

Cisco Dual-Slant Polarized Sector Antenna (IW-ANT-DS9-516-N)

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Overview

The Cisco Dual-Slant Polarized Sector Antenna (IW-ANT-DS9-516-N) is designed to cover a frequency range of 4.9 to 5.95 GHz.

Figure 1: IW-ANT-DS9-516-N Antenna



The IW-ANT-DS9-516-N can be used for Point-to-Multipoint, where the installation requires a sector antenna on the AP to support Dual Slant panel antennas on the clients.

Electrical Specifications

The following table is a summary of the electrical specifications:

Antenna Type	Dual-Slant Polarized Sector
Frequency Range	4.9 - 5.95 GHz
Input Impedance	50 Ω
Gain	15.0 dBi (min) 15.5 dBi (typ)

VSWR	1.7:1 (typ) 2:1 (max)
Polarization	Dual Linear ±45º
-3dB Elevation Beamwidth	6º (typ)
-4dB Azimuth Beamwidth	90º (typ)
EL Upper Side Lobe Level	-11 dB (typ)
F/B Ratio	25 dB (typ)
Cross Polarization	-15 dB (typ)
Port to Port Isolation	25 dB(typ) 22 dB (min)
Power	20W (max)
Elevation Null Fill	1ST -10 dB (typ)
Lightning Protection	DC Grounded

Mechanical Specifications

The following table is a summary of the mechanical specifications:

Dimensions (L x W x D)	550 x 250 x 17mm (max)
Weight	2.5 kg (max)
Radome Material	Plastic
Base Plate Material	Aluminum with chemical conversion coating
Connector type	2x N-Type Female

Environmental Specifications

The following table is a summary of the mechanical specifications:

Test	Standard	Duration	Temperature	Notes
Low Temperature	IEC 68-2-1	72 hours	-55° C	—
High Temperature	IEC 68-2-2	72 hours	+71° C	—
Temperature Cycling	IEC 68-2-14	1 hour	-45°C +70°C	3 Cycles
Vibration	IEC 60721-3-4	30 min/axis	—	Random 4M5

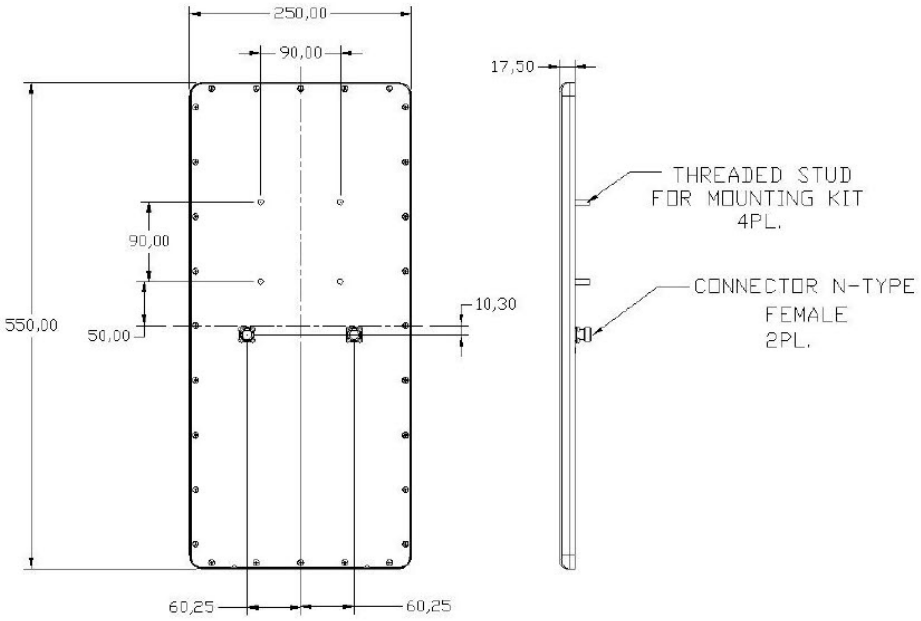
Test	Standard	Duration	Temperature	Notes
Mechanical Shock	IEC 60721-3-4	4M3	—	4M5
Humidity	ETSI EN300-2-4 T4.1E	144 hours	—	95%
Water Tightness	IEC 529	—	—	IP67
Solar Radiation	ASTM G53	2000 hours	—	—
Flamibility	UL 94	—	—	Class HB
Salt Spray	IEC 68-2-11 Ka	500 hours	—	—
Ice and Snow	—	—	—	25mm Radial
Wind Speed	—	—	—	Survival 220 Km/h Operation 160 Km/h

Mechanical Drawing

The following diagram provides mechanical details of the antenna.

Note All measurements are in millimeters.

Figure 2: Mechanical Drawing



Installation Instructions

This antenna uses the INSTALLATION INSTRUCTIONS FOR MT-120019. Follow the link for complete installation instructions.

Note The antenna package includes a mounting kit.

Radiation Patterns

The following figures show the antenna radiation patterns.

Note The IW-ANT-DS9-516-N is designed to cover a frequency range of 4.9 to 5.95 GHz. The following graphs show the 5.25 GHz frequency range as a reference to understand the pattern.

Figure 3: AZIMUTH RADIATION PATTERN MIDBAND FREQ. 5.25 GHZ

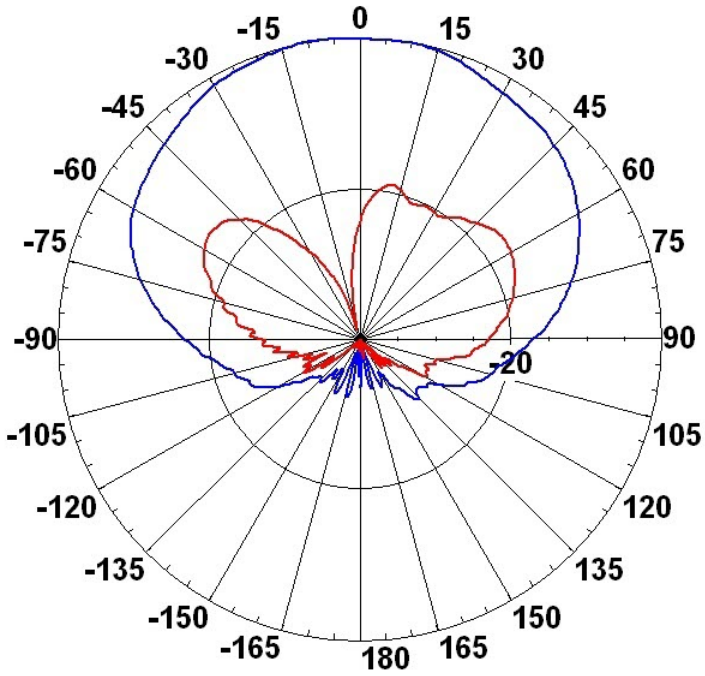


Figure 4: ELEVATION RADIATION PATTERN MIDBAND FREQ. 5.25 GHZ

