

Panel Antennas 10 dBic, RFID & ISM



PN10-915RCP



Pole Mount Configuration

- Weatherproof radome; perfect for in-building & outdoor coverage
- 10 dBic panel model for long range systems
- Low Profile ABS radome is aesthetic and durable
- Pole or wall mount makes installation easy and quick

Mobile Mark's high gain PN10 Series Panel Antenna is perfect for long range RFID installation for either US RFID at 915 MHz, or EU RFID at 868 MHz. This directional antenna can also be used for applications in the ISM band at 915 MHz.

The PN10 Series is available with right hand or left hand circular polarization. Antennas for 915 MHz applications are typically configured with righthand-circular-polarization (RCP) while antennas for 868 MHz applications are typically configured for lefthead-circular-polarization (LCP).

The PN10 Series provides an impressive 10 dBic gain. This high gain rating means the antenna is very useful for longer range systems.

This antenna has a 56° vertical beamwidth and a 56° horizontal beamwidth. With a relatively narrower beamwidth such as this, it can be quite effective in reducing interference issues.

The PN10 antenna design is very efficient with a Front-to-Back ratio of 20 dB.

For an ISM 915 application, the narrow beamwidth and circular polarization can overcome interference issues from other potential ISM

transmitters. Units would normally be used in pairs for a true point-to-point link. If used singularly with a linearly polarized antenna mate, full range performance will not be achieved.

The PN10 Panel is 12.25" (311 mm) square, and is housed in an attractive weatherproof grey ABS radome. It is provided with a dual purpose swivel wall/pole mount and U Bolts. Mounted parallel to a wall, it stands off 6.25 inches (159 mm).

This antenna terminates with a 1 ft pigtail (30 cm) of RF-195 cable and an N jack connector.

The PN10 Series has a 10K ohm resistor and is compatible with antenna sensing circuits found in the current generation of RFID readers.

Model #	Description
PN10-915RCP-3Y-GRY-12	(US) RFID
PN10-915LCP-3Y-GRY-12	(US) RFID
PN10-868LCP-3Y-GRY-12	(EU) RFID
PN10-868RCP-3Y-GRY-12	(EU) RFID

Specifications

Frequency:	
PN10-915RCP	902-928 MHz
PN10-868LCP	865-870 MHz
Gain:	10 dBic
Axial Ratio:	3 dB Max
Polarization:	RHCP & LHCP
VSWR:	2:1 max over range
Impedance:	50 Ohm nominal
Maximum Power:	10 Watts
Operating Temp:	-40°C to +85°C
Beamwidth:	56° elevation, 56° azimuth
Front-to-Back ratio:	20 dB

Lightning Protection:	External recommended
Mounting:	Pole mount with U-Bolts, fits pole up to 2.0" (5.1 cm) O.D., optional flush mount to walls using corner holes
Antenna Radome:	Grey UV resistant ABS
Radome Size:	12.25"H x 12.25"W x 3.5"D (311 mm x 311 mm x 89 mm)
Weight:	3.0 lbs (1.36 kg)
Termination:	1 ft (30 cm) RF-195 & N Jack (Female) connector