

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

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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

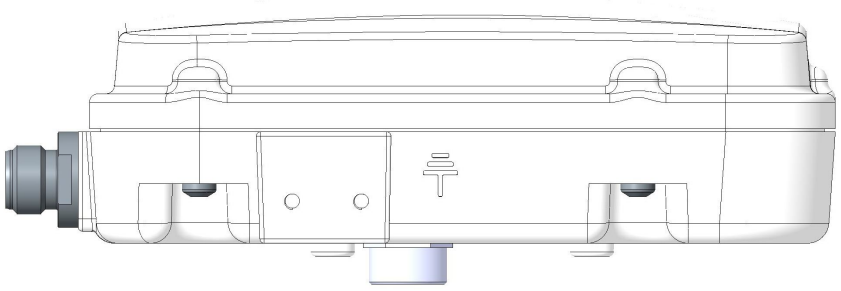


Figure 2: Antenna Front



Figure 3: Antenna Back

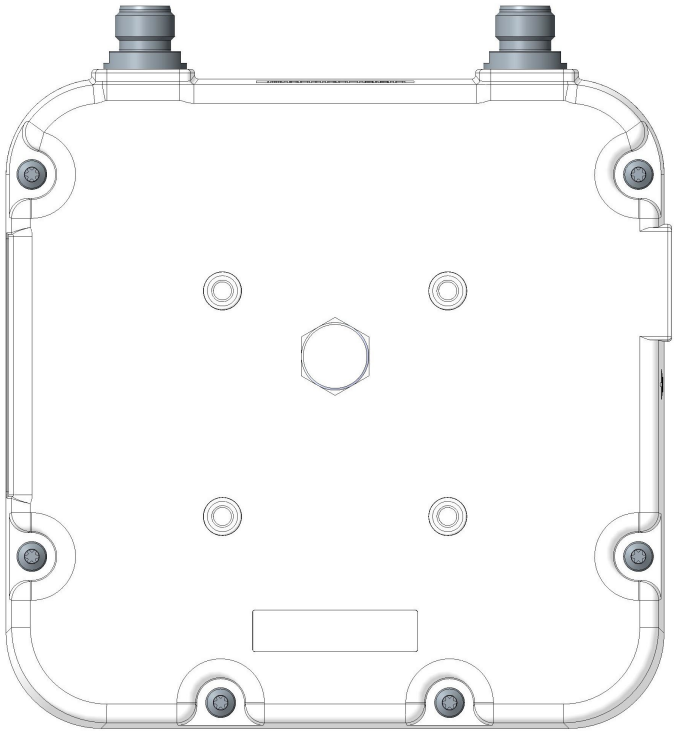
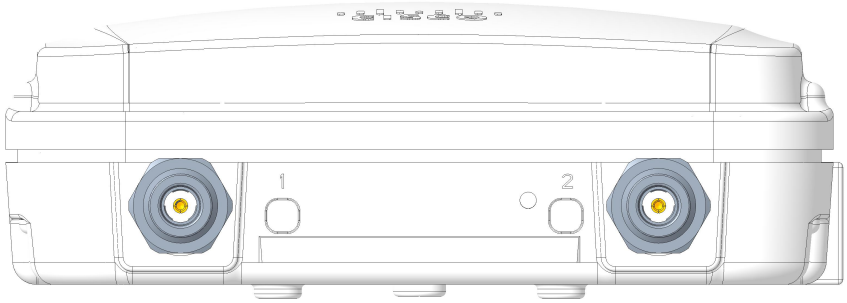


Figure 4: Antenna Bottom



Note Port 2 contains Self-Identifying Antenna (SIA) circuitry as denoted by the dot next to the port. Connect Port 2 to the port supporting self-identification on the Access Point..

Features include the following:

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

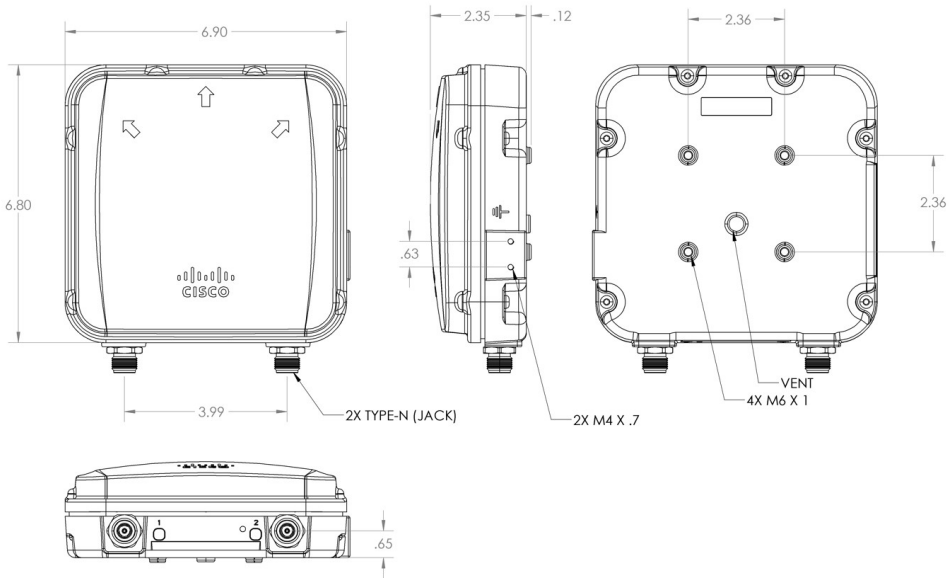
Specifications

The following table lists the specifications for the antenna:

Specification	Description
Frequency	4900–5925; 5925–7125 MHz
Polarization	±45°
VSWR	< 2.2:1
Port-to-Port Isolation	> 25 dB
Maximum Gain	15 dBi
Maximum Gain above +30° Elevation	3 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.

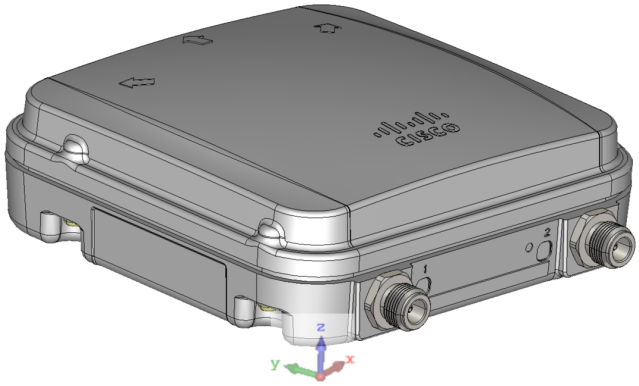


Table 1: IW-ANT-PNL5615-NS= Radiation Patterns

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

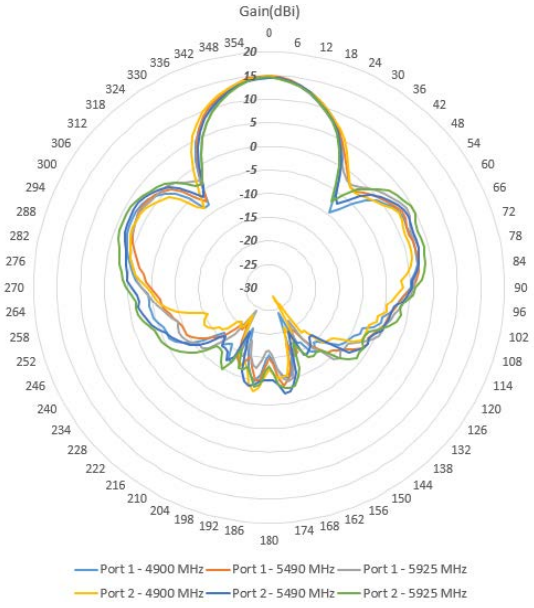


Figure 6: 5 GHz Radiation Pattern—Vertical Plane (Y-Z)

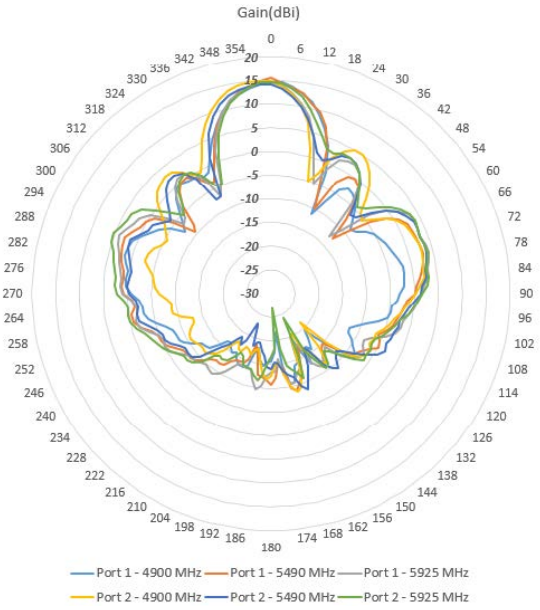


Figure 7: 6 GHz Radiation Pattern—Horizontal Plane (X-Z)

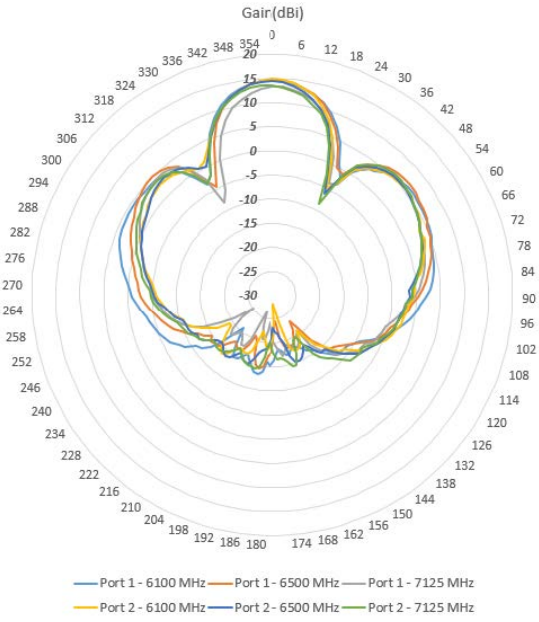
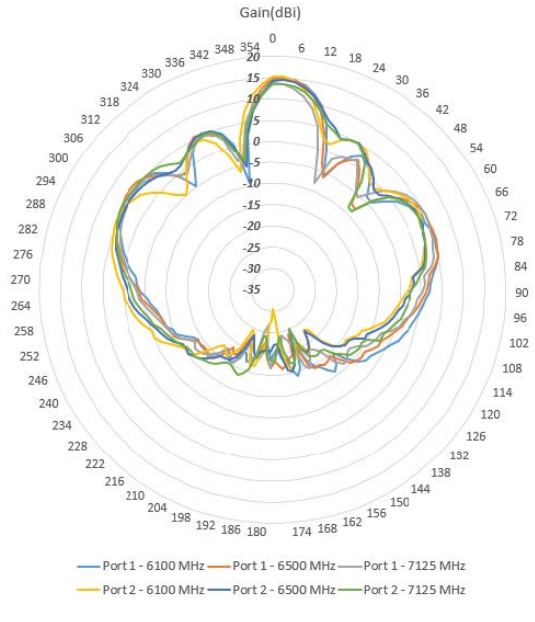


Figure 8: 6 GHz Radiation Pattern—Vertical Plane (Y-Z)



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-MNT-VERT1=	Standard Pole/Wall mount bracket

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

To mount the antenna with the IW9165D AP, see the procedure for each mounting kit in the IW9165D Hardware Installation Guide.

Table 2: Mounting Instructions for IW9165D AP

Using the fixed mounting kit AIR-ACC1530-PMK1=	https://www.cisco.com/c/en/us/td/docs/wireless/outdoor_industrial/iw9165d/hardware/installation/b-iw9165d-hig/m-installation-overview.html#wall-mounting-the-access-point-with-the-fixed-mounting-kit
Using the tiltable mounting kit IW-ACC-PMK1=	https://www.cisco.com/c/en/us/td/docs/wireless/outdoor_industrial/iw9165d/hardware/installation/b-iw9165d-hig/m-installation-overview.html#pole-mounting-the-access-point-with-the-tiltable-mount-kit