

Industrial Wireless 2-port High Gain Panel Antenna (IW-ANT-PNL-515-N)

This chapter contains the following sections:

- Overview, on page 1
- Specifications, on page 3
- Mechanical Drawings, on page 4
- Radiation Charts, on page 8
- Installation Options, on page 10

Overview

The Industrial Wireless 2-port high gain panel antenna (IW-ANT-PNL-515-N) is a directional 2-port array solution deployed in a variety of applications. Its versatile mounting solutions and unique and highly efficient radiation properties make this antenna a suitable solution for point-to-point communications in the industrial wireless space.

The antenna is equipped with two N(f) connectors and comes with 2x LMR-240 cables. The IW-ANT-PNL-515-N is also compatible with the bracket and mounting schemes for Cisco's IW9165D Industrial client.

Figure 1: Antenna Side

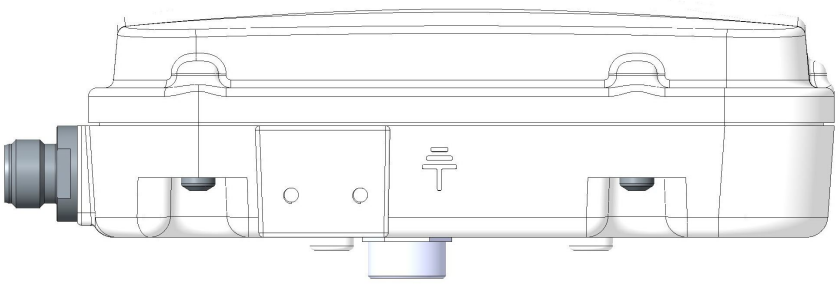
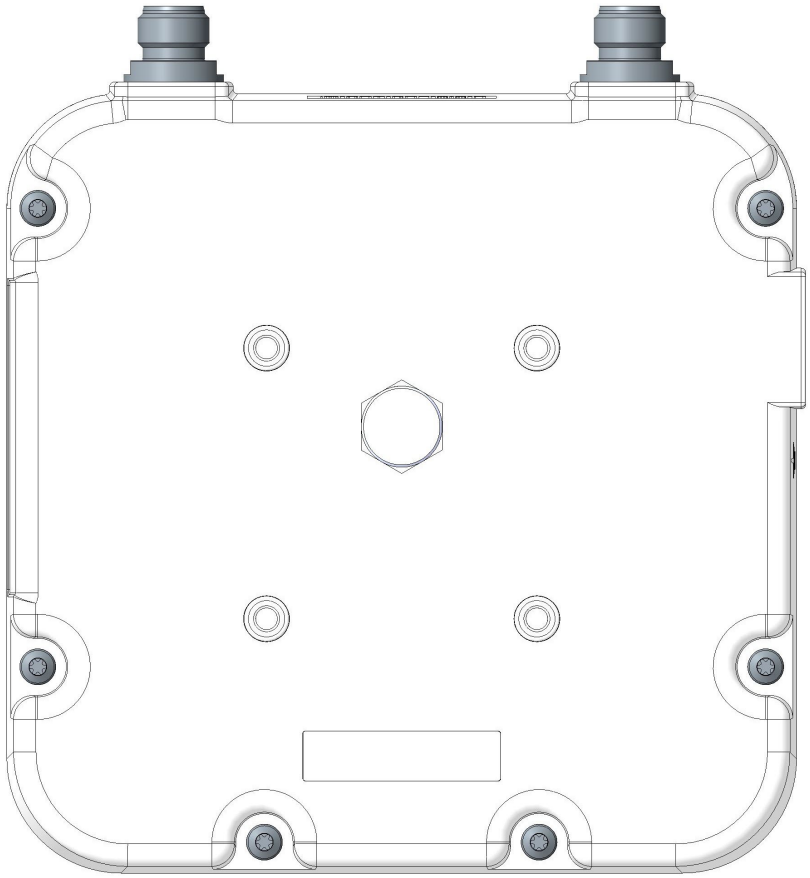


Figure 2: Antenna Front



Figure 3: Antenna Back



Features include the following:

- Compact design
- 15 dBi Gain
- 2x N(f) ports
- 2x, N(m)-to-N(m), LMR-240, 3m cables
- Compatible mounting with IW9165D
- IP66/67 rated
- High port-to-port isolation

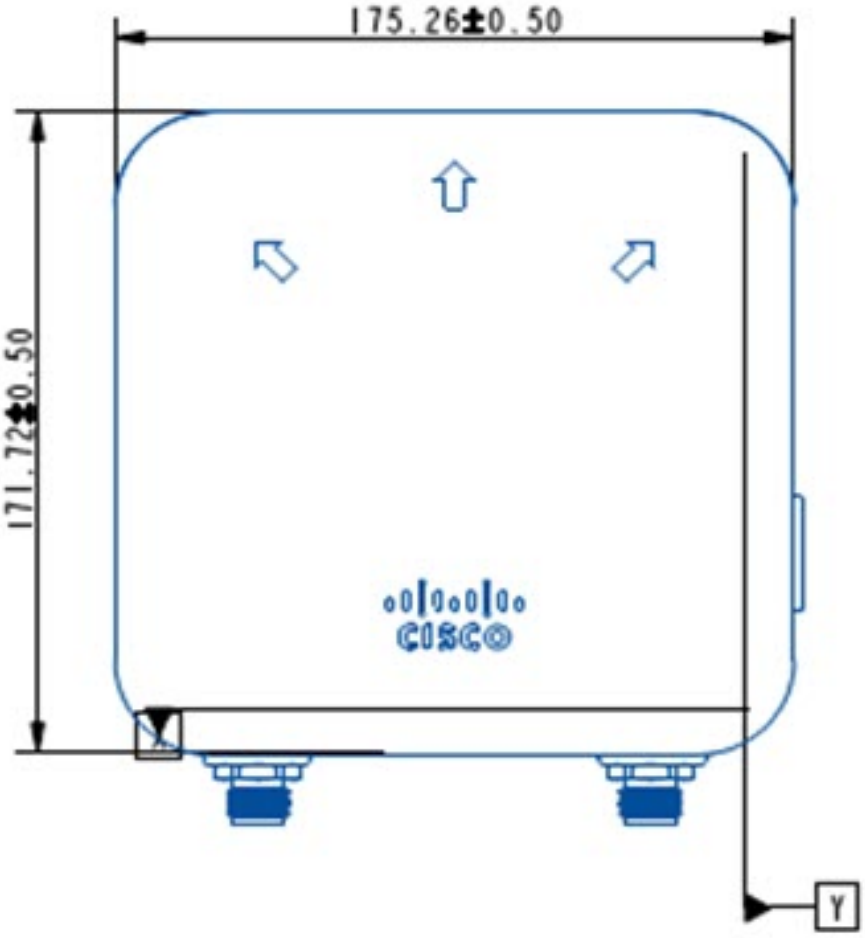
Specifications

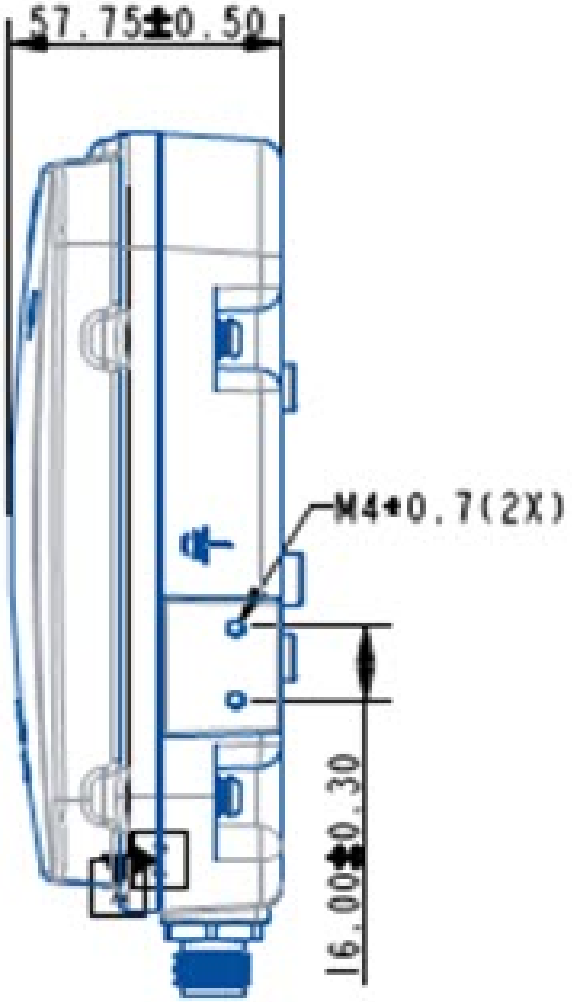
The following table lists the specifications for the antenna:

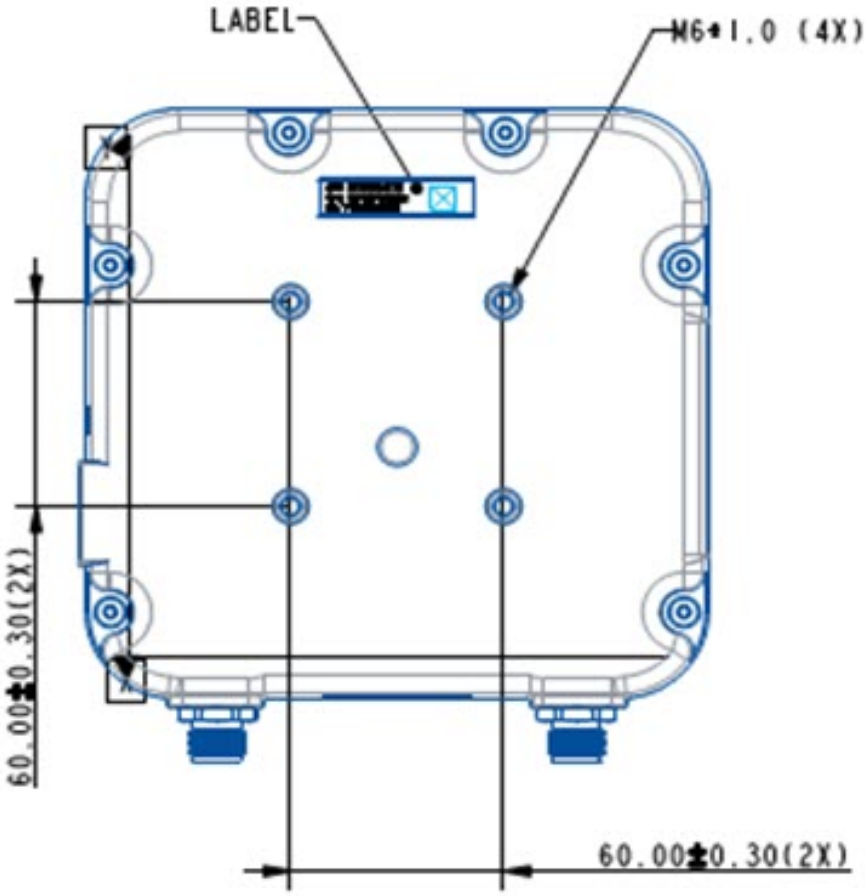
Specification	Description
Frequency	4900-5925 MHz
Polarization	±45°
VSWR	< 2.2:1
Port-to-Port Isolation	> 25 dB
Maximum Gain	15 dBi
HPBW (V, H)	21±4 deg, 28±5 deg
Size	7.5 in x 6.9 in x 2.3 in 191.3mm x 175.3mm x 57.8mm
Cable length	3 m
Cable Type	LMR 240, N(m)-to-N(m)
Connector	N-Type, female
Wind rating	200 km/h
Operating temp	-40 to +85 °C
Flammability	UL-94 V0
IP rating	IP66, IP67

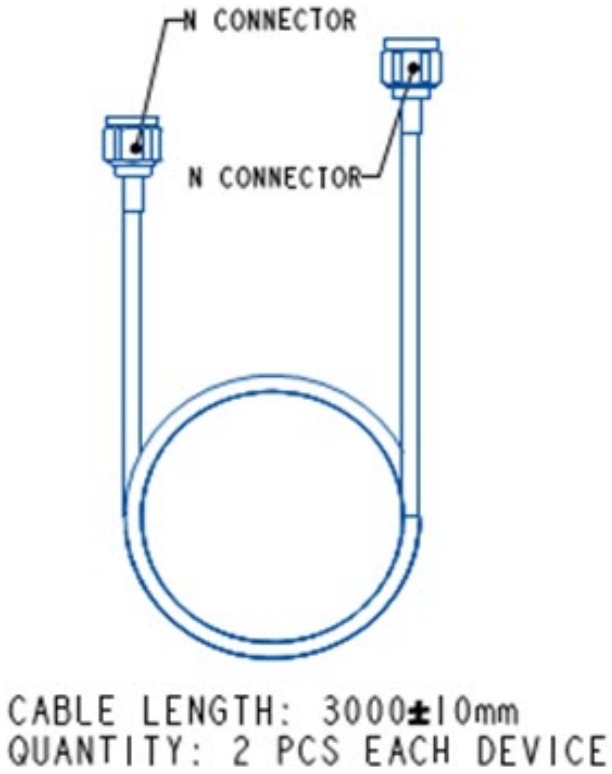
Mechanical Drawings

The following images show details about the antenna:


175.26±0.50
171.72±0.50
X
Y


57.75±0.50
M4*0.7(2X)
16.00±0.30


LABEL
M6*1.0 (4X)
60.00±0.30(2X)
60.00±0.30(2X)



Radiation Charts

The 5 GHz band radiation patterns are shown below. For illustration purposes, the reference coordinates of such polar plots are mapped to the following device orientation.

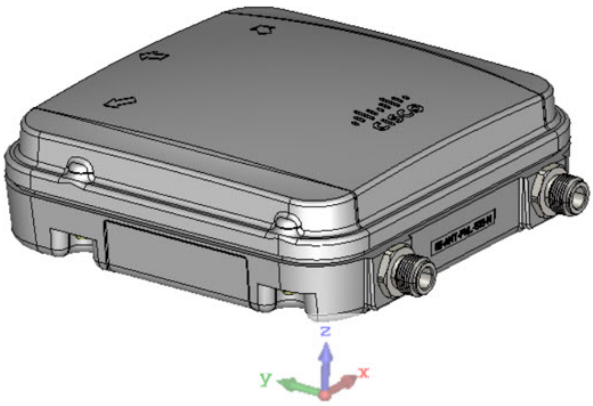


Figure 4: Vertical Plane (Y-Z)

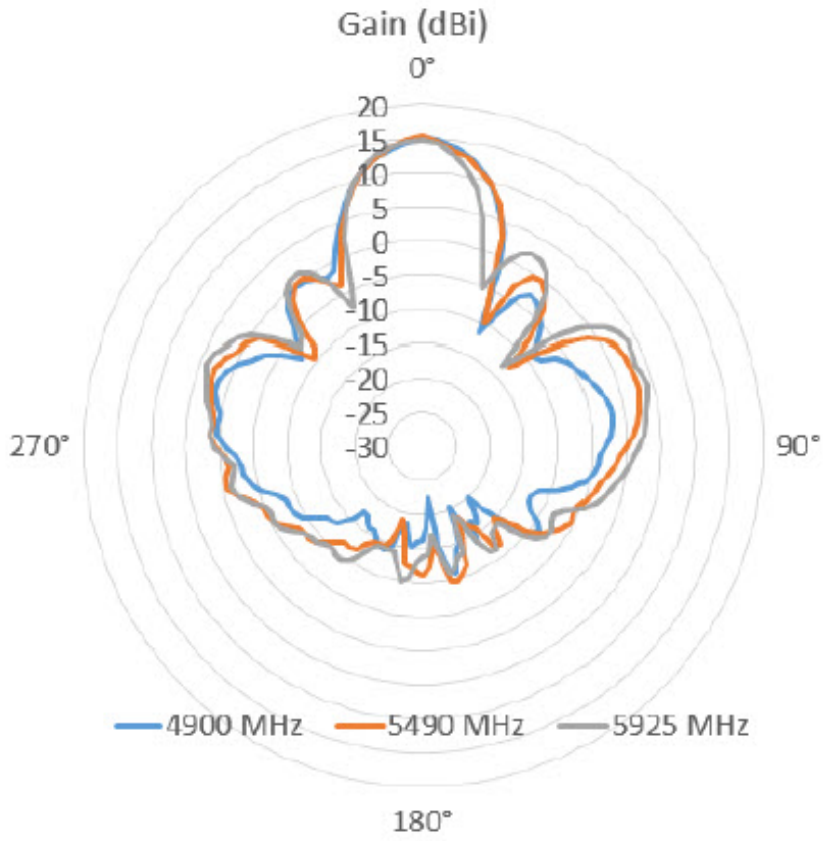
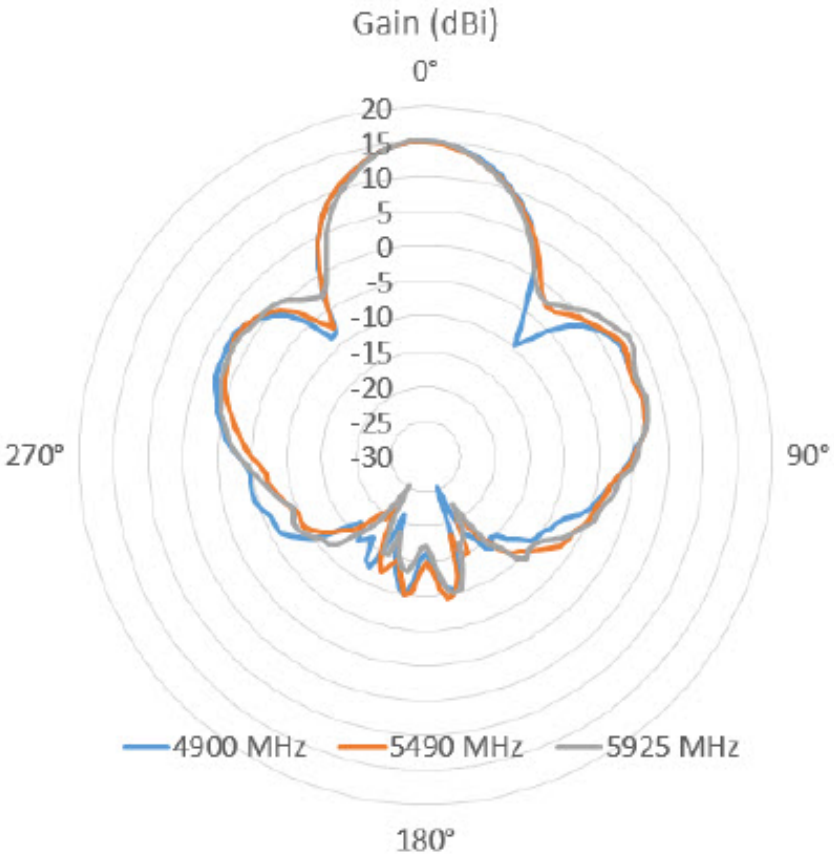


Figure 5: Horizontal Plane (X-Z)



Installation Options

The IW-ANT-PNL-515-N high gain antenna can be wall or pole mounted. There are two optional mounting kits:

Cisco PID	Description
IW-ACC-PMK1=	Pole/Wall mounting bracket with tilt and rotation.
AIR-MNT-VERT1=	Standard Pole/Wall mount bracket

Both of these mounts are also compatible with, among others, the IW9165D access point.