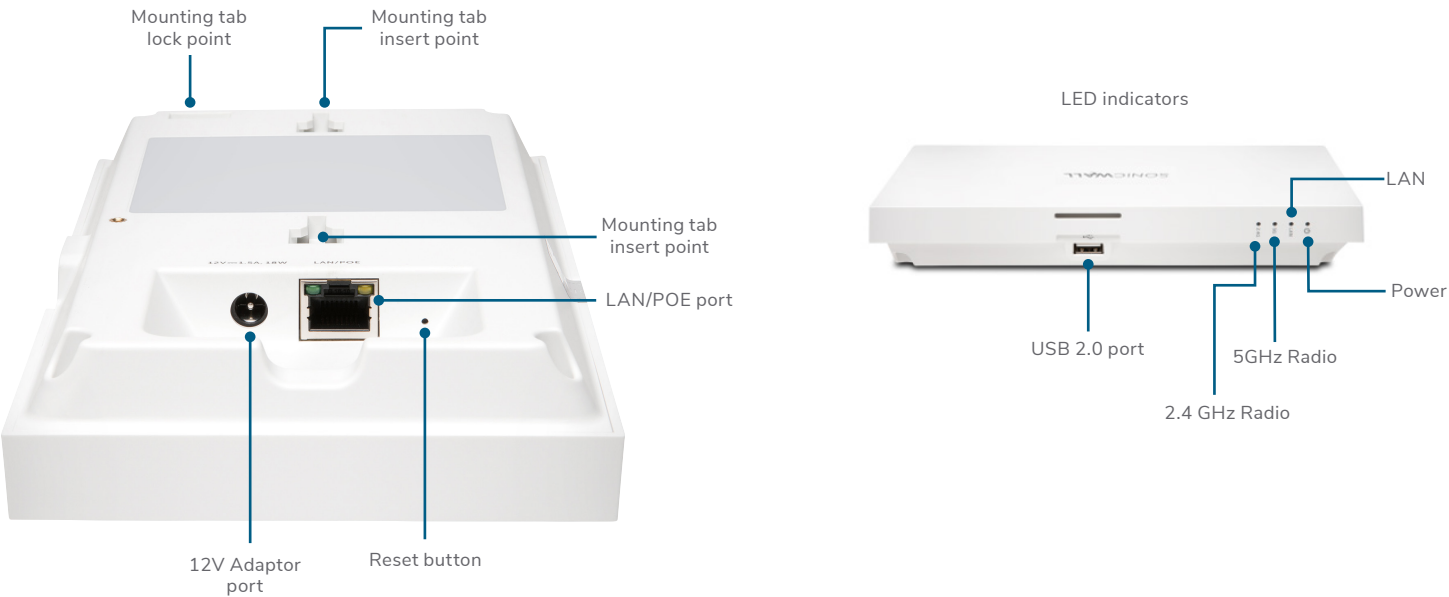
SonicWall WiFi planner is a cloud-based, advanced wireless site survey tool that enables to optimally design and deploy a wireless network for enhanced wireless user experience.

Ruggedized outdoor design

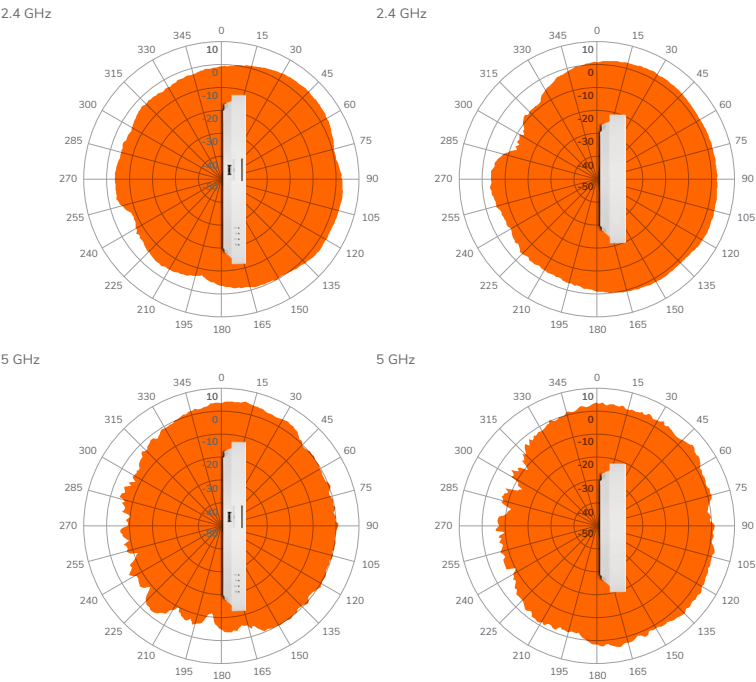
SonicWave outdoor APs are built to withstand rough outdoor conditions with industrial-grade enclosure. These APs are IP67 rated, which ensures protection against dust and water immersion.



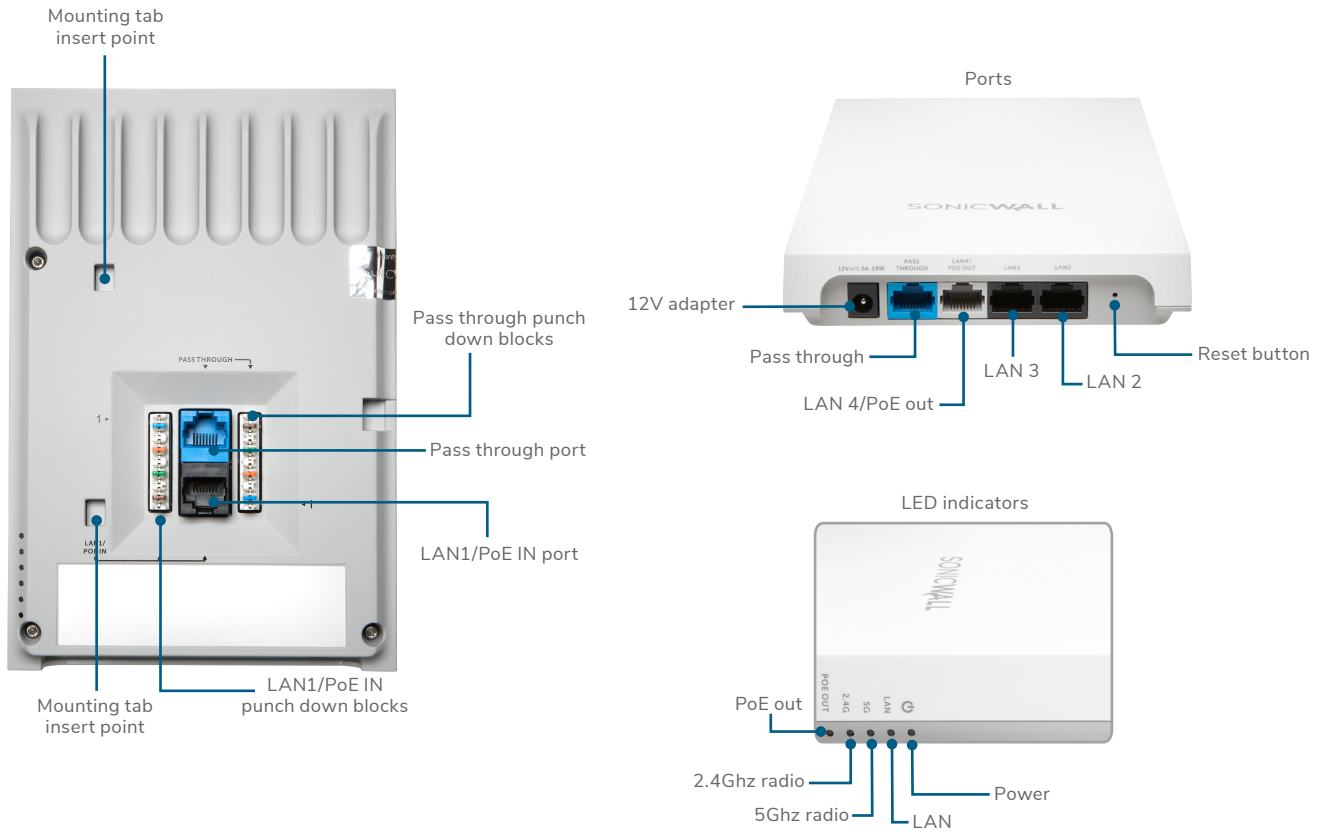
SonicWave 231c – The Ceiling Mount AP



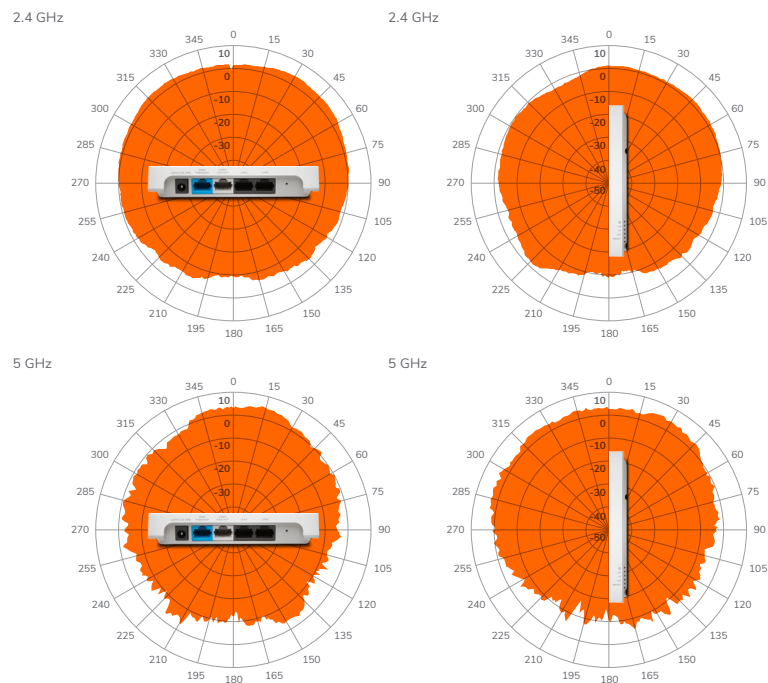
RF coverage maps



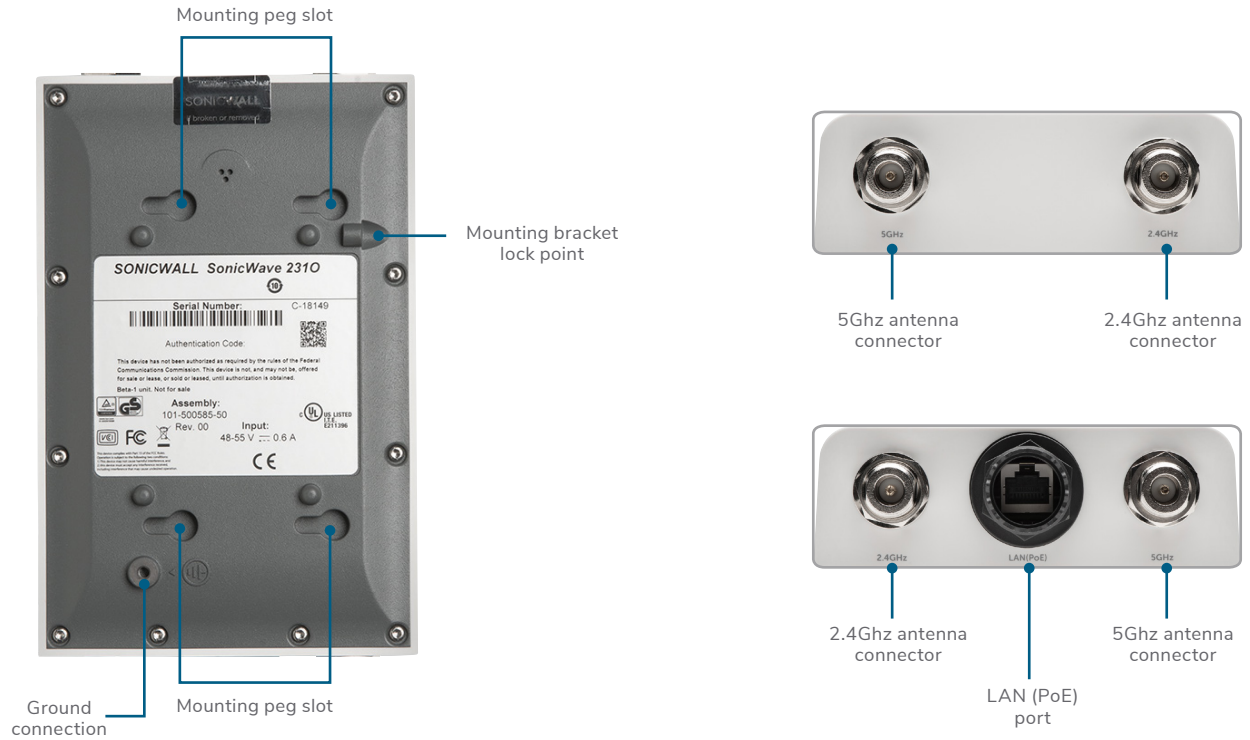
SonicWave 224w – The Wall Mount AP



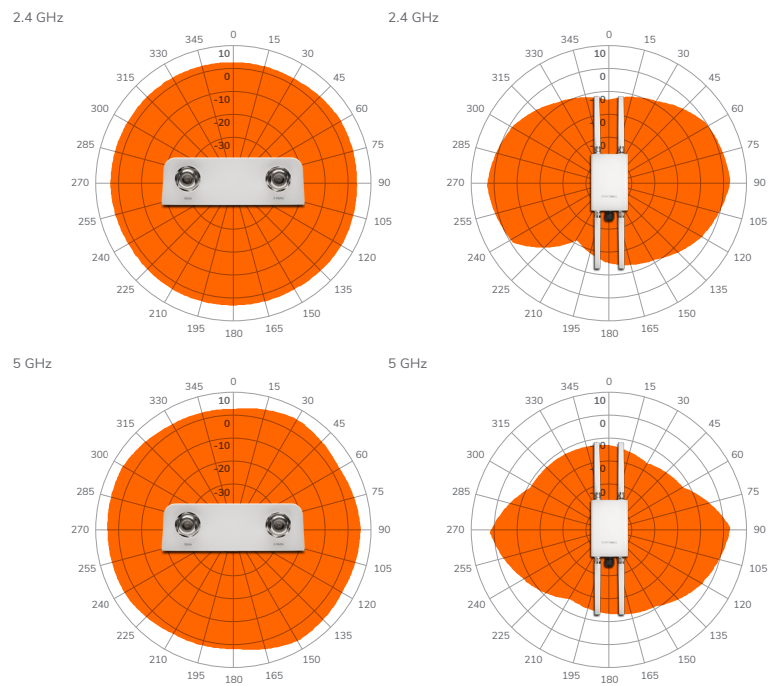
RF coverage maps



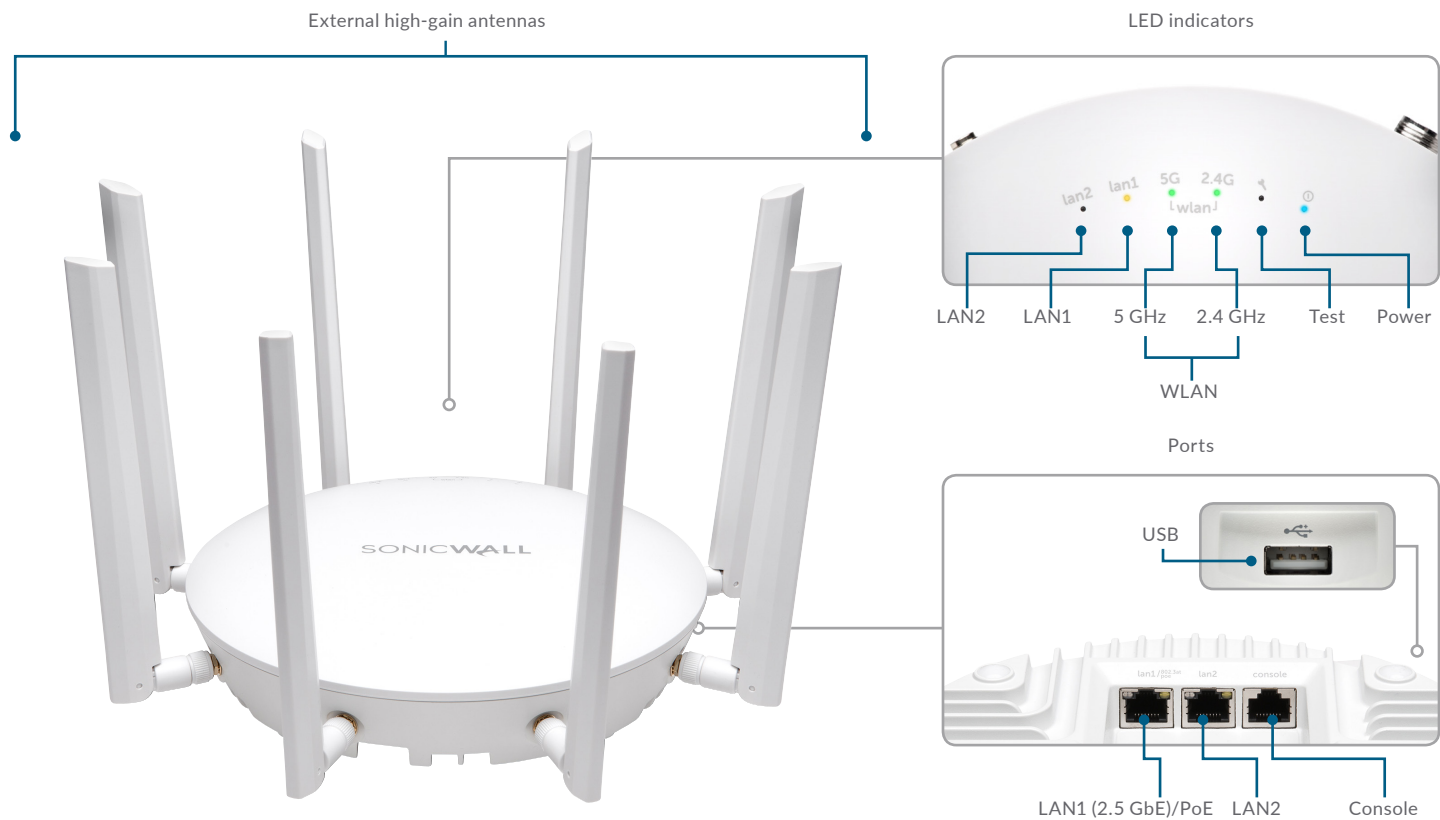
SonicWave 231o – The Outdoor Mount AP



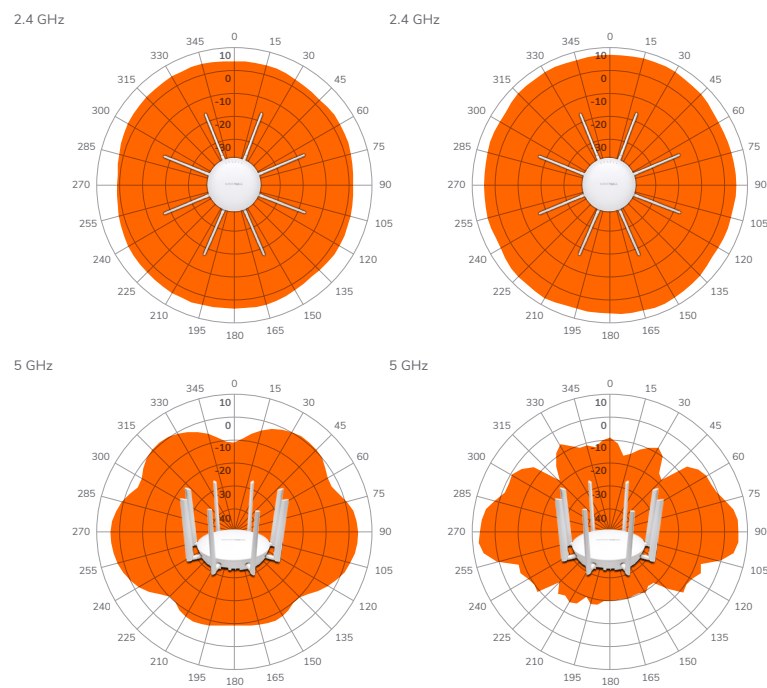
RF coverage maps



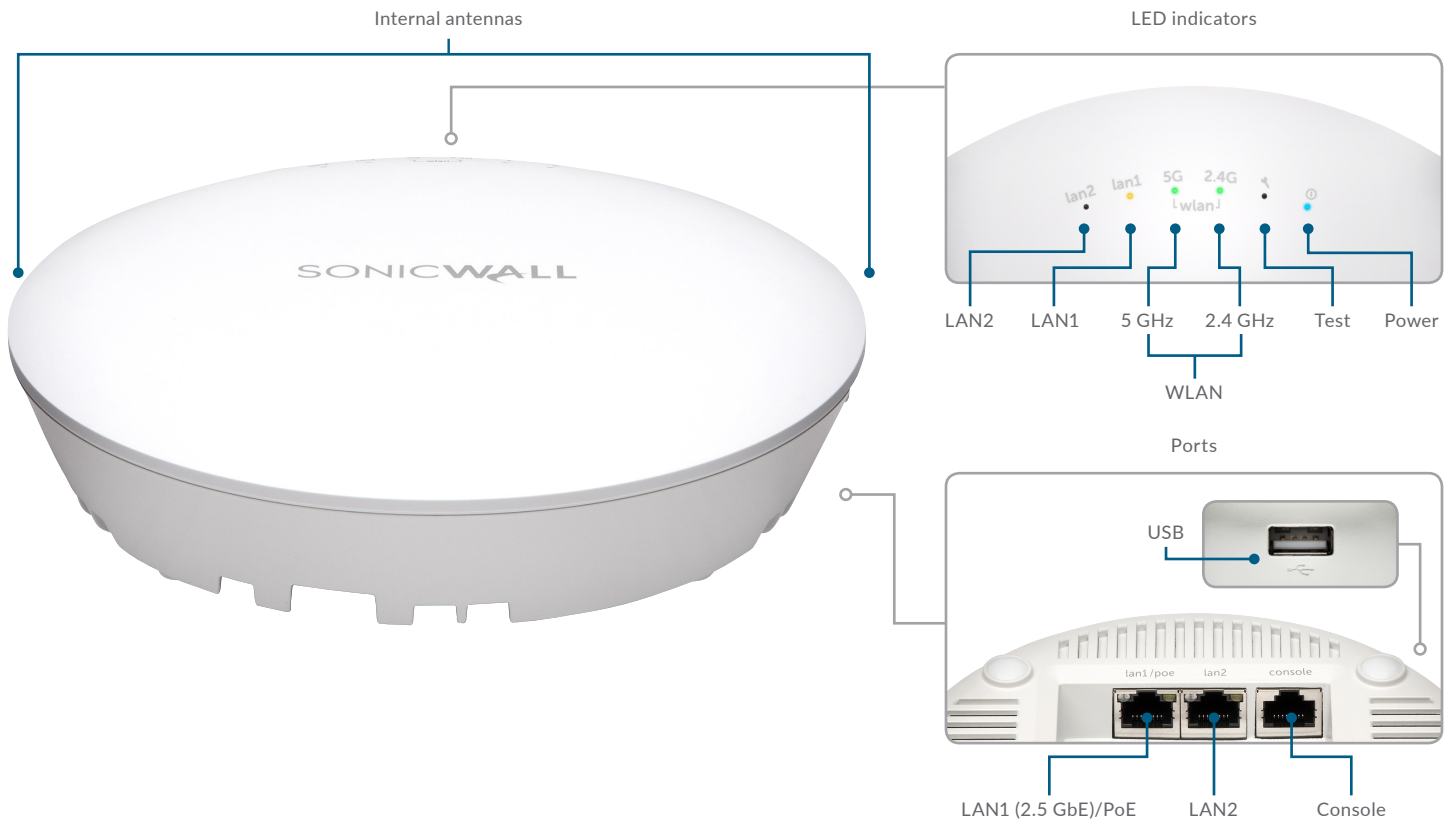
SonicWave 432e - The External Antenna AP



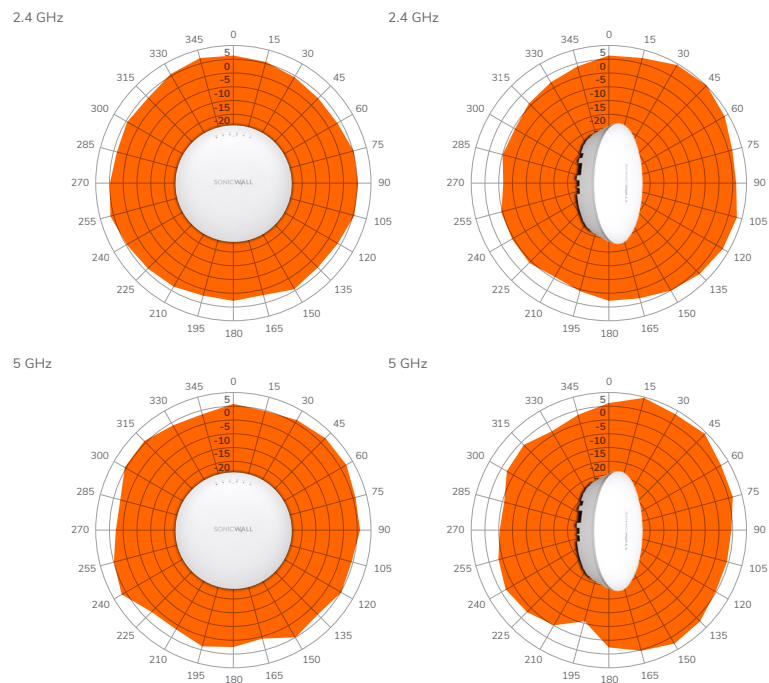
RF coverage maps



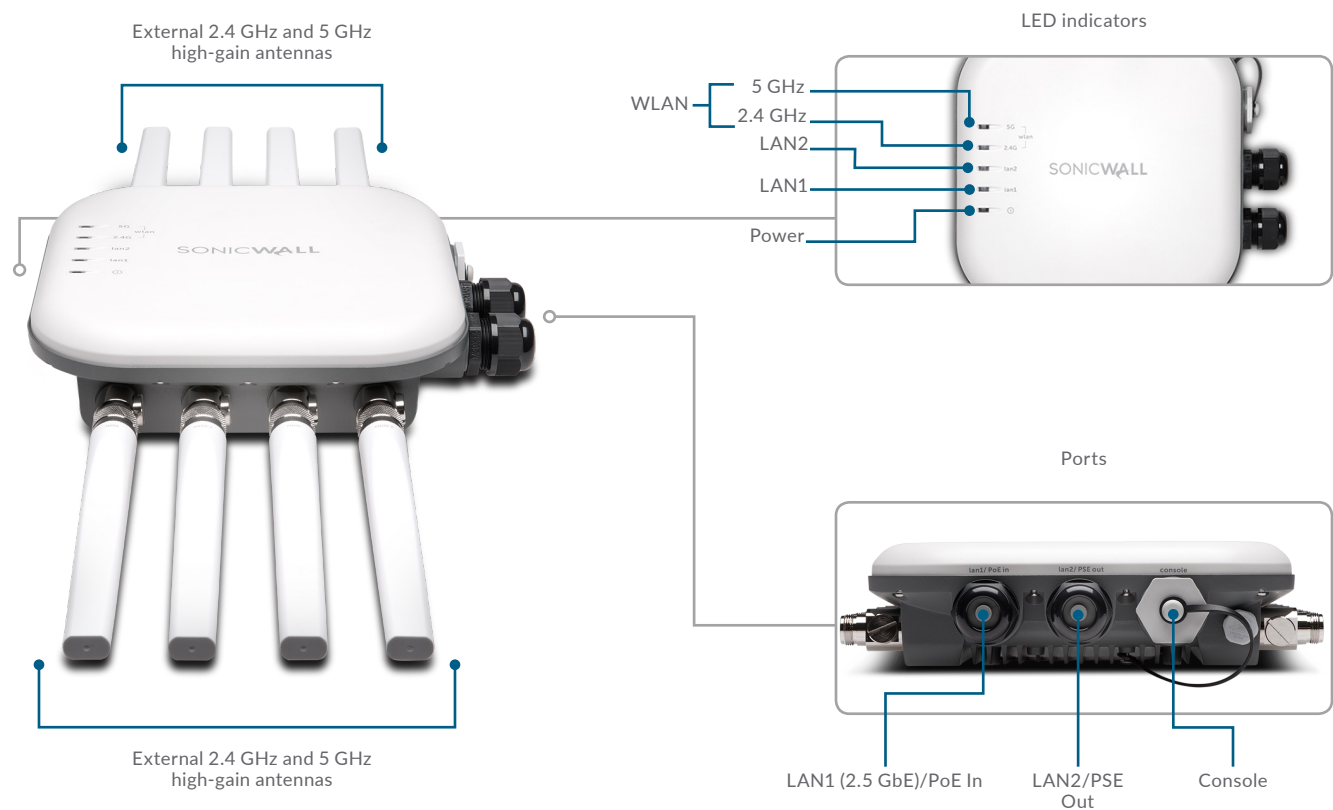
SonicWave 432i - The Indoor AP



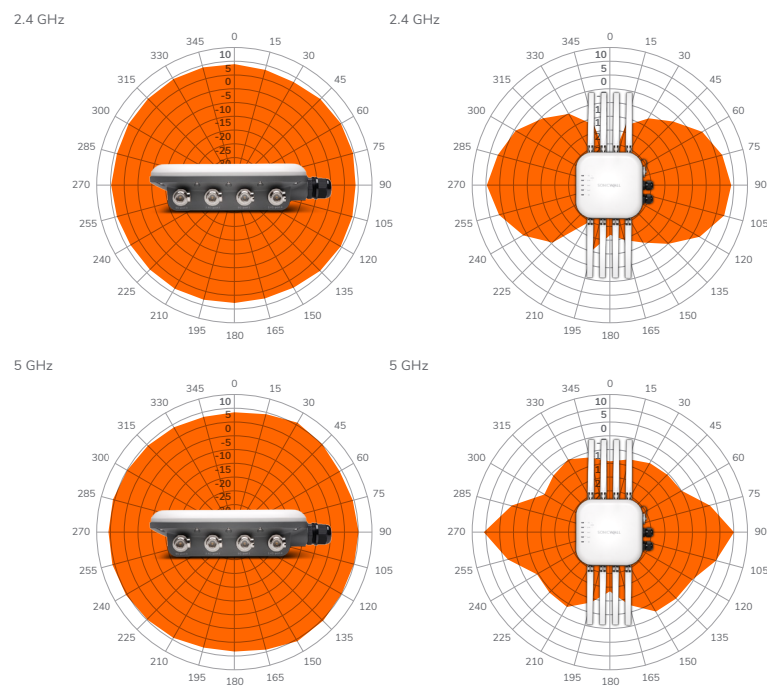
RF coverage maps



SonicWave 432o - The Outdoor AP



RF coverage maps



SonicWave 200 Series Specifications

HARDWARE SPECIFICATIONS	SONICWAVE 231c	SONICWAVE 224w	SONICWAVE 231o
Location	Ceiling	Wall	Outdoor
Radio	2x2 802.11ac Wave 2		
Dedicated 3rd scanning radio	Yes	No	Yes
USB 2.0	Yes	No	No
Bluetooth Low Energy (BLE) radio	Yes	Yes	Yes
Antenna type	Internal	Internal	Omni-Antenna
Dimensions	118mmx214mmx34m	122mmx188mmx18mm	190mmx120mmx42mm
Shipping dimension	150mm x240mm x 73mm	150mm x240mm x 73mm	265mmx450mmx78mm
Unit weight	0.4 kg	0.4 kg	0.7 kg
WEEE weight	0.7 Kg	0.7 Kg	2.0 kg
Shipping weight	0.7 Kg	0.7 Kg	2.0 kg
PoE	802.3at 802.3af (compatible)	802.3at 802.3af (compatible)	802.3at 802.3af (compatible)
	DC 12V adapter (optional)	DC 12V adapter (optional)	(PoE sold separately)
Maximum power consumption (W)	12W	12W	12W
Status indicators	4	5	4
Wired network ports	1 x 10/100/1000 auto-sensing RJ-45	3 x 10/100/1000, 2x 10/100/1000 PoE pass through, 1 LAN PoE Out LAN ports	1 x 10/100/1000 auto-sensing RJ-45
Accessories included	Ceiling/wall mounting kit		NEMA 4X Mounting kit and external antennas
Virtual access points/SSID group	Up to 8 per access point		
Chassis	Rectangle		
STANDARDS AND COMPLIANCE	SONICWAVE 231c	SONICWAVE 224w	SONICWAVE 231o
IEEE Standard	802.11a/b/g/n/ac		
Compliance	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.11ac, IEEE 802.11e, IEEE 802.11i, IEEE 802.3at, IEEE 802.3bz, WPA, TKIP, AES, IEEE 802.11r, IEEE 802.11k, IEEE 802.11v, IEEE 802.11w		
Plenum rated	Yes	N/A	No
Regulatory	FCC, IC/ISED, CE, RCM, NCC, TELEC, KCC		
Safety	UL, cUL, TUV-GS, CB , UL Mexico CoC		
MIMO	MU-MIMO		
Max/Recommended connected clients per radio	128/32		
ENVIRONMENTAL	SONICWAVE 231c	SONICWAVE 224w	SONICWAVE 231o
Temperature range	0° to 40°C	0° to 40°C	-30° to 60°C
Humidity	0%~95% typical, elevation 50,000 ft	0%~95% typical, elevation 50,000 ft	5%~90% typical
RADIO SPECIFICATIONS	SONICWAVE 231c	SONICWAVE 224w	SONICWAVE 231o
Radios	3 radios - 5GHz, 2.4GHz and security radio	2 radios - 5GHz and 2.4GHz	3 radios - 5GHz, 2.4GHz and security radio
Frequency bands	IEEE 802.11 b/g/n: 2.412-2.484 GHz; IEEE 802.11a/n/ac: 5.150-5.250 GHz (UNII-1), 5.250-5.350 GHz (UNII-2), 5.470-5.600, 5.660-5.725 GHz (UNII-2e), 5.725-5.825 GHz (UNII-3)		
Operating channels*	2.4GHz channels : 1-13; 5 GHz channels: 36-64, 100-140, 149-165		
Transmit output power*	Based on the regulatory domain product is installed in and specified by the system administrator		
Transmit power control	Supported		
Data rates supported	867 Mbps for 5GHz radio, 400Mbps for 2.4GHz radio		
Modulation technology spectrum	802.11ac: Orthogonal Frequency Division Multiplexing (OFDM)		
SECURITY	SONICWAVE 231c	SONICWAVE 224w	SONICWAVE 231o
Data encryption	WPA2; IPSec, 802.11i, WPA; 64/128/152-bit WEP, TKIP, AES, SSL VPN**		
AUTHENTICATION	SONICWAVE 231c	SONICWAVE 224w	SONICWAVE 231o
Authentication	RADIUS, Active Directory, single sign-on (SSO)		

* Subject to country regulations

** When used with SonicWall Secure Remote Access Series appliance

SonicWave 400 Series Specifications

HARDWARE SPECIFICATIONS	SONICWAVE 432e	SONICWAVE 432i	SONICWAVE 432o
Location	Indoor	Indoor	Outdoor
Dimensions	8.5 (D) x 2.0 (H) in 21.6 (D) x 5.1 (H) cm	8.5 (D) x 2.0 (H) in 21.6 (D) x 5.1 (H) cm	9.5 (W) x 9.3 (D) x 2.4 (H) in 24.1 (W) x 23.6 (D) x 6.1 (H) cm
Weight	1.1 kg / 2.5 lbs	1.0 kg / 2.2 lbs	2.2 kg / 4.9 lbs
WEEE weight	1.4 kg / 3.1 lbs	1.2 kg / 2.6 lbs	4.1 kg / 9.1 lbs
Shipping weight	1.7 kg / 3.8 lbs	1.5 kg / 3.3 lbs	4.7 kg / 10.4 lbs
PoE injector		802.3at	
Maximum power consumption (W)	18.8 W	18.8 W	21.2 W
Status indicators	Six (6) LED (WLAN/Link) (LAN/Link) Power, Test		
Antennas	4+4 (SMA 2.4 GHz + TNC 5 GHz)	8 fully internal	8 N-type dipole
Wired network ports	(1) 10/100/1000 auto-sensing RJ-45 for Ethernet and Power over Ethernet (PoE); (1) 100/1000/2.5 GbE auto-sensing RJ-45 for Ethernet; (1) RJ-45 console; (1) USB 2.0 (except 432o)		
Accessories included	Wall/ceiling mount kit		
Virtual access points/SSID group	Up to 8 per access point		
Chassis	UL 1024 plenum rated		
STANDARDS AND COMPLIANCE	SONICWAVE 432e	SONICWAVE 432i	SONICWAVE 432o
IEEE Standard	802.11a/b/g/n/ac Wave 2		
Compliance	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.11ac, IEEE 802.11e, IEEE 802.11i, IEEE 802.3at, IEEE 802.3bz, WPA, TKIP, AES, IEEE 802.11r, IEEE 802.11k, IEEE 802.11v, IEEE 802.11w		
Regulatory	FCC/ICES Class B, CE, RCM/ACMA, VCCI Class B, TELEC, BSMI, NCC, MSIP, ANATEL, Customs Union, RoHS (Europe/China), WEEE		
MIMO	MU-MIMO 4x4 (4 streams)		
Max/Recommended connected clients per radio	128/48		
Safety	UL, cUL, TUV/GS, CB, CE, BSMI, Mexico CoC, Customs Union		
ENVIRONMENTAL	SONICWAVE 432e	SONICWAVE 432i	SONICWAVE 432o
Temperature range	32 to 104°F, 0 to 40°C		-40 to 140°F, -40 to 60°C
Humidity	10 - 95%, non-condensing		
RADIO SPECIFICATIONS	SONICWAVE 432e/432i/432o		
Radios	Dual: 4x4 11n + 4x4 11ac MU-MIMO; Dedicated third scanning radio; Bluetooth Low Energy radio		
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: 1,2,5,11 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, 433.3, 65, 130, 195, 260, 390, 520, 585, 650, 780, 866.7, 1040, 1170, 1300, 1560, 1733.4 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	SONICWAVE 432e/432i/432o		
Data encryption	WPA2, IPsec*, 802.11i, WPA, 64/128/152-bit WEP, TKIP, AES, SSL VPN**		
AUTHENTICATION	SONICWAVE 432e/432i/432o		
Authentication	RADIUS, Active Directory, single sign-on (SSO)		

*When used with a SonicWall firewall

**When used with SonicWall Secure Mobile Access Series appliance

SonicPoint Series Specifications

For organizations with a substantial investment in 802.11ac clients, the SonicWall SonicPoint series features dual radios, high-speed 802.11ac performance, 3x3 SU-MIMO and all the security advantages that SonicWall Wireless Network Security solutions offer.

HARDWARE SPECIFICATIONS	SONICPOINT ACe	SONICPOINT ACi	SONICPOINT N2
Location	Indoor	Indoor	Indoor
Dimensions	6.9 (D) x 1.5 (H) in 17.5 (D) x 3.8 (H) cm	6.9 (D) x 1.5 (H) in 17.5 (D) x 3.8 (H) cm	6.9 (D) x 1.5 (H) in 17.5 (D) x 3.8 (H) cm
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 injector	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		
Accessories included	Wall/ceiling mount kit		
Virtual access points	Up to 8 per SonicPoint		
Chassis	UL 2043 plenum rated		
STANDARDS AND COMPLIANCE	SONICPOINT ACe	SONICPOINT ACi	SONICPOINT N2
IEEE Standard	802.11a/b/g/n/ac	802.11a/b/g/n/ac	802.11a/b/g/n
Compliance	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		
MIMO	SU-MIMO 3x3 (3 streams)		
Max/Recommended connected clients per radio	128/30	128/30	128/30
Certifications	WiFi, Dynamic Frequency Selection (DFS)		
Safety	UL, cUL, TUV/GS, CB, CE, BSMI, Mexico CoC, Customs Union		
ENVIRONMENTAL	SONICPOINT ACe/ACi/N2		
Temperature range	32 to 104°F, 0 to 40°C		
Humidity	10 - 95%, non-condensing		
RADIO SPECIFICATIONS	SONICPOINT ACe	SONICPOINT ACi	SONICPOINT N2
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: 1,2,5,5,11 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, 433.3, 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)		
HARDWARE SPECIFICATIONS	SONICPOINT ACe	SONICPOINT ACi	SONICPOINT N2
Location	Indoor	Indoor	Indoor
Dimensions	6.9 (D) x 1.5 (H) in 17.5 (D) x 3.8 (H) cm	6.9 (D) x 1.5 (H) in 17.5 (D) x 3.8 (H) cm	6.9 (D) x 1.5 (H) in 17.5 (D) x 3.8 (H) cm
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
SECURITY	SONICPOINT ACe/ACi/N2		
Data encryption	WPA2; IPSec, 802.11i, WPA; 64/128/152-bit WEP, TKIP, AES, SSL VPN*		
AUTHENTICATION	SONICPOINT ACe/ACi/N2		
Authentication	RADIUS, Active Directory, single sign-on (SSO)		

*When used with SonicWall Secure Remote Access Series appliance

**Available on SonicPoint ACe and SonicPoint ACi only

SonicPoint Series PoE Injector Specifications

HARDWARE SPECIFICATIONS		SONICWAVE 231c/224w/231o	SONICWAVE 432e/432i/432o
Number of ports		2: (1) Data In; (1) data and power out	2: (1) Data In; (1) data and power out
Dimensions		2.09 in. (W) x 1.28 in. (H) x 5.5 in (L)	1.69 (H) x 3.46 (W) x 6.54 (L) in; (43 (H) x 87.9 (W) x 166 (L) mm
Weight		0.44 lbs	0.91 lbs/(0.41 kg)
WEEE weight		—	1.2 lbs/(0.54 kg)
Shipping weight		—	1.28 lbs/(0.58 kg)
Connectors		Shielded RJ-45, EIA 568A and 568B	Shielded RJ-45, EIA 568A and 568B
Status Indicators		2: AC Power (Yellow); Channel Power (Green)	LED indicator: Power On (yellow); Power supplied over Ethernet (green); Over current/short circuit (blinking green)
Data rates		10/100/1000 Mbps	10/100/1000 Mbps/2.5 GbE
POWER OVER LAN OUTPUT		SONICWAVE 231c/224w/231o	SONICWAVE 432e/432i/432o
Pin assignment and polarity		4/5 (+), 7/8 (-)	4/5 (+), 7/8 (-)
Output power voltage		55VDC	-55 VDC
Maximum output power		30 W	30 W
INPUT POWER REQUIREMENTS		SONICWAVE 231c/224w/231o	SONICWAVE 432e/432i/432o
AC input voltage		100 to 240 VAC	100 to 240 VAC
AC frequency		50 to 60 Hz	50 to 60 Hz
AC input current		0.8A @ 100-240 VAC	1.5A at 100-240 VAC
STANDARDS AND COMPLIANCE		SONICWAVE 231c/224w/231o	SONICWAVE 432e/432i/432o
Regulatory compliance		IEEE 802.3at (PoE), RoHS Compliant, WEEE Compliant, CE	CE, EN 55022 Class B (Emissions), FCC Part 15 Class B, EN 55024 (Immunity), VCCI
Electromagnetic emission and immunity		FCC Part 15, Class B; EN 55022 Class B (Emissions); EN 55024 (Immunity), VCCI	—
Safety		UL/cUL Per IEC 60950-1; GS Mark Per IEC 60950-1	UL/CUL 60950-1, GS Mark per IEC 60950-1
Environmental		—	RoHS, WEEE
ENVIRONMENTAL REQUIREMENTS		SONICWAVE 231c/224w/231o	SONICWAVE 432e/432i/432o
Operating ambient temperature		32° to 104°F (0 to 40°C)	14 to 113 °F, -10 to 40 °C
Operating humidity		Maximum 90%, Non-condensing	Maximum 90%, non-condensing
Storage temperature		-4° to 158°F (-20° to 70°C)	-4 to 158 °F, -20 to 70 °C
Storage humidity		Maximum 95%, Non-condensing	Maximum 95%, non-condensing

SonicWave Feature Summary

SUPERIOR USER EXPERIENCE	
Feature	Description
High-speed wireless performance and range	SonicWave access points are based on the 802.11ac Wave 2 standard, which can achieve a PHY rate of up to 2.34 Gbps 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.
Increased wireless reliability	The increase in bandwidth capacity and greater number of spatial streams combined with MU-MIMO and the improved processing offered by 802.11ac, result in more reliable wireless coverage.
MU-MIMO	MU-MIMO (Multi-user, multiple-input, multiple-output) technology enables simultaneously transmission from the access point to numerous wireless clients instead of just one.
Band steering	Band steering improves the user experience by steering dual-band clients to automatically connect to the less crowded 5 GHz frequency band leaving the more crowded 2.4 GHz frequency for legacy clients.
Beamforming	Beamforming improves wireless performance and range by focusing the wireless signal on an individual client instead of spreading the data transmission equally in all directions.
AirTime Fairness	AirTime Fairness distributes air time equally among connected clients, ensuring faster clients get more data in their time while slower clients receive less.
Wireless mesh	A wireless mesh enables to extend wifi coverage instantly without requiring cables.
FairNet wireless bandwidth allocation	FairNet 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	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, ransomware, spyware, viruses and other threats before they enter the network.
Real-Time Deep Memory Inspection (RTDMI)	This patent-pending cloud-based technology detects and blocks malware that does not exhibit any malicious behavior and hides its weaponry via encryption. By forcing malware to reveal its weaponry into memory, the RTDMI engine proactively detects and blocks mass-market, zero-day threats and unknown malware.
SSL/TLS decryption and inspection	The SonicWall firewall decrypts and inspects SSL/TLS 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 SSL/TLS-encrypted traffic.
Dedicated third scanning radio	Most SonicWave access points include a dedicated that performs continual scanning of the wireless spectrum for rogue access points plus additional security functions that help with PCI compliance.
Wireless intrusion detection and prevention	Wireless intrusion detection and prevention scans the wireless network for unauthorized (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 SonicWall wireless guest services model of differentiated internet access for guest users, enabling extensive customization 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.

COMPREHENSIVE WIRELESS SECURITY, CONT'D

Feature	Description
Cloud ACL	An extension to local ACL, cloud ACL is deployed and managed from a centralized RADIUS server in the cloud. This eliminates local ACL scalability issues, enabling organizations 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 organizations to deploy multiple RADIUS servers in active/passive mode for high availability. Should the primary RADIUS server fail, the managing 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.
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.

SIMPLIFIED DEPLOYMENT AND CENTRALIZED MANAGEMENT

Feature	Description
Simplified setup and centralized management	SonicWave access points are automatically detected, provisioned and updated by the cloud or through SonicWall next-gen firewalls. WLAN administration is also handled directly from the managing firewall, simplifying setup and centralizing ongoing management.
WiFi planner	To optimize access point placement before deployment, the WiFi planning tool provides comprehensive visualization of the WiFi environment including obstacles that impact signal performance plus both covered and non-covered zones.
Floor plan view	Floor plan view is a WiFi planning tool that enables users to upload or create a floor plan and place SonicWave access points appropriately to ensure required wireless coverage.
Topology view	Topology view is a WiFi tool that automatically maps devices and how they are connected in the wireless network architecture in order to aid in troubleshooting.
Plenum rated	SonicWave access points are plenum rated for safe installation in air-handling spaces such as in or above suspended ceilings.
Multiple power options	SonicWave access points are powered from a SonicWall Power over Ethernet (PoE) Injector or third-party device for easy deployment where electrical outlets are not readily accessible.
Light controls	With dimmable LEDs (excluding power), SonicPoints fit perfectly into environments that need discreet wireless coverage.
Broad standards and protocols support	SonicWave access points support a wide range of wireless standards and security protocols, including 802.11 a/b/g/n/ac, WPA2 and WPA. This allows organizations to leverage prior investments in devices that are incapable of supporting higher encryption standards.

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 organization's cost to add wireless into a new or existing network infrastructure.
MiFi extender	MiFi Extender enables the attachment of a 3G/4G/LTE modem to the SonicWave access point for use as either the primary WAN or as a secondary failover WAN link for business continuity.
Bluetooth Low Energy	SonicWave access points include a Bluetooth Low Energy radio that enables the use of ISM (industrial, scientific and medical) applications for healthcare, fitness, retail beacons, security and home entertainment over a low energy link.
USB port	Access points with USB port supports 3G/4G failover. Plug in a dongle to the port and network continues to function over cellular connection, in case of WiFi network outage.
Green access points	SonicWave access points 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 access point will exit sleep mode once a client attempts to associate with it.

SonicWave 200 Series Access Points and Accessories Ordering Information

SONICWAVE 200 Series	SKU	
SonicWave 231c Wireless Access Point with Secure Cloud WiFi Management and Support 1YR (No PoE)	02-SSC-2095	
SonicWave 231c Wireless Access Point with Secure Cloud WiFi Management and Support 3YR (No PoE)	02-SSC-2097	
SonicWave 231c Wireless Access Point with Secure Cloud WiFi Management and Support 5YR (No PoE)	02-SSC-2096	
SonicWave 231c Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 3YR (No PoE)	02-SSC-2103	
SonicWave 231c Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 5YR (No PoE)	02-SSC-2102	
SonicWave 224w Wireless Access Point with Secure Cloud WiFi Management and Support 1YR (No PoE)	02-SSC-2107	
SonicWave 224w Wireless Access Point with Secure Cloud WiFi Management and Support 3YR (No PoE)	02-SSC-2109	
SonicWave 224w Wireless Access Point with Secure Cloud WiFi Management and Support 5YR (No PoE)	02-SSC-2108	
SonicWave 224w Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 3YR (No PoE)	02-SSC-2111	
SonicWave 224w Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 5YR (No PoE)	02-SSC-2110	
SonicWave 231o Wireless Access Point with Secure Cloud WiFi Management and Support 1YR (No PoE)	02-SSC-2115	
SonicWave 231o Wireless Access Point with Secure Cloud WiFi Management and Support 3YR (No PoE)	02-SSC-2117	
SonicWave 231o Wireless Access Point with Secure Cloud WiFi Management and Support 5YR (No PoE)	02-SSC-2116	
SonicWave 231o Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 3YR (No PoE)	02-SSC-2119	
SonicWave 231o Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 5YR (No PoE)	02-SSC-2118	
SonicWave 224w/231c Power Supply	01-SSC-9146	
SonicWave Multi-Gigabit 802.3at PoE Injector	01-SSC-5545	
SonicWave 231o Sector Antenna S122-12 Single Band 2.4GHz 12dBi (No RF Cable)	02-SSC-0504	
SonicWave 231o Sector Antenna S152-15 Single Band 5GHz 15dBi (No RF Cable)	02-SSC-0505	

For a complete list of SKUs please contact your local SonicWall reseller

SonicWave 400 Series Access Points and Accessories Ordering Information

SONICWAVE 400 Series	SKU	
SonicWave 432i Wireless Access Point with Secure Cloud WiFi Management and Support 1YR (No PoE)	01-SSC-2493	
SonicWave 432i Wireless Access Point with Secure Cloud WiFi Management and Support 3YR (No PoE)	01-SSC-2494	
SonicWave 432i Wireless Access Point with Secure Cloud WiFi Management and Support 5YR (No PoE)	01-SSC-2492	
SonicWave 432i Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 3YR (No PoE)	01-SSC-2487	
SonicWave 432i Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 5YR (No PoE)	01-SSC-2486	
SonicWave 432e Wireless Access Point with Secure Cloud WiFi Management and Support 1YR (No PoE)	01-SSC-2509	
SonicWave 432e Wireless Access Point with Secure Cloud WiFi Management and Support 3YR (No PoE)	01-SSC-2504	
SonicWave 432e Wireless Access Point with Secure Cloud WiFi Management and Support 5YR (No PoE)	01-SSC-2503	
SonicWave 432e Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 3YR (No PoE)	01-SSC-2562	
SonicWave 432e Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 5YR (No PoE)	01-SSC-2559	
SonicWave 432o Wireless Access Point with Secure Cloud WiFi Management and Support 1YR (No PoE)	01-SSC-2510	
SonicWave 432o Wireless Access Point with Secure Cloud WiFi Management and Support 3YR (No PoE)	01-SSC-2512	
SonicWave 432o Wireless Access Point with Secure Cloud WiFi Management and Support 5YR (No PoE)	01-SSC-2511	
SonicWave 432o Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 3YR (No PoE)	01-SSC-2570	
SonicWave 432o Wireless Access Point Secure Upgrade Plus with Secure Cloud WiFi Management and Support 5YR (No PoE)	01-SSC-2569	
SonicWave Multi-Gigabit 802.3at PoE+ Injector	01-SSC-2450	
SonicWave 432o Sector Antenna S124-12 (Single Band 2.4 GHz)	01-SSC-2461	
SonicWave 432o Sector Antenna S154-15 (Single Band 5 GHz)	01-SSC-2462	
SonicWave 432o Panel Antenna P254-07 (Dual Band)	01-SSC-2465	
SonicWave 432o Panel Antenna P254-13 (Dual Band)	01-SSC-2467	

For a complete list of SKUs please contact your local SonicWall reseller

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.

About SonicWall

SonicWall has been fighting the cybercriminal industry for over 27 years defending small and medium businesses, enterprises and government agencies worldwide. Backed by research from SonicWall Capture Labs, our award- winning, real-time breach detection and prevention solutions secure more than a million networks, and their emails, applications and data, in over 215 countries and territories. These organizations run more effectively and fear less about security. For more information, visit www.sonicwall.com or follow us on [Twitter](#), [LinkedIn](#), [Facebook](#) and [Instagram](#).