

2.4/5 GHz Junction Box Wi-Fi Antenna

Ventev's TerraWave 2.4/5 GHz Junction Box Wi-Fi Antenna is concealed within a standard three-gang electrical box. The antenna's cover plate looks like a standard junction box cover, providing building managers, IT network operators, and building architects with an aesthetically appealing Wi-Fi antenna that will blend into existing room décor for "out of sight" coverage and capacity. The antenna is designed to be installed within a dry wall cut-out where the 6' leads can connect to a nearby access point. The directional antenna provides 0-45 degree articulation to provide excellent coverage and capacity in one or more rooms. *Every Ventev TerraWave antenna is covered by the company's two-year warranty program. For questions and to purchase product, contact a regional sales executive at 210-375-8482, 800-851-4965 or sales@ventev.com.*

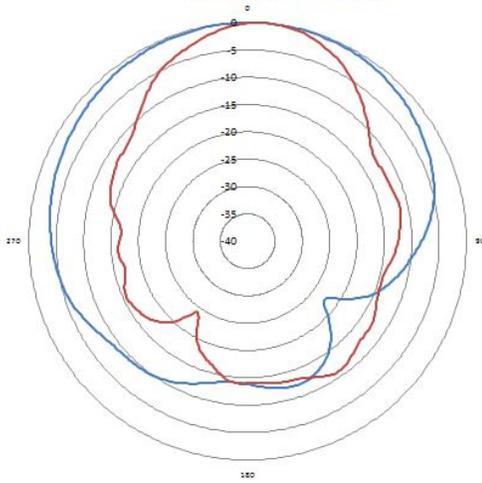


Specifications		
Model Number	M040030D33620WS	
Frequency Range	2400 — 2484 MHz	4900 — 5885 MHz
Gain	5dBi	6dBi
Polarization	2 x Horizontal 2 x Vertical	
Horizontal Beamwidth	75° ± 15°	
Vertical Beamwidth	75° ± 15°	
Front to Back Ratio	9 dB	12 dB
VSWR/Impedance	2:1	
Isolation—Cross Polarized Ports	12 dB	20 dB
Input Power	20 W	
Dimensions (L x W x H)	Gang Box Only	6" x 3.7" x 3.6"
	With Cover	6.75" x 3.85" x 4.88"
Connector type	4 x RPTNC Plug	
Pigtail Length	72" / 6'	
Mounting Options	Wall Mount	
Application Environment	Inside Drywall Installation	
Construction	Three Gang Electrical Box	
Tilt Option	0° - 45°	
Radome Color	White	

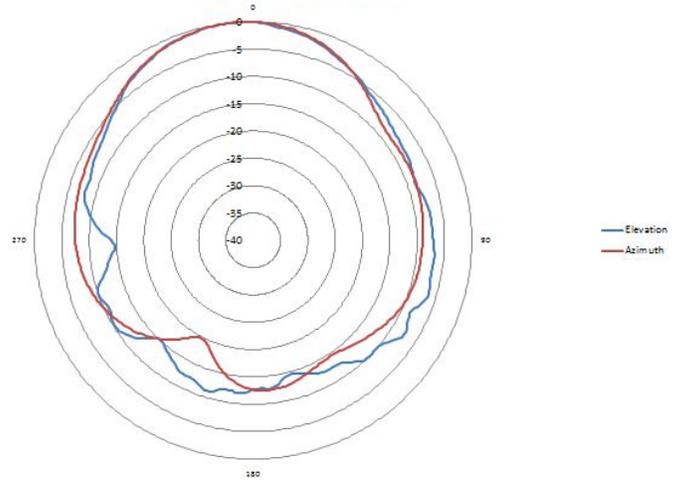
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Radiation Patterns

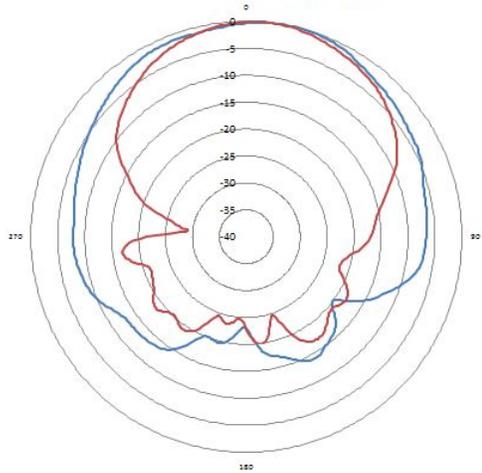
2400 - 2484 MHz: H Pol



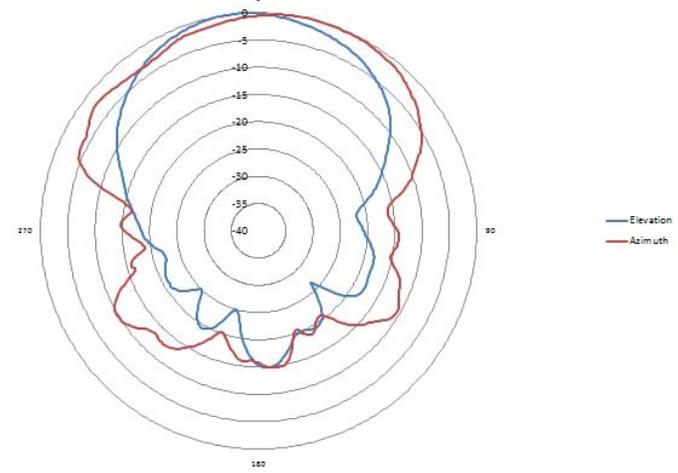
2400 - 2484 MHz: V Pol



4900 - 5885 MHz: H Pol



4900 - 5885 MHz: V Pol



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INSTALLATION

Note 1: The Junction Box Wi-Fi Antenna is delivered with the antenna pointing straight forward at the 0° position. The antenna's standard position can be moved +/-45° within the junction box so that the RF beam will provide a more precise coverage pattern.

Note 2: Precise beam positioning is accomplished through a combination of junction box orientation and antenna positioning within the junction box. Figure 1 identifies the antenna components that will be referenced in the antenna positioning steps.

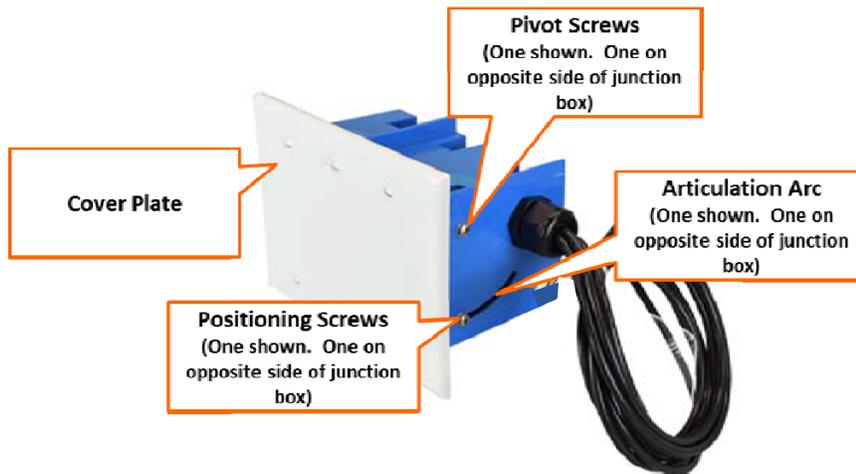


Figure 1

Antenna Positioning:

1. First, orient the junction box so that the antenna's RF beam can point in the desired direction.
 - a. Ensure the Articulation Arcs are at the top of the junction box for an RF beam that points up. Refer to Figure 2.
 - b. Ensure the Articulation Arcs are at the bottom of the junction box for an RF beam that points down. Refer to Figure 3.
 - c. Maintain the articulation arc in the desired orientation through the remainder of the antenna positioning steps



Figure 2



Figure 3

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Antenna Positioning (cont.):

2. Remove the cover plate from the front of the junction box using a standard screwdriver.
3. Loosen the pivot screws on both sides of the junction box using a Phillips head screwdriver.
4. Loosen the positioning screws on both sides of the junction box using a Phillips head screwdriver.
5. Grip both positioning screws between thumbs and index fingers, and rotate the antenna to the desired position.
6. Hold one positioning screw in place and tighten the other screw at the desired position. Then, tighten the second positioning screw.
7. Tighten the pivot screws to lock the antenna's position.

Note 3: Do not reinstall the cover plate until after the antenna is positioned within the drywall as described in the next steps.

Junction Box Installation and Connection:

Note 4: The Junction Box Wi-Fi Antenna can be installed in many different environments / locations. The procedures in this step describe a common in-wall installation environment.

Note 5: The following installation steps assume the location of the access point has already been selected.

Note 6: Reminder: When installing the junction box into the wall, ensure the articulation arc is at the top of the junction box for an upward pointing RF beam, or the bottom of the junction box for a downward pointing RF beam.

1. Trace the outline of the junction box on the drywall at the location of desired antenna placement.
2. Cut out the traced section of drywall with a utility knife or other tool. Remove the cut section of drywall.
3. Run a cable snake or pull cord inside drywall from the access point (AP) to the mounting hole for the junction box.
4. Attach the pull cord to the connector side of the antenna's cables.
5. Pull the cables through the rectangular hole in the drywall.
6. Install the edge of the junction box with the cables into the rectangular cut out in the drywall first.
7. Rotate the other side of the junction box into the hole just after the cable end of the junction box antenna clears the inside of the drywall.
8. Push the junction box fully into the hole until the face of the junction box is flush with the drywall.
9. Tighten the four junction box wall anchors by tightening the wall anchor screws with a Phillips head screwdriver. Ensure the junction box is secured within the drywall.
10. Cover the junction box with the wall plate that shipped with the antenna.
11. Connect the cables to the AP.