

# SonicWall™ SonicWave 432o

## Getting Started Guide

**IMPORTANT:** This device must be professionally installed using either the supplied antennas, or with other approved antennas available from SonicWall.

Regulatory Model Numbers:

APL42-0C1 (SonicWave 432o)



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### Legend



**WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.



**CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.



**IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

# Introduction

## In this Guide

This *Getting Started Guide* provides instructions for basic installation and configuration of the SonicWall™ SonicWave 432o wireless access points in single-unit or multi-unit wireless deployments.

For the latest product documentation, visit <https://www.sonicwall.com/en-us/support/technical-documentation>.

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# Professional Installation Validation

Because of the unique market and functionality targeted by this product, the SonicWave 432o requires specially trained professionals to configure and install the product. Also, according to FCC rules (similar rules in other regulatory domains), you are required to consult with an experienced professional RF installer/dealer/technician to conduct the installation, conform to the regulation, and correct the interference from the standard industry measures. The FCC requires you to be notified that any changes or modifications made to the device that are not expressly approved by SonicWall could void your authority to operate the equipment.

A professional installer is responsible for the proper installation and configuration of the outdoor SonicWave. The installer needs to understand and prepare for operating near any Terminal Doppler Weather Radar (TDWR) locations based on the FCC Memorandum and comply with all its requirements.

The professional installer needs to choose the correct antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication to ensure the reduction of potential radio interference with other users.

The professional installer must also properly select the current country of operation from the SonicWall configuration interface. Incorrectly entering the country of operation could

result in illegal operation and might cause harmful interference to other systems.

SonicWall Inc. hereby declares that this product is distributed through our controlled distribution channel and requires that trained professionals are to install this product, and we will not sell this product directly to the general public through retail stores.



**WARNING: Electrical Hazard: Only qualified personnel should perform installation procedures. Within the context of the safety notes in this documentation qualified persons are defined as persons who are authorized to commission, ground and label devices, systems, and circuits in accordance with established safety practices and standards. A qualified person understands the requirements and risks involved with installing outdoor electrical equipment in accordance with national codes.**

**Restricted Access location. This product is not intended to be installed and used in a home or public area accessible to the general population. When installed in schools, this equipment must be installed in a secure location accessible only by trained personnel.**

If you have any questions regarding the authorization, contact your SonicWall vendor for professional installation details.

# SonicWave 432o Wireless Overview

The SonicWall SonicWave 432o is the latest generation in SonicWall's evolutionary wireless access points. The SonicWave 432o extends your wireless LAN past the traditional boundaries of indoor locations. With state of the art design and construction, it is resistant to harsh outdoor environments and extreme temperature changes. The unit is designed specifically for outdoor use and should be attached to either a pole or post. Waterproof connectors are supplied to ensure watertight seals for connecting the Ethernet cables to the device.

The SonicWave 432o also provides physical layer enhancements for higher throughput with a maximum data rate of 1730 Mbps for 5GHz and 800Mbps for 2.4GHz. To achieve this, the SonicWave 432o uses:

- **More antennas**—four antennas for the 5 GHz radio, and four more for the 2.4 GHz radio.
- **Wider channels**—80 MHz-wide channels for the 802.11ac radio module, while continuing to support 20/40 MHz channels. This allows for dynamic per packet negotiation of channel widths so that when there is interference, the SonicWave can temporarily fall back to 40 or 20MHz channels.
- **More spatial streams**—4X4 multiple-input and multiple-output, (MU-MIMO) for the 802.11ac radio module, where the capacity of a radio link is multiplied using multipath propagation.

## Frequency Bands and Channels

Currently five standards for 802.11 wireless network types have been widely adopted: a, b, g, n, and ac. 802.11n and 802.11ac are the newest and highest capacity standards, but older client devices might not be able to utilize the newer standards.

## Wireless Standards

802.11 (x)	Frequency Standard	Maximum Data Rate
802.11a	5 GHz	54 Mbps
802.11b	2.4 GHz	11 Mbps
802.11g	2.4 GHz	54 Mbps
802.11n	2.4 GHz and 5 GHz	450 Mbps
802.11ac	5 GHz + MU-MIMO	2.34 - 3.47 Gbps

Different frequency bands provide varying signal strength and quality over different distance ranges. Signals in the 2.4 GHz range tend to pass through physical barriers better and carry farther than those in the 5 GHz range, but they do not provide as high a data rate. Signals in the 5 GHz range provide faster data rates for better throughput, but the signal attenuates faster and is best suited for open spaces.

### Strengths and Weaknesses of 5 GHz and 2.4 GHz Signals

	5 GHz	2.4 GHz
<b>Strength</b>	Higher speed, more channels	Longer range, stronger signal penetration
<b>Weakness</b>	Limited penetration of walls, client compatibility	More sources of interference

Refer to [Radio Frequency Barriers](#) on page 23 and [RF Interference](#) on page 23 for detailed information about RF barriers and interference.

To allow multiple separate wireless networks in a shared and confined space, the RF medium is divided into channels. For devices in the 5 GHz range (802.11a/n/ac), this means the possibility of up to 23 discrete channels.



For devices using the 2.4 GHz range (802.11b/g/n), the wireless space is limited to a maximum of 14 *overlapping* channels. As a result of these overlapping channels, 2.4 GHz technology provides only a total of three discrete channels.

## 802.11 Signal Comparison Chart

### 802.11 Signal Characteristics

	802.11a	802.11b	802.11g	802.11n	802.11ac
# of Channels in USA	23	11	11	11	21
# of Channels in EU	23	13	13	13	16
# of Channels in Japan	15	14	14	14	19
Frequency Band	5 GHz	2.4 GHz	2.4 GHz	2.4/5 GHz	5 GHz
Max. Data Rate	54 Mbps	11 Mbps	54 Mbps	800 Mbps (For 4X4 MU-MIMO)	1.7 Gbps (For QAM-64, MU-MIMO 4X4, and 80 MHz channels)
Radius (Range)	90ft/25m	120ft/35m	120ft/35m	300ft/90m	120ft/35m

**i** | **NOTE:** Although 802.11b/g/n standards provide between 11 and 14 channels, only three of those channels are fully discrete (non-overlapping) channels.

# Professional Installation

## Antenna Configuration

The available configuration methods for professional installers include:

- [Managed Mode Configuration](#) on page 10
- [Configuring Optional Sector or Panel Antennas](#) on page 10

Perform the initial configuration without the SonicWall firewall controller, attach a serial cable to the console port, and run the individual commands to configure the external antenna options.

To manage the SonicWave from the SonicOS management UI remotely, the SonicWave first needs to be connected to a SonicWall firewall over a layer 2 or layer 3 network, then you can log in to the SonicOS management interface and configure the external antennas for each SonicWave.

For a managed mode scenario, the SonicWave can be automatically discovered by SonicWall within the layer 2 network boundary. For a layer 3 deployment, refer to the *SonicOS Connectivity Administration* documentation to understand how a management tunnel is established and how to properly provision the network device along the network path. After the SonicWave is governed by a SonicWall firewall,

use the dedicated tool provided by SonicOS to complete the antenna option configuration.

## Managed Mode Configuration

Follow the steps in the *SonicOS Connectivity Administration* documentation to connect the SonicWave to the SonicWall firewall and configure the SonicWave in the *Managed mode*.

After the SonicWave is discovered, contact SonicWall for additional information on updating necessary internal settings.

## Configuring Optional Sector or Panel Antennas

Follow the steps included in the *SonicOS Connectivity Administration* documentation to boot the SonicWave and then connect the serial console cable to start the configuration.

After logging in to the console, enter the “proinstall” command to gain the access. SonicWave shows a prompt banner and requests a passcode.

Type in the serial number of the SonicWave in a hex string with all letters in uppercase as a passcode to enter the professional install mode.

In the professional install mode, the following commands are available:

**Help** – Provides all commands available with a description of each.

**Show** – Displays all available antennas with a key index.

**Set** – Configures both Radio 0 (5GHz) and Radio 1 (2.4GHz) with different antenna options.

**Get** – Shows the current antenna options for both Radio 0 and Radio 1.

**Exit** – Leaves the professional install mode.

### ***The following is an example configuration:***

```
#!/proinstall
Welcome to SonicWall SonicWave
Professional Install Mode. By entering the
passcode, you accept and agree to the terms
and conditions of the agreement from
HTTPS://WWW.SONICWALL.COM/LEGAL/EUPA.ASPX.
You also confirm yourself as the certified
RF professional installer and is obligated
to ensure the SonicWave is operating
```

```
according to the channel limitations,
outdoor restrictions and license
requirements for different domains and
countries.
```

```
PRO->
```

```
PRO->help
```

```
help - Provide all commands available
with description.
```

```
show all-antennas -- Show all
available antennas
```

```
show radio-antenna-settings -- Show
the current antenna options for both radio
0(5GHz) and radio 1(2.4GHz)
```

```
set radio [0 | 1] antenna
[0|1|2|3|4|5|6|7]
```

```
-- Set antenna for radio 0(5GHz radio) or
radio 1(2.4GHz)
```

```
commit -- Apply changes
```

```
exit -- Leave the professional install
mode
```

```
PRO->show
```

```
all-antennas -- Show all available
antennas which can be selected
```

```
radio-antenna-settings -- Show what
antenna has been selected for radio 5GHz/
2.4GHz
```

```
PRO->
```

```
PRO->show all-antennas
```

**i** **NOTE:** Choose 1 to 7 for an optional Sector or Panel antenna. Use option 0 to return to the Default antenna settings.

```
All Available antennas:
```

```
0 - Default (2.4GHz / 5GHz)
1 - S124-12 (2.4GHz Only)
2 - S154-15 (5GHz Only)
3 - P124-10 (2.4GHz Only)
4 - P154-12 (5GHz Only)
5 - P254-07 (2.4GHz / 5GHz)
6 - P254-09 (2.4GHz / 5GHz)
7 - P254-13 (2.4GHz / 5GHz)
```

```
PRO->
```

```
PRO->show radio-antenna-settings
```

```
Radio 0 (5GHz):      7 - P254-13 (2.4GHz / 5GHz)
```

```
Radio 1 (2.4GHz):   3 - P124-10 (2.4GHz Only)
```

```
PRO->
```

```
PRO->
```

```
PRO->set radio
```

```
Available Radios:
```

```
0 -- radio 0 (5GHz)
1 -- radio 1 (2.4GHz)
```

```
PRO->set radio 0
```

```
antenna -- antenna [0|1|2|3|4|5|6|7]
```

```
PRO->
```

```
PRO->
```

```
PRO->set radio 0 antenna
```

```
All Available antennas:
```

```
0 - Default (2.4GHz / 5GHz)
2 - S154-15 (5GHz Only)
4 - P154-12 (5GHz Only)
5 - P254-07 (2.4GHz / 5GHz)
6 - P254-09 (2.4GHz / 5GHz)
7 - P254-13 (2.4GHz / 5GHz)
```

```
PRO->
```

```
PRO->
```

```
PRO->
```

```
PRO->set radio 1 antenna
```

```
All Available antennas:
```

```
0 - Default (2.4GHz / 5GHz)
1 - S124-12 (2.4GHz Only)
3 - P124-10 (2.4GHz Only)
5 - P254-07 (2.4GHz / 5GHz)
6 - P254-09 (2.4GHz / 5GHz)
7 - P254-13 (2.4GHz / 5GHz)
```

```
PRO->set radio 1 antenna 3
```

```
<cr>
```

```
PRO->set radio 1 antenna 3
```

```
PRO->commit
```

```
PRO->exit
```

# Initial Setup

This section provides a basic checklist of materials, hardware information, and describes how to connect and configure physical aspects of the SonicWall SonicWave 432o including LEDs, antennas, cabling, placement, and mounting.

- [Check Package Contents](#) on page 14
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## Check Package Contents

Before continuing, ensure that your SonicWave 432o package contains the following materials:

### SonicWave 432o Appliance Checklist

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- SonicWave 432o Appliance
  - Antennas: 4 x 5GHz, 4 x 2.4GHz
  - Mounting hardware:
  - Getting Started Guide
  - SERI Guide
  - SonicWall console cable
  - Grounding Cable, Grounding Screw
- 

## Any Items Missing?

If any of the items corresponding to your product are missing from the package, contact Technical Support at: <https://www.sonicwall.com/support/contact-support>. A listing of the most current support documents are available online at: <https://www.sonicwall.com/support/technical-documentation>

## Performance Requirements

The user browser needs to include HTML5 support to properly access the SonicOS management user interface. For browser specifications; use Chrome 50 and higher, Firefox 50 and higher, or IE Edge 15 and higher.

Other browsers that do not support HTML5 might result in display issues or poor response times.

## Deployment Requirements

Use these instructions as guidelines to mount and connect the SonicWave 432o easily and safely. The installation of the SonicWave 432o should be performed by a professional installer to ensure proper operation and compliance with local safety guidelines.

### SonicOS Firmware

- SonicWall SonicWave 432o access points are centrally managed by SonicWall network security appliances running the following versions of SonicOS:
  - SonicOS 6.5 or higher

## Power Source

- Use a multi-gigabit 802.3at compliant PoE injector or a PoE switch to provide power to each SonicWave 432o.

## Internet Connectivity

- An active Internet connection is required for your firewall to download the latest SonicWave firmware.

## Gigabit Ethernet Connectivity

- The SonicWave 432o hardware requires more bandwidth than a 1 Gigabit Ethernet connection can handle. SonicWall recommends connecting your SonicWave (through a PoE device) to a 2.5 Gbps interface to take full advantage of the SonicWave 432o data throughput capability.

See [Product Safety and Regulatory Information](#) on page 35.

# Ground Connection

The ground connection for the SonicWave 432o is located on the back of the device. Attach the green ground to earth cable to the grounding terminal.

- 1 Use the ground screw assembly, with the star washer, to attach the ground wire's ring terminal to the

SonicWave. The wire should be as close to the SonicWave bottom as possible.

- 2 Tighten the screw securely.

# Mounting the SonicWave 432o Appliance

**ⓘ | IMPORTANT:** This device must be professionally installed.

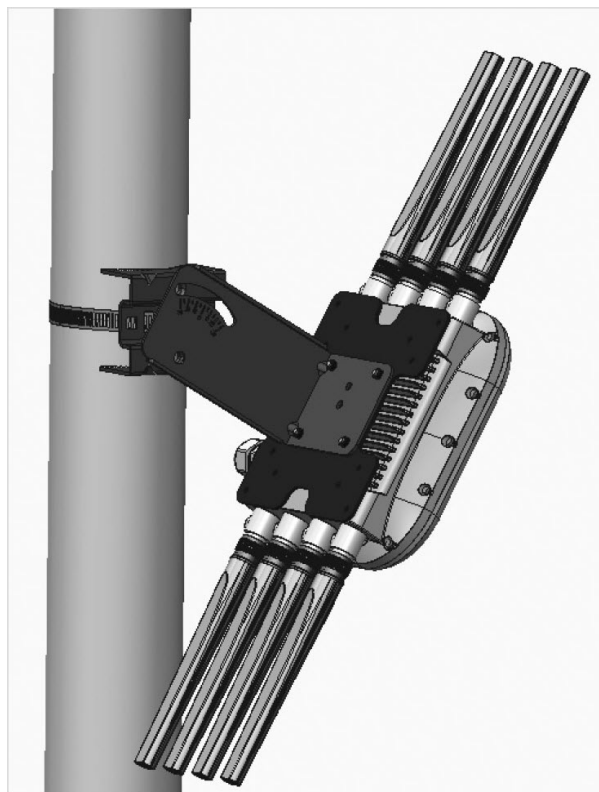
Attach the SonicWave 432o to a surface that can support it and withstand its environment. It can be mounted to a post or pole, and the surface material can be concrete, brick, wood, metal, or plastic.

## Mounting the SonicWave 432o on a Pole or Post

**i** **IMPORTANT:** This device must be professionally installed using either the supplied antennas or with approved alternate antennas available from SonicWall.

### *To mount the SonicWave 432o unit on a pole or post:*

- 1 Fasten the mounting base securely to the back of the SonicWave 432o using the provided mounting screws.
- 2 Attach the pole-mount bracket to the mounting base using the provided screws. The pole-mount bracket can be attached either vertically or at a tilt of up to 30 degrees, depending on your requirements.
- 3 Loop the provided pole strap through the slots on the pole-mount bracket and then around the pole.



- 4 Tighten the strap with an appropriate screw driver and ensure that the device is firmly in place.



# Installing SonicWave 432o

## Antennas

**IMPORTANT:** This device must be professionally installed using either the supplied antennas or with approved alternate antennas available from SonicWall.

Install the external antennas (or approved alternates) intended for area coverage. The SonicWave 432o features dual concurrent radio signals. Use the 2.4 GHz antennas to access Radio 1 (802.11 b/g/n at 600 Mbps) signals, and the 5 GHz antennas to access Radio 2 (802.11 a/n/ac at 1733 Mbps) signals. You should use all eight WiFi antennas to utilize both radio frequencies concurrently.

**CAUTION:** To prevent damage to the SonicWave 432o, all RF output ports must be attached to an approved antenna before the radios are enabled.

### *To install the antennas on your SonicWave 432o:*

- 1 Remove all eight antennas from their bags and place one on each of the appropriate connectors, matching the radio signals marked on the antennas to those marked above the connectors.
- 2 Insert the antenna base firmly into the antenna mount.

- 3 Carefully finger-tighten the fittings being cautious not to over-tighten them.
- 4 Repeat with the remaining antennas.



# Available Antennas for the SonicWave 432o


The following antennas are approved for use with the outdoor SonicWave 432o.

Antenna Mode	Band (GHz)	Antenna Gain (dBi)	Antenna Type	Deflection (Beamwidth)
Default: D121-05*/D151-07*	2.4/5G	5dBi/7dBi	Omni/Dipole	360°
S124-12†	2.4G	12dBi	Sector	120°
S154-15†	5G	15dBi	Sector	120°
P124-10‡	2.4G	10dBi	Panel	70°
P154-12‡	5G	12dBi	Panel	70°
P254-07	2.4/5G	5dBi/7dBi	Panel	90°
P254-09	2.4/5G	8dBi/9dBi	Panel	60°
P254-13	2.4/5G	12dBi/13dBi	Panel	40°

\* Default antennas provided with appliance.

† S124-12 and S154-15 must be used together.

‡ P124-10 and P154-12 must be used together.

 **CAUTION: To prevent damage to the SonicWave 432o, all RF output ports must be attached to an approved antenna before the radios are enabled.**

For details regarding these alternately approved antennas (including important safety information) refer to the respective antenna guides. Some antennas might not be offered for sale in all countries. Contact SonicWall for purchasing information.

The SonicWave default antenna configuration only supports Omni/Dipole antennas as shipped from the factory. When any other antenna or antenna pair is installed, the professional installer must correctly configure the SonicWave for the new antennas before

enabling the radios. Configuration instructions are included in this guide and with each antenna.

## Connecting Ethernet Cables

Provide adequate grounding to the SonicWave 432o and the PoE injector. The grounding screw and wire are provided for this purpose. Consult a certified electrician to ensure that all grounding and cabling is installed in compliance with local electrical codes. The SonicWave 432o is powered through Power over Ethernet (PoE), and should be cabled with CAT5e Ethernet cabling.

When using PoE, a SonicWall 802.3at compliant midspan PoE line injector (sold separately), or an 802.3at compliant switch is required to power each SonicWave 432o.

**i** **NOTE:** To maximize the SonicWave 432o's power capabilities, connect the PoE to a 2.5Gb port on the firewall.

### *To connect PoE to a SonicWave 432o:*

- 1 Install the cable gland adapter assembly through the LAN/PoE sealing nut, slide claw, and seal onto the RJ45 Ethernet cable.
- 2 Slide the seal and claw into the SonicWave 432o port.

- 3 Secure the seal nut onto the main assembly body.
- 4 Tighten the assembly by hand (finger-tight).
- 5 Repeat using a second Ethernet cable, connecting to the **Data & Power out** port on the SonicWall PoE Midspan injector to the **LAN1/PoE** port on your SonicWave 432o.

**i** **IMPORTANT:** Be sure cables are connected correctly.

- 6 Plug the power cord of the SonicWall PoE injector into an appropriate power outlet.
- 7 Wait for the **LAN1** LED on the SonicWave 432o to illuminate green. This indicates an active connection.

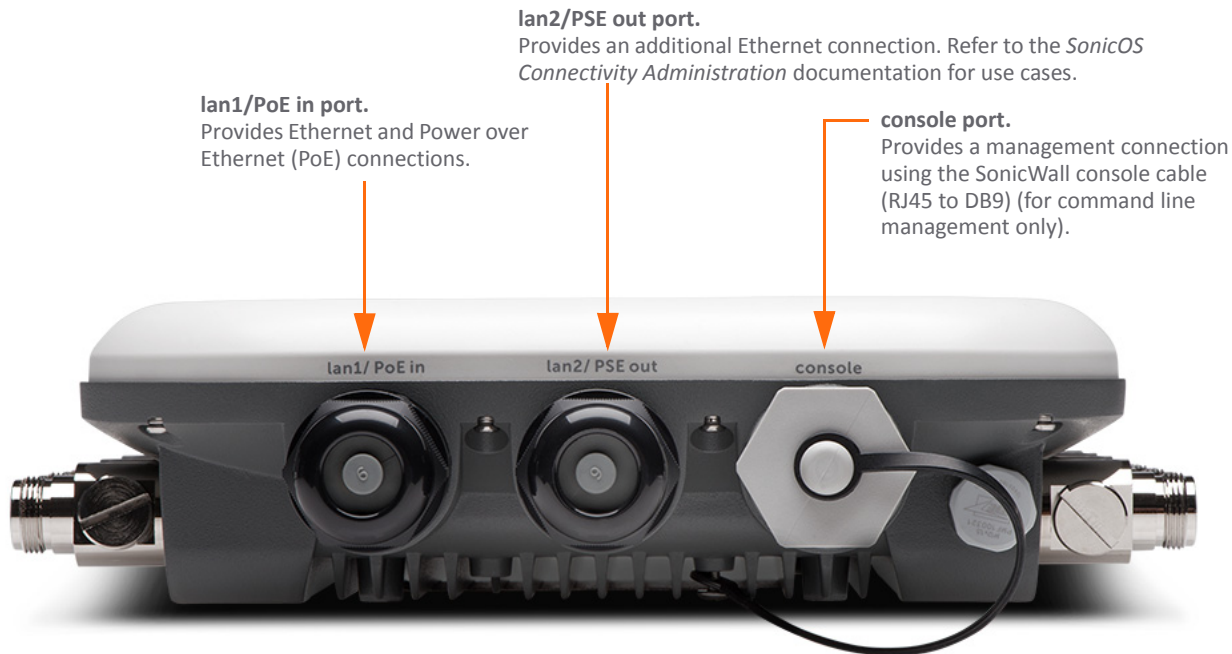
See [Product Safety and Regulatory Information](#) on page 35.

**△** **CAUTION:** A multi-gigabit 802.3at compliant PoE injector or PoE-capable switch is required to provide power to each SonicWave 432o.

To maintain power to the SonicWave 432o, the maximum length of CAT 5e cable from the 802.3at PoE injector to the SonicWave 432o is 100 meters (333 feet).

# SonicWave 432o Available Ports/Status LEDs

## Available Ports



## Status LEDs

### LED (5G)

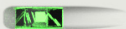
- On (solid green, 5 GHz radio link)
- Blinking green (5 GHz radio activity)



5G

### LED (2.4G)

- On (solid green, 2.4 GHz radio link)
- Blinking (2.4 GHz radio activity)



2.4G

wlan

### LED (lan2)

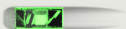
- On (solid yellow or green, Ethernet link)
- Blinking yellow (1G Ethernet activity)
- Blinking green (10/100M Ethernet activity)



lan2

### LED (lan1)

- On (solid yellow or green, Ethernet link)
- Blinking yellow (2.5G Ethernet activity)
- Blinking green (1G/100M Ethernet activity)



lan1

### LED (Power)

- On (solid blue, power)
- Blinking (booting/FW upgrade)



ⓘ

### LED (safe mode)

- On (solid blue, power) with 4
- Blinking (green)

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# Wireless Access Point Placement Considerations

Physical placement of the SonicWave 432o wireless access point has a measurable effect on who can and cannot access your wireless signal.

Access points should be kept clear of Radio Frequency (RF) interference sources. RF barriers can be circumvented by deploying multiple access points.

A site survey can help find the optimum wireless access point placement, but you can find usable locations without it.

Considerations include:

- **Number of Access Points Versus User Density** – If too many users are serviced by a single access point, maximum transfer rates are reached and that access point may become a bottleneck for the whole system.
- **Bandwidth** – How much data is moving upstream and downstream for a given type of user?
- **Ethernet Cabling** – Where are you running the powered Ethernet (PoE) cable to and how are you securing that cable? Are you using a multi-gigabit 802.3at compliant PoE injector or switch to power all access points?

To maintain power to the SonicWave 432o, the recommended maximum length of CAT5e cable from the 802.3at PoE injector to the SonicWave 432o is 100 meters (333 feet).

- **Hubs / Switches** – Your wireless deployment has to tie back into your network security appliance and LAN resources. Consider where your key networking devices are deployed and how they will connect efficiently with your wireless appliances. What speed is needed for your Ethernet connection to accommodate the number of access points you are installing? A Gigabit Ethernet interface is recommended when connecting a SonicWave 432o to your SonicWall network security appliance.
- **Legacy Clients** - Older laptops and mobile devices might not support 802.11ac. Although clients with 802.11a/g/b hardware are supported by the SonicWall SonicWave 432o, the presence of these legacy clients within range of your wireless network could affect the connection speed of your 802.11ac clients.

For example, an 802.11b device authenticated to the SonicWave 432o could limit all clients connected to that radio to 802.11b data rates.

## Radio Frequency Barriers

Determining how to circumvent RF barriers can be a challenging part of the placement process, but RF barriers can also be used beneficially in an attempt to block signals where you do not want coverage. The 5 GHz frequency is more sensitive to RF barriers. A wall that allows a 2.4 GHz wireless network to operate can block a 5 GHz one.

### Common RF Barrier Types

Barrier Type	RF Signal Blocking
Open air	Very Low
Glass, wood, drywall, cube partitions	Low
Floors and outer walls, aquariums (brick/marble/granite/water)	Medium
Concrete, security glass, wire mesh, stacked books/paper	High
Metal partitions, desks, reinforced concrete	Very High

## RF Interference

RF interference from home, office, and medical equipment is a common challenge in wireless deployments.

When considering RF interference sources, remember that most cell/wireless phones and Bluetooth devices only utilize the 2.4 GHz frequency. As such, they should not cause significant interference with wireless networks operating in the 5 GHz frequency.

### Common Sources of RF Interference

Interference Source	Possible Range	Bands Affected
2.4 GHz phones	100 feet	2.4 GHz (802.11 b/g/n)
Bluetooth devices	30 feet	2.4 GHz (802.11 b/g/n)
Microwave oven	10-20 feet	2.4 and 5 GHz, depending on shielding
Scientific and medical equipment	Short distance, varies	2.4 and 5 GHz, depending on shielding





# Configuring SonicOS for Wireless Access

This section provides instructions for configuring SonicOS on your SonicWall network security appliance to connect your SonicWave 432o to the WLAN zone and manage it as a Layer 2 device. For more advanced configurations, including Layer 3 management of your SonicWave 432o on a LAN zone, refer to the *SonicOS Connectivity Administration* documentation available on the Support Portal.

- [Configuring SonicOS for SonicWave 432o](#) on page 25
- [Verifying SonicWave Operation](#) on page 30
- [Troubleshooting Tips](#) on page 31

## Configuring SonicOS for SonicWave 432o

You only need to complete three simple configuration tasks in SonicOS to prepare your SonicWave 432o to provide secure wireless access.

- 1 Configure the network interface to which the SonicWave 432o is connected.
- 2 Configure the WLAN zone for trust and security services.
- 3 Configure the SonicWave 432o entry for the desired radio frequency, mode, and authentication type.

## Configuring the Network Interface

Each SonicWave or group of SonicWaves must be connected to a physical network interface that is configured in a wireless zone. SonicOS provides a standard wireless zone (WLAN) which can be applied to any available interface.

### To configure the network interface in SonicOS:

- 1 Log into SonicOS as an administrator (default: admin / password).
- 2 In the **MANAGE** view, navigate to the **System Setup | Network > Interfaces** page and click **Configure** for the interface to which your SonicWave is connected.
- 3 Select **WLAN** zone for the **Zone** type.
- 4 Select **Static IP Mode** for the **Mode/IP Assignment**.
- 5 In the **IP Address** field, type in any private IP address that does not interfere with the IP address range of any other interfaces on the appliance.
- 6 Enter a **Subnet Mask**. The default is 255.255.255.0.

- 7 Use the default settings or select appropriate settings for the other fields and then click **OK**.



**CAUTION:** Allowing **Management** and **User Login** to the appliance from a wireless zone can pose a security threat if you or your users have not set strong passwords.

### SonicOS 6.5 Interface Settings

**General** **Advanced**

#### Interface 'X12' Settings

Zone: WLAN

Mode / IP Assignment: Static IP Mode

IP Address: 172.203.28.2

Subnet Mask: 255.255.255.0

SonicPoint/SonicWave Limit: 128

Reserve SonicPoint/SonicWave Address:

Automatically  Manually

Comment: SonicWave

Management:  HTTPS  Ping  SNMP  SSH

User Login:  HTTP  HTTPS


Add rule to enable redirect from HTTP to HTTPS

Ready

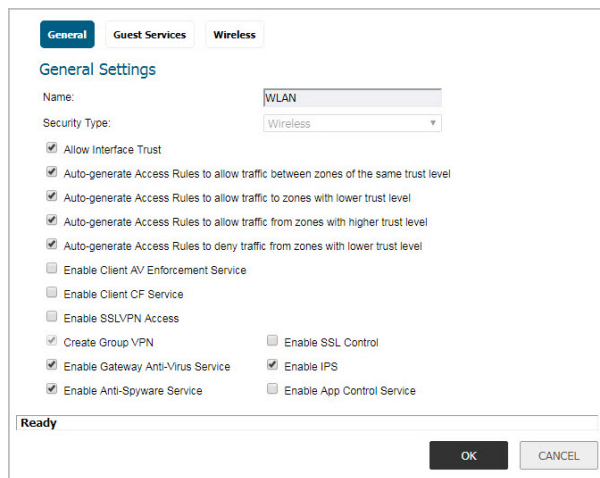
**OK** **CANCEL** **HELP**

# Configuring the WLAN Zone

*To configure the WLAN zone in SonicOS:*

- 1 In the **MANAGE** view on the **System Setup | Network > Zones** page, click the **Edit** icon  in the **Configure** column of the **WLAN** row.
- 2 On the **General** page, under **General Settings**, select the **Allow Interface Trust** option to automate the creation of Access Rules to allow traffic to flow between the interfaces within the zone, regardless of the interfaces to which the zone is applied.

For example, if the WLAN zone has both the **X2** and **X3** interfaces assigned to it, selecting **Allow Interface Trust** creates the necessary access rules to allow hosts on these interfaces to communicate with each other.



The screenshot shows the 'General Settings' configuration page for a WLAN zone. The 'Name' field contains 'WLAN' and the 'Security Type' is set to 'Wireless'. The following security services are checked:

- Allow Interface Trust
- Auto-generate Access Rules to allow traffic between zones of the same trust level
- Auto-generate Access Rules to allow traffic to zones with lower trust level
- Auto-generate Access Rules to allow traffic from zones with higher trust level
- Auto-generate Access Rules to deny traffic from zones with lower trust level
- Enable Client AV Enforcement Service
- Enable Client CF Service
- Enable SSLVPN Access
- Create Group VPN
- Enable SSL Control
- Enable Gateway Anti-Virus Service
- Enable IPS
- Enable Anti-Spyware Service
- Enable App Control Service

The status bar at the bottom indicates 'Ready' and includes 'OK' and 'CANCEL' buttons.

- 3 Select the checkboxes to enable security services on this zone. Minimally, you would select **Enable Gateway Anti-Virus Service**, **Enable IPS**, and **Enable Anti-Spyware Service**. If your wireless clients are all running SonicWall Client Anti-Virus, select **Enable Client AV Enforcement Service**.
- 4 In the **Guest Services** page, optionally configure guest Internet access. For information about Guest Services,

see the *SonicOS Connectivity Administration* documentation.

- 5 In **Wireless** under **SonicPoint/SonicWave Settings**, select **Only allow traffic generated by a SonicPoint/SonicWave** to allow only traffic from SonicPoints/SonicWaves to enter the WLAN zone interfaces, providing maximum security.
- 6 When finished, click **OK**.

## Configuring the SonicWave 432o Settings

When a SonicWave 432o is initially connected to an interface, the firewall uses a default provisioning profile to create a SonicWave 432o entry. It can take up to five minutes for the entry to be created.

You can modify the SonicWave 432o entry to configure the access point name, radio frequency mode, authentication type, and other settings specific to your SonicWave 432o.

- TIP:** For deployments of multiple SonicWaves that need the same provisioning settings, you can create a custom provisioning profile in the upper section of **Connectivity | Access Points > Base Settings** page in the **MANAGE** view. In **System Setup | Network > Zones** page, you can edit the WLAN zone and specify this profile on the **Wireless** page. Any SonicWaves connecting to an interface in the WLAN zone can then be provisioned with the assigned profile.

You might want to use the new **Floor Plan View** and **Topology View** features as well. See the *SonicOS Connectivity Administration* documentation for more information.

### *To modify the SonicWave 432o entry in SonicOS:*

- 1 In the **MANAGE** view, navigate to **Connectivity | Access Points > Base Settings**.
- 2 In the **SonicPoint/SonicWave Objects** table, click the **Configure** icon in the row for the SonicWave 432o entry you wish to modify.

### *General page settings:*

- 1 On the **General** page, select **Enable SonicPoint**.

- 2 In the **Name** field, optionally type in a new name for this SonicWave 4320. The existing name is assigned by the provisioning profile based on the name prefix in the profile with a unique number appended.

This is the access point name that appears in clients' lists of available wireless connections.

- 3 Verify the **Country Code** for the area of operation.
- 4 Configure the remaining options as necessary. For more information, see the *SonicOS Connectivity Administration* documentation.

### **Radio 0 Basic / Radio1 Basic Settings:**

- 1 Click **Radio 0 Basic**, or **Radio 1 Basic**.

The configuration is very similar for both Radio 0 Basic and Radio 1 Basic. The main differences are the radio frequencies:

<b>Radio</b>	<b>Frequency</b>	<b>Default Mode</b>
Radio 0	5 GHz	5GHz 802.11ac/n/a Mixed
Radio 1	2.4 GHz	2.4GHz 802.11n/g/b Mixed

- 2 Select **Enable Radio**.
- 3 Select a **Mode** or use the default.

- 4 Under Wireless Security, select the **Authentication Type** for your wireless network. SonicWall recommends using **WPA2** as the authentication type if all client devices support it.

**i** | **TIP:** *PSK* uses a personal passphrase for authentication, *EAP* uses an Enterprise RADIUS server.

- 5 Select the **Cipher Type**. When using WPA and WPA2, SonicWall recommends **AES** for maximum security.

**i** | **NOTE:** Older client devices might not support AES.

- 6 Fill in the fields specific to the authentication type that you selected. The remaining fields change depending on the selected authentication type.
- 7 Optionally, under **ACL Enforcement**, select **Enable MAC Filter List** to enforce Access Control by allowing or denying traffic from specific devices. Select a MAC address object group from the **Allow List** or **Deny List** to automatically allow or deny traffic to and from all devices with MAC addresses in the group. The **Deny List** is enforced before the **Allow List**.

### **Virtual Access Point Encryption Settings:**

- i** | **NOTE:** This section displays only if a VAP was selected from the Radio 0 Basic/1 Virtual AP Group drop-down menu in the **Virtual Access Point Settings** section of the **General** page.

The **Virtual Access Point Encryption Settings** section of both **Radio 0 Basic** and **Radio 1 Basic** are the same for the **802.11n Radio**.

### **Radio 0 Advanced / Radio1 Advanced Settings:**

- 1 Click **Radio 0 Advanced** or **Radio 1 Advanced**.

The configuration is very similar for Radio 0 Advanced and Radio 1 Advanced. For most advanced options, the default settings give optimum performance. For a full description of the fields on this page, see the *SonicOS Connectivity Administration* documentation.

- 2 Optionally select the **Hide SSID in Beacon** checkbox.

The *SSID* refers to the access point name that appears in clients' lists of available wireless connections.

Hiding the SSID provides additional security because it requires that you know the access point name before connecting.

- 3 When finished configuring all options, click **OK**.

### **Sensor page**

On the Sensor page, enable or disable **Wireless Intrusion Detection and Prevention (WIDP) mode**.

- i** | **NOTE:** If this option is selected, Access Point or Virtual Access Point(s) functionality is disabled automatically.

- 1 Select **Enable WIDF sensor** to have the SonicWave operate as a dedicated WIDP sensor. This option is not selected by default.
- 2 From the drop-down menu, select the schedule for when the SonicWave operates as a WIDP sensor or select **Create new schedule...** to specify a different time; default is **Always on**.

## **Verifying SonicWave Operation**

To verify that the SonicWave is provisioned and operational, in the **MANAGE** view, navigate to the **Connectivity | Access Points > Base Settings** page in SonicOS. In the **SonicPoint/SonicWave Objects** table, the **Status** column displays the SonicWave 432o status. It should say **Operational**.

### **To verify Internet connectivity through the SonicWave:**

- 1 Connect a client device to the SonicWave by selecting the appropriate access point name (SSID).
- 2 Ensure that the client device is not connected to any other network connections (wired LAN, 3G/4G WWAN).
- 3 In a browser, enter “https://www.SonicWall.com/” in the address bar and press **Enter**. The SonicWall website displays. If you are unable to browse to a website, refer to [Troubleshooting Tips](#).

- Ensure that the SonicWave 432o is properly connected by Ethernet cable to an 802.3at compliant PoE device or to the supplied power adaptor.
- If an 802.3at compliant PoE injector is being used, verify that the SonicWave 432o is connected to the PoE port labeled **Data & Power Out**.

If the SonicWave 432o has an entry in the table, but reboots frequently or seems non-functional:

- Verify that your PoE switch/injector is 802.3at compliant and rated to deliver sufficient power to each PoE port. 802.3af compliant PoE devices do not provide sufficient power to properly run current generation 802.11 devices. A multi-gigabit 802.3at compliant PoE injector or switch is required to power the SonicWall SonicWave 432o over Ethernet.
- Click **Synchronize Access Points** on the **Connectivity | Access Points > Base Settings** page in **MANAGE** view to force SonicOS to download a new SonicWave firmware image from the SonicWall back-end server.

## **Troubleshooting Tips**

When the SonicWave 432o is connected to a SonicWall network security appliance, the two units perform an encrypted exchange, and an entry for the SonicWave 432o is automatically created in the **SonicPoint/SonicWave Objects** table. In the **MANAGE** view, navigate to the **Connectivity | Access Points > Base Settings** page in SonicOS.

If the entry does not appear in the table within five minutes of connecting the SonicWave 432o:

- Make sure the SonicWave 432o is connected to an interface that is configured as part of a wireless zone. Either the default WLAN zone or a custom zone with type set to “wireless” is required.





# Support and Product Registration

This section provides information about registering your SonicWall SonicWave 432o, requirements for receiving technical support, and other online support and training options.

- [Registration and Support](#) on page 33
- [Online Support and Training](#) on page 34

## Registration and Support

All SonicWave 432o wireless access points include an initial subscription to SonicWall 24x7 Support.

SonicOS automatically registers your SonicWave 432o on MySonicWall, if connected to the Internet. It could take up to 24 hours for your SonicWave 432o to be automatically registered.

Optionally, you can manually register the SonicWave 432o on MySonicWall by logging into your account at: <http://www.MySonicWall.com>.

The SonicWave 432o is also associated in MySonicWall with the registered SonicWall network security appliance to which it is connected. See the Associated Products section at the bottom of the appliance Service Management page in MySonicWall.

For the access point to operate, and to receive technical support, your SonicWave 432o must have a current “Activation and Support” license.

**IMPORTANT:** If the license expires, the access point will cease to function until the license is renewed.

## Online Support and Training

SonicWall offers a variety of online support and training options for your convenience.

- **Customer Support**

SonicWall offers telephone, email and Web-based support to customers who have a valid Warranty or who purchased a Support Contract. Review our Warranty Support Policy for product coverage. SonicWall also offers a full range of consulting services to meet your needs.

For more information, visit: <https://www.sonicwall.com/support>

- **Knowledge Base**

The Knowledge Base allows users to search for SonicWall documents by browsing the knowledge base, searching for keywords, or using full-text search.

For more information, visit: <https://www.sonicwall.com/support/knowledge-base-category>

- **Training**

SonicWall offers an extensive sales and technical training curriculum. SonicWall Training provides the E-Training, instructor-led training, custom training, technical certification, and uses authorized training partners.

For more information, visit: <https://www.sonicwall.com/support/sonicwall-training-certification>

- **Related Documentation**

- *SonicOS Connectivity Administration* documentation
- SonicOS Release Notes
- SonicOS Configuration or Deployment Guides

For more information, visit: <https://www.sonicwall.com/support/technical-documentation>

# Product Safety and Regulatory Information

This section provides product safety and regulatory information.

- [Safety Instructions for the SonicWave 432o Appliances](#) on page 36
- [Sicherheitsanweisungen](#) on page 38
- [EU and EFTA](#) on page 40
- [Simplified EU/CE Declaration of Conformity](#) on page 40

SonicWave 432o complies with FCC U-NII New Rules.

Regulatory Model/Type	Product Name
APL42-0C1	SonicWave 432o



**CAUTION**  
Hot Surface  
Do Not Touch

**i** **NOTE:** Additional regulatory notifications and information for this product can be found online at: <https://www.sonicwall.com/support/technical-documentation>

## Safety Instructions for the SonicWave 432o Appliances

- [Installation Requirements](#) on page 36
- [Approved Alternate Antennas](#) on page 37
- [Professional Installation Notice](#) on page 37
- [Cable Connections](#) on page 37
- [Power Supply Information](#) on page 38

## Installation Requirements

### WARNING:

The following conditions are required for proper installation:

- Mount in a location away from direct sunlight and sources of heat. A maximum ambient temperature of 140° F (60° C) is recommended.

- Route cables away from power lines, fluorescent lighting fixtures, and sources of noise such as radios, transmitters, and broadband amplifiers
- Ensure that no water or excessive moisture can enter the unit.
- Allow unrestricted airflow around the unit. A minimum of 1 inch (25.44mm) clearance is recommended.
- Consideration must be given to the connection of the equipment to the supply circuit and that the effect of overloading the circuits has minimal impact on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings must be used when addressing this concern.
- This equipment is not intended for use at workplaces with visual display units, in accordance with §2 of the German ordinance for workplaces with visual display units. To avoid incommoding reflections at visual display workplaces, this device must not be placed in the direct field of view.
- This product is not intended to be installed and used in a home or public area accessible to the general population. When installed in schools, this equipment must be installed in a secure location accessible only by trained personnel.

## Approved Alternate Antennas

Alternate antennas used with the SonicWave 432o must be approved and certified before use. However, in order to comply with the local laws and regulations, an approval might be required by the local regulatory authorities.

The included antennas have been tested and approved for use with the SonicWave 432o model.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p) is not more than that required for successful communication.

Contact SonicWall for a list of antennas approved for use with the SonicWave 432o.

## RF Safety Distance

The antennas used for this transmitter must be installed to provide a separation distance of at least 58 cm (based on 150cm for the SonicWave 432o) from all persons and must not be co-located or operating in conjunction with another antenna or transmitter. This requirement applies to the SonicWave 432o.

## Professional Installation Notice

To comply with FCC part 15 rules in the United States, the SonicWave 432o must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

## Cable Connections

### **WARNING:**

RS232 (Console) cables are designed for intra-building connection to other equipment. Do not connect these ports directly to communication wiring or other wiring that exits the building where the appliance is located.

## Power Supply Information

This product's power is provided by the Ethernet cable plugged into the "LAN1" port, this is called "Power over Ethernet" or "PoE." The PoE source should only be UL listed marked "Class 2" or "LPS" with an output rated 48 VDC, minimum 0.6 A, Tma: minimum 40 degrees C.

If PoE output on LAN2 is used to power an 802.3af compliant device, the PoE source should only be UL listed marked "Class 2" or "LPS," with an output rated 48 VDC, minimum 1.26 A, Tma: minimum 40 degrees C.

LAN2 PSE output is 48 VDC, maximum 0.3 A.

## Sicherheitsanweisungen

- [Anforderungen an die Installation](#) on page 38
- [Verwarnung Kabelverbindungen](#) on page 39
- [Informationen zur stromversorgung SonicWave 432o](#) on page 39

## Anforderungen an die Installation

### Verwarnung:

Für eine ordnungsgemäße Montage sollten die folgenden Hinweise beachtet werden:

- Wählen Sie für die Montage einen Ort, der keinem direkten Sonnenlicht ausgesetzt ist und sich nicht in der Nähe von Wärmequellen befindet. Die Umgebungstemperatur darf nicht mehr als 60 °C betragen.
- Führen Sie die Kabel nicht entlang von Stromleitungen, Leuchtstoffröhren und Störquellen wie Funksendern oder Breitbandverstärkern.
- Das im Lieferumfang enthaltene bzw. die im Lieferumfang enthaltenen Netzkabel sind nur für die Verwendung in bestimmten Ländern und Regionen zugelassen. Überprüfen Sie bitte vor der Verwendung eines Netzkabels, ob es für die Verwendung in Ihrem Land oder Ihrer Region zugelassen ist und den geforderten Normen entspricht.
- Stellen Sie sicher, dass das Gerät vor Wasser und hoher Luftfeuchtigkeit geschützt ist.
- Stellen Sie sicher, dass die Luft um das Gerät herum zirkulieren kann und die Lüftungsschlitze an der Seite

des Gehäuses frei sind. Hier ist ein Belüftungsabstand von mindestens 26 mm einzuhalten.

- Prüfen Sie den Anschluss des Geräts an die Stromversorgung, damit der Überstromschutz sowie die elektrische Leitung nicht von einer eventuellen Überlastung der Stromversorgung beeinflusst werden. Prüfen Sie dabei sorgfältig die Angaben auf dem Aufkleber des Geräts. Überlasten Sie nicht den Stromkreis.
- Dieses Gerät ist nicht zur Verwendung an Arbeitsplätzen mit visuellen Anzeigegeräten gemäß § 2 der deutschen Verordnung für Arbeitsplätze mit visuellen Anzeigegeräten vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert werden.
- Dieses Produkt ist nicht dafür entwickelt, um in Bereichen mit öffentlichem Zugang betrieben zu werden. Wenn es in Schulen betrieben wird, stellen Sie sicher, dass das Gerät in einem abgeschlossenen Raum installiert wird, der nur von speziell ausgebildetem Personal betreten werden kann.

## Verwarnung Kabelverbindungen

RS232-C-Kabel eignen sich für die Verbindung von Geräten in Innenräumen. Schließen Sie an die Anschlüsse der SonicWall keine Kabel an, die aus dem Gebäude herausgeführt werden, in dem sich das Gerät befindet.

## Informationen zur Stromversorgung SonicWave 4320

Die Stromversorgung durch das Ethernet-Kabel in die "LAN1"-Anschluss angeschlossen vorgesehen ist, wird dies als "Power over Ethernet" oder "PoE." Dieses Produkt darf nur in Verbindung mit einem für den Europäischen Markt genehmigten und mit dem Logo „LPS.“ Ausgang: 48 VDC Gleichspannung, mind. 0,6 A, mindest TMA mindestens 40° Grad C, betrieben werden.

Wenn PoE-Ausgang auf LAN2 verwendet wird, um ein 802.3af-kompatibles Gerät zu versorgen, dieses Produkt darf nur in Verbindung mit einem für den Europäischen Markt genehmigten und mit dem Logo „LPS.“ Ausgang: 48 VDC

Gleichsspannung, mind. 1,26 A, mindest TMA mindestens 40° Grad C, betrieben werden.

LAN2 PSE Ausgang ist 48 VDC Gleichsspannung, maximal 0,3 A.

## EU and EFTA

This SonicWall appliance contains radio equipment to provide 2.4 GHz and 5 GHz RLAN/WLAN. To maintain Radio Equipment Directive 2014/53/EU compliance, use only SonicOS software and accessories provided with this appliance and by SonicWall.

Diese SonicWall Appliance enthält Funkanlagen zur Bereitstellung von RLAN/WLAN im Frequenzbereich von 2,4 GHz und 5 GHz. Verwenden Sie zur Einhaltung der Funkanlagenrichtlinie 2014/53/EU (Radio Equipment Directive – RED) ausschließlich SonicOS Software und Zubehör, das mit dieser Appliance und von SonicWall bereitgestellt wird.

To maintain safe exposure levels to electromagnetic fields, place appliance a minimum of 58 cm from all persons and domestic animals.

Zur Einhaltung unbedenklicher Expositionswerte durch elektromagnetische Felder sollte sich die Appliance mindestens 58 cm von Personen und Haustieren entfernt befinden.

### SonicWave 432o RF Transmitter Bands and Power

Frequency Band	Maximum Radio-Frequency Power Transmitted
MHz	dBm EIRP
2412 - 2472	19.76
5260 - 5320	Not currently enabled in the SonicWave software
5500 - 5700	29.47

## Simplified EU/CE Declaration of Conformity

A “Declaration of Conformity” in accordance with the directives and standards has been made and is on file at: SonicWall International Limited, City Gate Park, Mahon, Cork, Ireland.

Hereby, SonicWall Inc. declares that the radio equipment type 2.4 GHz and 5 GHz RLAN/WLAN is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following Internet address: <https://www.SonicWall.com/Support>



Hierbij verklaar ik, SonicWall Inc., dat het type radioapparatuur 2.4 GHz and 5 GHz RLAN/WLAN conform is met Richtlijn 2014/53/EU.

De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: <https://www.SonicWall.com/Support>

Hiermit erklärt SonicWall Inc., dass der Funkanlagentyp 2.4 GHz and 5 GHz RLAN/WLAN der Richtlinie 2014/53/EU entspricht.

Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: <https://www.SonicWall.com/Support>

Le soussigné, SonicWall Inc., déclare que l'équipement radioélectrique du type 2.4 GHz and 5 GHz RLAN/WLAN est conforme à la directive 2014/53/UE.

Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: <https://www.SonicWall.com/Support>

С настоящото SonicWall Inc. декларира, че този тип радиосъоръжение 2.4 GHz and 5 GHz RLAN/WLAN е в съответствие с Директива 2014/53/ЕС.

Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: <https://www.SonicWall.com/Support>

Tímto SonicWall Inc. prohlašuje, že typ rádiového zařízení 2.4 GHz and 5 GHz RLAN/WLAN je v souladu se směrnicí 2014/53/EU.

Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: <https://www.SonicWall.com/Support>

Hermed erklærer SonicWall Inc., at radioudstyrstypen 2.4 GHz and 5 GHz RLAN/WLAN er i overensstemmelse med direktiv 2014/53/EU.

EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: <https://www.SonicWall.com/Support>

Με την παρούσα ο/η SonicWall Inc., δηλώνει ότι ο ραδιοεξοπλισμός 2.4 GHz and 5 GHz RLAN/WLAN πληροί την οδηγία 2014/53/ΕΕ.

Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: <https://www.SonicWall.com/Support>

Por la presente, SonicWall Inc. declara que el tipo de equipo radioeléctrico 2.4 GHz and 5 GHz RLAN/WLAN es conforme con la Directiva 2014/53/UE.

El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: <https://www.SonicWall.com/Support>

Käesolevaga deklareerib SonicWall Inc., et käesolev raadioseadme tüüp 2.4 GHz and 5 GHz RLAN/WLAN vastab direktiivi 2014/53/EL nõuetele.

ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: <https://www.SonicWall.com/Support>

SonicWall Inc. vakuuttaa, että radiolaitetyypin 2.4 GHz and 5 GHz RLAN/WLAN on direktiivin 2014/53/EU mukainen.

EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: <https://www.SonicWall.com/Support>

SonicWall Inc. ovime izjavljuje da je radijska oprema tipa 2.4 GHz and 5 GHz RLAN/WLAN u skladu s Direktivom 2014/53/EU.

Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: <https://www.SonicWall.com/Support>

SonicWall Inc. igazolja, hogy a 2.4 GHz and 5 GHz RLAN/WLAN típusú rádióberendezés megfelel a 2014/53/EU irányelvnek.

Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: <https://www.SonicWall.com/Support>

Il fabbricante, SonicWall Inc., dichiara che il tipo di apparecchiatura radio 2.4 GHz and 5 GHz RLAN/WLAN è conforme alla direttiva 2014/53/UE.

Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: <https://www.SonicWall.com/Support>

Aš, SonicWall Inc., patvirtinu, kad radijo įrenginių tipas 2.4 GHz and 5 GHz RLAN/WLAN atitinka Direktivą 2014/53/ES.

Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: <https://www.SonicWall.com/Support>

Ar šo SonicWall Inc. deklarė, ka radioiekārta 2.4 GHz and 5 GHz RLAN/WLAN atbilst Direktīvai 2014/53/ES.

Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: <https://www.SonicWall.com/Support>

B'dan, SonicWall Inc., niddikjara li dan it-tip ta' tagħmir tar-radju 2.4 GHz and 5 GHz RLAN/WLAN huwa konformi mad-Direttiva 2014/53/UE.

It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: <https://www.SonicWall.com/Support>

SonicWall Inc. niniejszym oświadcza, że typ urządzenia radiowego 2.4 GHz and 5 GHz RLAN/WLAN jest zgodny z dyrektywą 2014/53/UE.

Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: <https://www.SonicWall.com/Support>

Prin prezenta, SonicWall Inc. declară că tipul de echipamente radio 2.4 GHz and 5 GHz RLAN/WLAN este în conformitate cu Directiva 2014/53/UE.

Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: <https://www.SonicWall.com/Support>

SonicWall Inc. týmto vyhlasuje, že rádiové zariadenie typu 2.4 GHz and 5 GHz RLAN/WLAN je v súlade so smernicou 2014/53/EÚ.

Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: <https://www.SonicWall.com/Support>

SonicWall Inc. potvrdzuje, da je tip radijske opreme 2.4 GHz and 5 GHz RLAN/WLAN skladen z Direktivo 2014/53/EU.

Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: <https://www.SonicWall.com/Support>

Härmed försäkrar SonicWall Inc. att denna typ av radioutrustning 2.4 GHz and 5 GHz RLAN/WLAN överensstämmer med direktiv 2014/53/EU.

Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: <https://www.SonicWall.com/Support>



**NOTE:** Additional regulatory notifications and information for this product can be found online at: <https://www.sonicwall.com/support/technical-documentation>



# SonicWall Support

Technical support is available to customers who have purchased SonicWall products with a valid maintenance contract and to customers who have trial versions.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. To access the Support Portal, go to <https://www.sonicwall.com/support>.

The Support Portal enables you to:

- View knowledge base articles and technical documentation
- View video tutorials
- Access MySonicWall
- Learn about SonicWall professional services
- Review SonicWall Support services and warranty information
- Register for training and certification
- Request technical support or customer service

To contact SonicWall Support, visit <https://www.sonicwall.com/support/contact-support>.



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