

Industrial Wireless 2-port High Gain Panel Antenna (IW-ANT-PNL5615-NS=)

This chapter contains the following sections:

- [Overview, on page 1](#)
- [Specifications, on page 3](#)
- [Mechanical Drawings, on page 4](#)
- [Radiation Charts, on page 7](#)
- [Installation Options, on page 9](#)

Overview

The Industrial Wireless high gain panel antenna (IW-ANT-PNL5615-NS=) 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.

Figure 1: Antenna Side

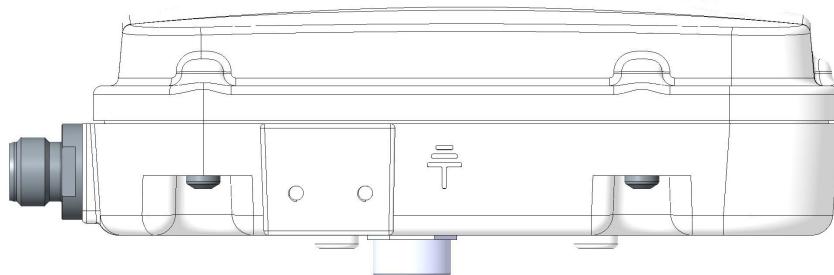
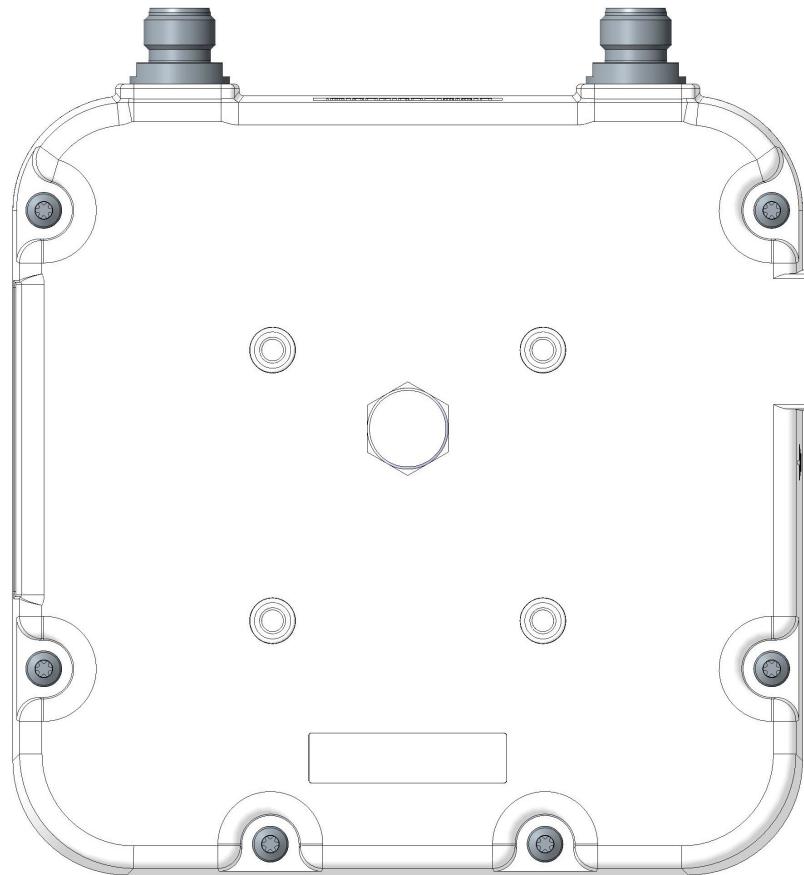


Figure 2: Antenna Front



Figure 3: Antenna Back

Features include the following:

- Compact design
- Self-Identifying Antenna (SIA) circuit
- 15 dBi Gain
- 2x N(f) ports
- Compatible mounting with IW9165D
- IP66/67 rated
- High port-to-port isolation

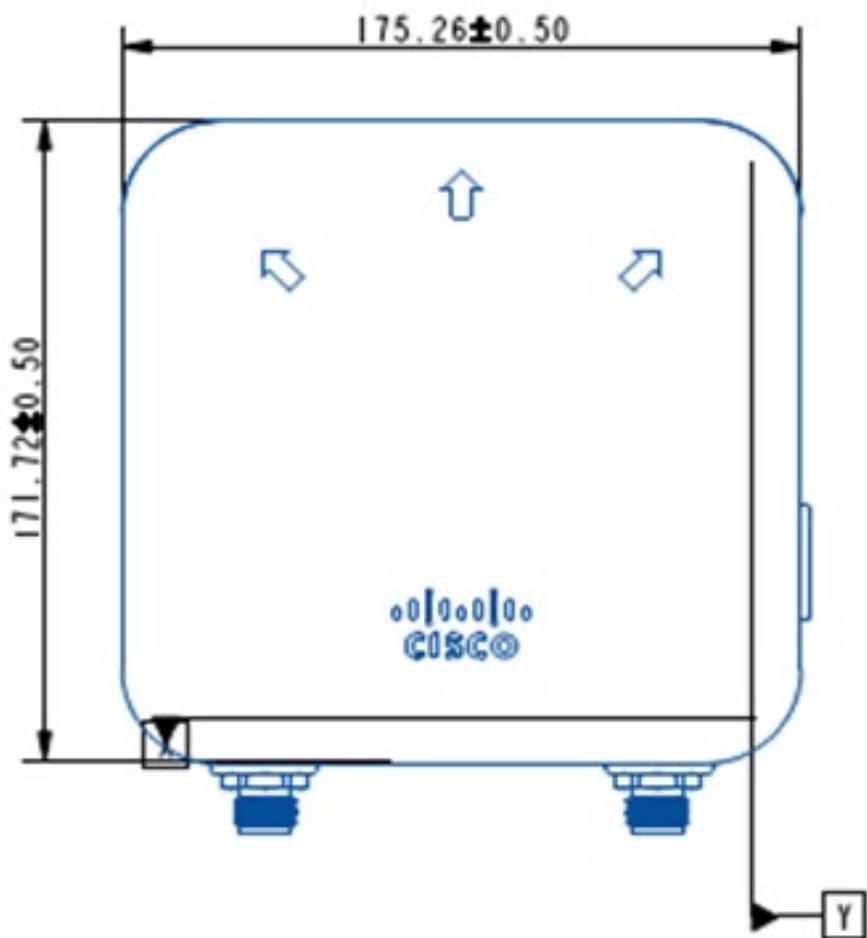
Specifications

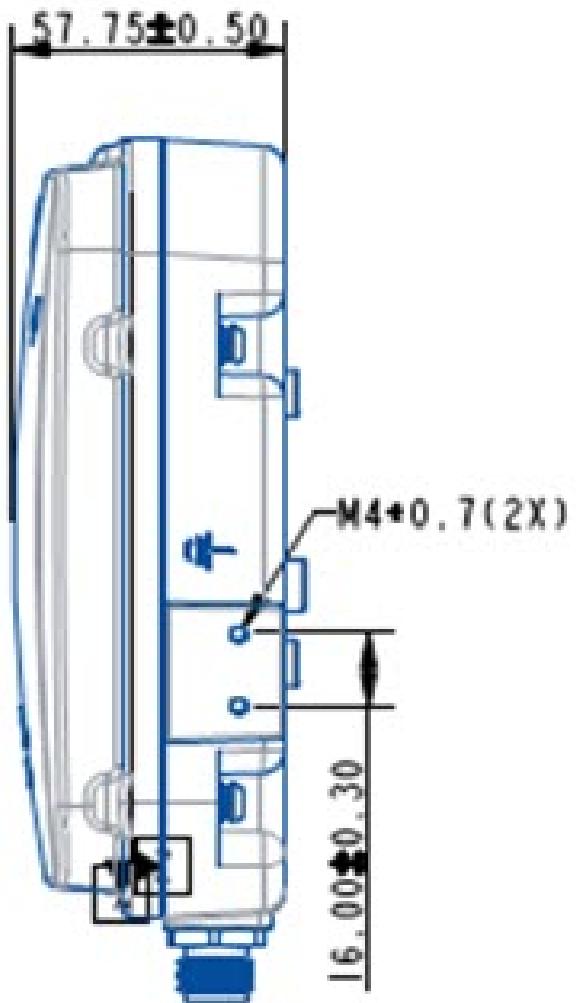
The following table lists the specifications for the antenna:

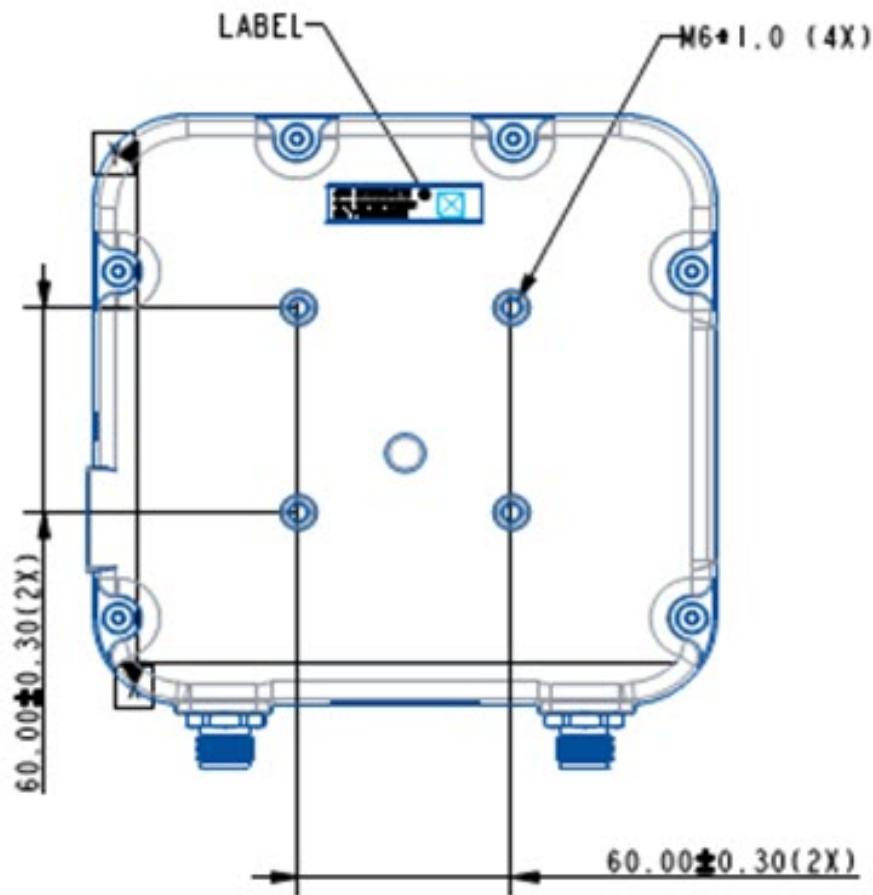
Specification	Description
Frequency	4900–5925; 5925–7125 MHz
Polarization	$\pm 45^\circ$
VSWR	< 2.2:1
Port-to-Port Isolation	> 25 dB
Maximum Gain	15 dBi
HPBW (V, H)	21 ± 4 deg, 28 ± 5 deg
Size	7.5 in x 6.9 in x 2.3 in 191.3mm x 175.3mm x 57.8mm
Wind rating	200 km/h
Operating temp	-40 to +85 °C
Flammability	UL-94 V0
IP rating	IP66, IP67

Mechanical Drawings

The following images show details about the antenna:







Radiation Charts

The 5-GHz and 6-GHz band radiation patterns are shown below. For illustration purposes, the reference coordinates of such polar plots are mapped to the following device orientation.

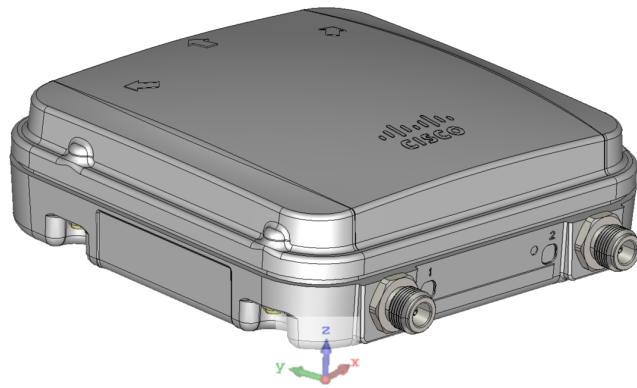


Table 1: IW-ANT-PNL5615-NS= Radiation Patterns

Figure 4: 5 GHz Radiation Pattern—Horizontal Plane (X-Z)

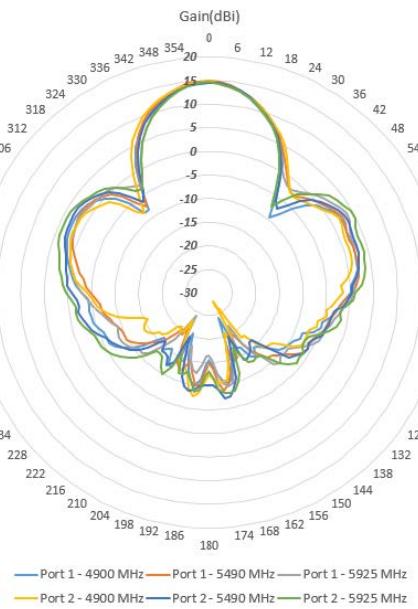


Figure 5: 5 GHz Radiation Pattern—Vertical Plane (Y-Z)

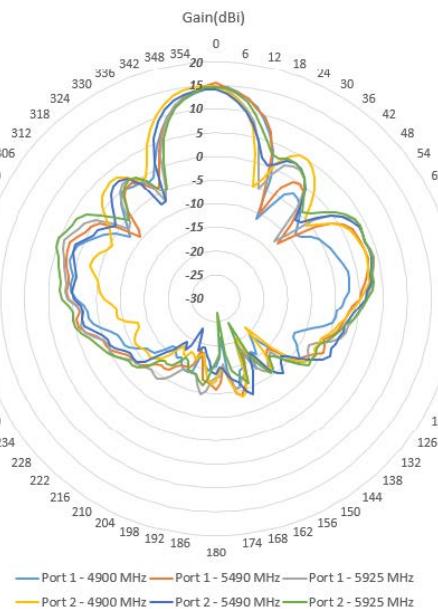


Figure 6: 6 GHz Radiation Pattern—Horizontal Plane (X-Z)

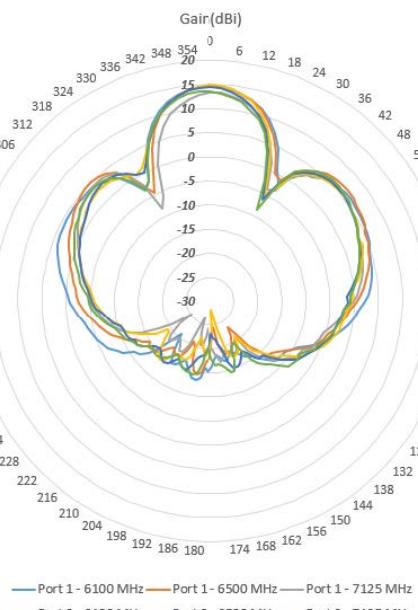
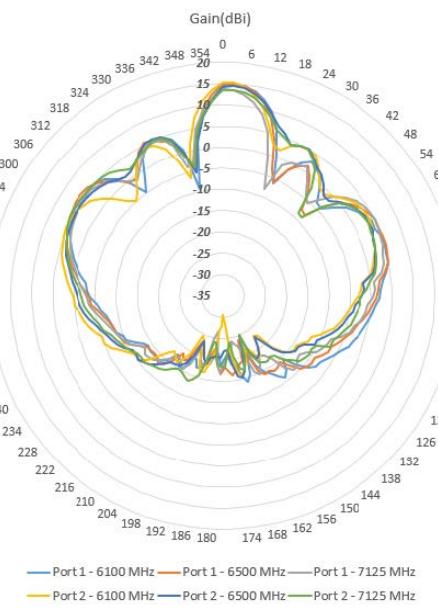


Figure 7: 6 GHz Radiation Pattern—Vertical Plane (Y-Z)



Installation Options

The IW-ANT-PNL5615-NS= 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-ACC1530-PMK1=	Standard Pole/Wall mount bracket

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

