

SIGNALPLUS Omni Directional WiFi Antenna

SIGNALPLUS Omni-Directional 2.4G/5.8G 12dBi WiFi Antenna User Manual

Model: Omni Directional WiFi Antenna | Brand: SIGNALPLUS

1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of your SIGNALPLUS Omni-Directional 2.4G/5.8G 12dBi WiFi Antenna. This antenna is designed to enhance wireless signal reception and extend the range of compatible WiFi devices.

Key features include:

- Dual-band operation: Supports both 2.4GHz and 5.8GHz WiFi systems (802.11a/b/g and 802.11a).
- Compatibility: Works with WiFi devices featuring external antenna interfaces.
- Signal Enhancement: Improves reception, increases signal strength, and extends the range of WiFi hotspots (routers/cameras).
- High Gain: Features 11/12dBi gain for stronger signal power and longer range.
- Omni-Directional Design: Allows for optimal positioning to maximize WiFi reception.
- Plug and Play: No external power or complex setup required.

2. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x WiFi Omni-Directional Antenna
- 1 x 3-meter (9.8 ft) RG58 RP-SMA Cable
- 1 x RP-SMA Male to SMA Male Adapter
- Mounting hardware (U-bolts, brackets, nuts, washers)



Figure 1: Package contents including the antenna, cable, adapter, and mounting hardware.

3. SPECIFICATIONS

Feature	Specification
Frequency Range	2400-2500 MHz / 5150-5850 MHz
Gain	11-12 dBi

Vertical Beamwidth	7°
VSWR	≤ 2.0
Nominal Impedance	50 Ω
Polarization	Vertical
Maximum Power	100 W
Length	Φ32 x 75 cm (approx. 1.26 x 29.5 inches)
Weight	1 kg (approx. 2.2 lbs)
Rated Wind Velocity	60 m/s
Antenna Connector	N Female
Cable Connector (Antenna End)	N-Male
Cable Connector (Device End)	RP-SMA Female
Adapter Included	RP-SMA Male to SMA Male
Operating Temperature	-30°C to 60°C

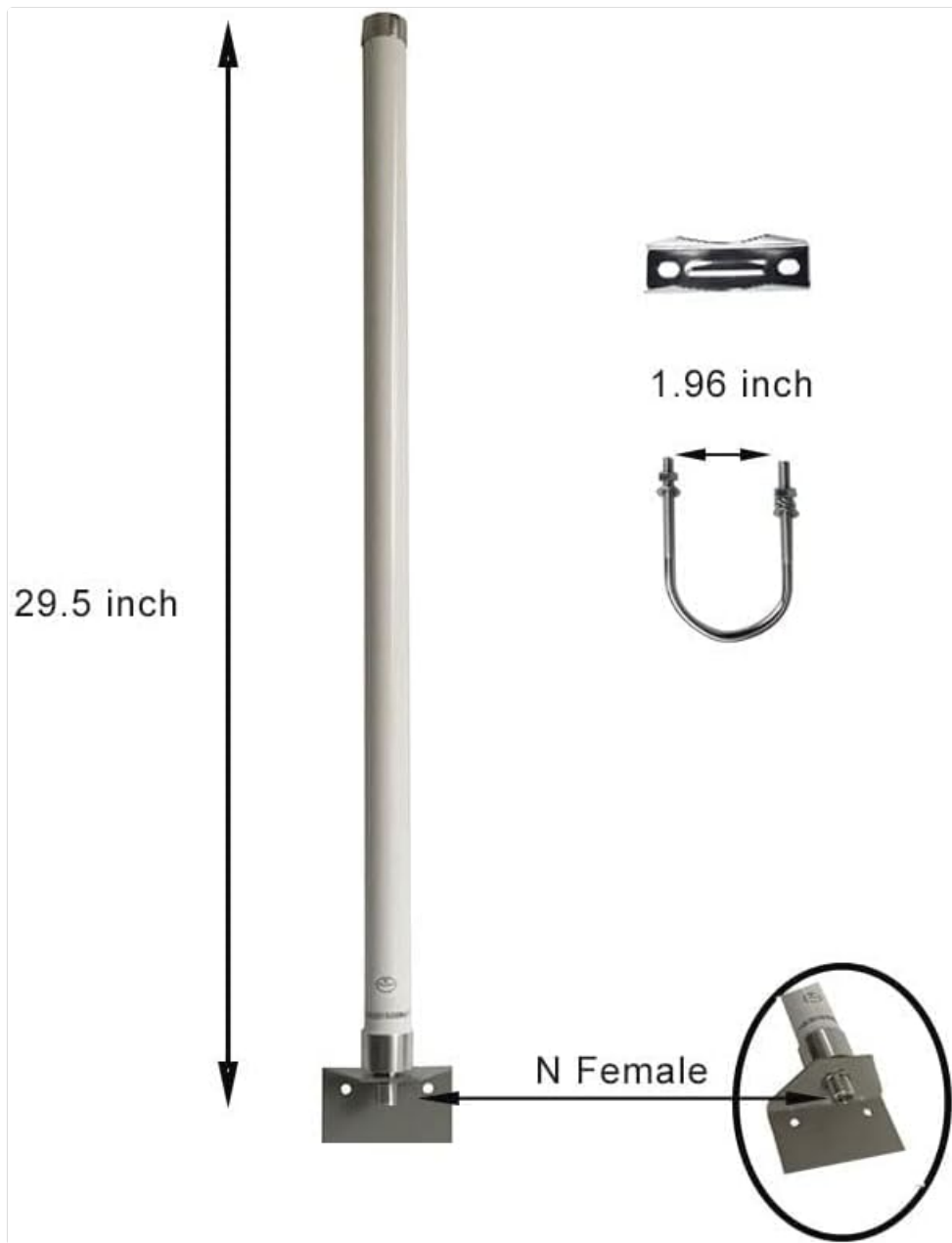


Figure 2: Antenna dimensions (29.5 inches) and the N Female connector at the base.



Figure 3: The included 118-inch (3-meter) RG58 cable with N-Type Male (antenna end) and RP-SMA Male (device end) connectors. An RP-SMA Male to SMA Male adapter is also shown.

4. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance. The antenna is designed for outdoor use and should be mounted in a position with minimal obstructions.

4.1 Assembling the Antenna and Mounting Bracket

1. Attach the mounting bracket to the base of the antenna using the provided screws and nuts. Ensure a secure fit.
2. Connect the N-Male end of the RG58 cable to the N-Female connector on the antenna base. Tighten securely.
3. Use the U-bolts and associated hardware to attach the antenna assembly to a pole or suitable mounting surface. Ensure the antenna is vertically oriented for best omni-directional performance.



Figure 4: Detail of the N-Female connector on the antenna base and the mounting bracket attachment points.

Wifi Antenna

POINT TO THE SIGNAL SOURCE DIRECTION



2.4G



5.8G

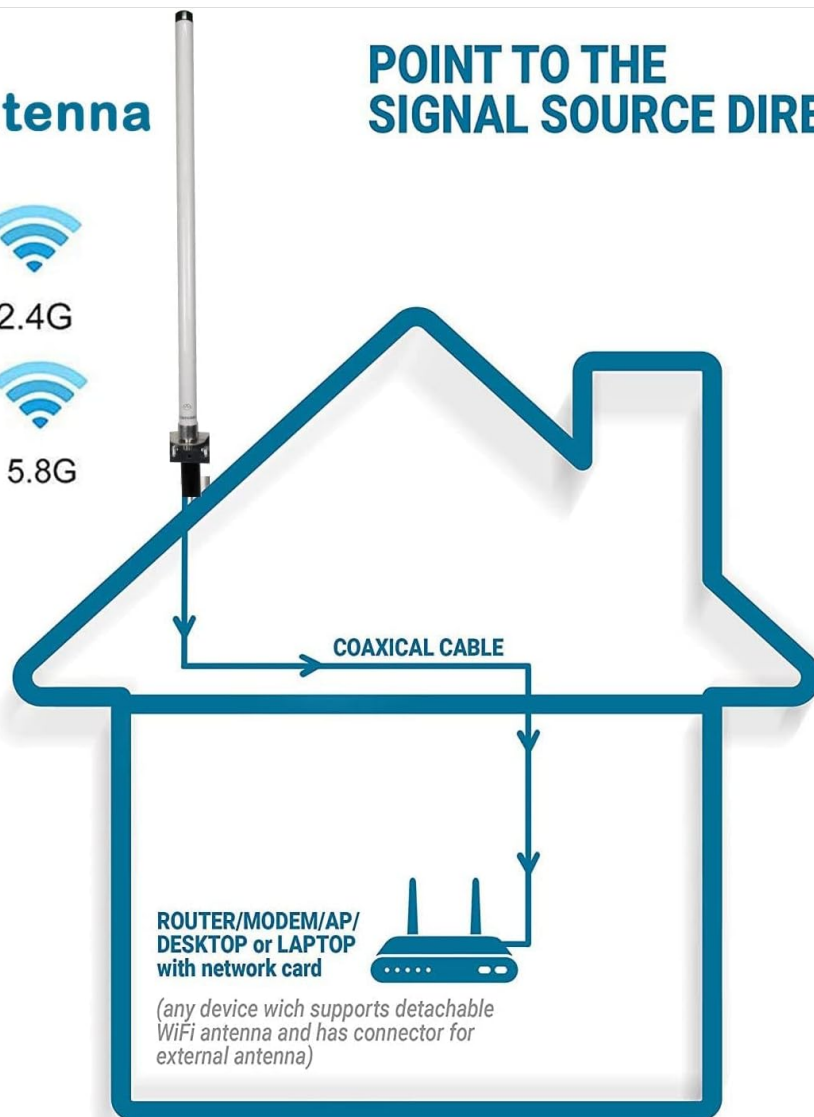


Figure 5: The antenna mounted on a pole, demonstrating the use of U-bolts for secure attachment.

4.2 Connecting to Your Device

1. Locate the external antenna port on your WiFi device (router, extender, security camera, etc.). This port is typically RP-SMA Female.
2. Connect the RP-SMA Male end of the RG58 cable to your device's antenna port. Hand-tighten until secure.
3. If your device uses an SMA connector, use the included RP-SMA Male to SMA Male adapter. First, connect the RP-SMA Male end of the cable to the adapter, then connect the SMA Male end of the adapter to your device.

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Figure 6: Examples of compatible devices such as wireless cameras, PCI-E cards, PC desktops, drones, and WiFi routers, showing the RP-SMA Female connector on network devices.

4.3 Placement Considerations

The performance of any antenna is significantly influenced by its surroundings. As an omni-directional antenna, it broadcasts and receives signals in all directions. To maximize its effectiveness:

- Mount the antenna as high as possible.
- Ensure a clear line of sight to the areas where you need improved WiFi coverage.
- Avoid placing the antenna near large metal objects, thick walls, trees, or concrete structures that can block or interfere with the signal.



Figure 7: Illustration of an outdoor WiFi antenna connected via coaxial cable to a router/modem inside a house, demonstrating how proper placement extends signal range.

4.4 Installation Video

Watch this video for a visual guide on installing an external WiFi antenna:

Your browser does not support the video tag.

Video 1: This video demonstrates the process of installing an external WiFi antenna, including mounting and connection steps. It shows the antenna being set up for a Spypoint trail camera, but the general installation principles apply to various WiFi devices.

5. OPERATING INSTRUCTIONS

The SIGNALPLUS Omni-Directional WiFi Antenna is a passive device and does not require external power. Once physically connected to a compatible WiFi device, it operates automatically to enhance signal transmission and reception.

- Ensure your WiFi device is powered on and configured to use the external antenna port if applicable.
- No software installation or specific settings are typically required for the antenna itself.
- Monitor your device's signal strength indicators to confirm improved connectivity.

6. MAINTENANCE

The SIGNALPLUS Omni-Directional WiFi Antenna is designed for outdoor, all-weather use with a rugged build. Minimal maintenance is required.

- Periodically inspect the antenna and its mounting hardware for any signs of wear, corrosion, or loosening.
- Ensure all cable connections remain tight and free from moisture. Applying dielectric grease and electrical tape to outdoor connections can help prevent corrosion.
- Clean the antenna's exterior with a soft, damp cloth if it becomes dirty to maintain optimal performance. Avoid abrasive cleaners.

7. TROUBLESHOOTING

If you experience issues with your antenna, consider the following:

- **Poor Signal Strength:**
 - Verify the antenna is mounted in an optimal location, free from obstructions.
 - Check all cable connections to ensure they are secure and correctly attached.
 - Ensure the cable length is appropriate; excessively long cables can lead to signal loss.
 - Confirm your device is compatible with external antennas and the correct connector type is used.
- **No Connectivity:**
 - Double-check all physical connections between the antenna, cable, and device.
 - Test your WiFi device with its original antenna (if detachable) to rule out device-specific issues.

8. WARRANTY AND SUPPORT

SIGNALPLUS offers a 1-month replacement warranty and 100% satisfaction guarantee for this product. If you receive a defective unit or encounter any issues, please contact customer support for assistance.

For further support, please refer to the official SIGNALPLUS store on Amazon: [Visit SIGNALPLUS Store](#)

