

PX-R07-ANT Dish antenna series

Photonix Communications provides a superior series of solid parabolic dish antennae for the communications industry at the 3.5GHz and 5GHz frequencies.

The series comprises the following;

PX-R07-ANT-25-35-DISH	3.4 – 3.6 GHz solid dish (648mm dia.) 25dBi Gain
PX-R07-ANT-28-35-DISH	3.4 – 3.6 GHz solid dish (648mm dia.) 28dBi Gain
PX-R07-ANT-28-53-DISH	5.1 – 5.3 GHz solid dish (648mm dia.) 28dBi Gain
PX-R07-ANT-32-53-DISH	5.1 – 5.3 GHz solid dish (900mm dia.) 32dBi Gain
PX-R07-ANT-29-58-DISH	5.7 – 5.8 GHz solid dish (648mm dia.) 29dBi Gain
PX-R07-ANT-32-58-DISH	5.7 – 5.8 GHz solid dish (900mm dia.) 32dBi Gain

Full technical details with polar diagrams are available on each model.

Key Features of all models

•Simple tilt adjustment

The unique mounting bracket incorporates a three point securing mechanism, the lower two points provide an axis while the top point allows the threaded rod to extend or retract to tilt the antenna



•Ease of mounting / pan adjustment

With the unique Stabilizer clamp, there is additional support to the antenna plus height of the antenna on the mounting pole will be maintained while undergoing panning. NO more trying to prevent antenna from slipping down the pole while panning !

•Quick change of Feeder polarity

Without having to dismount the antenna, the polarity of the antenna can be quickly changed by rotating the antenna feed to the vertical or horizontal position.



Horizontal Polarity



Vertical Polarity

•High wind survivability with optional Radome

All solid parabolic dish antenna can be retrofitted with the optional radome that once secured with the 12 screws allows the antenna to survive a rated wind velocity of 125mph. Additionally the radome has drain holes for condensation run off.



Drain Holes



DATA SHEET

Parabolic Dish Antenna 5 GHz Operation

Features

- High Gain 29 dBi Antenna
- Adjustable tilt pole mount
- Vertical or Horizontal Polarization
- Type N Female Connector
- DC Grounded for lightning protection
- Rugged, Lightweight and Waterproof

Applications

- 5.8 GHz ISM Band Applications
- Long Distance Backhaul Data Links
- Building to Building High Speed Links
- 802.11a Wireless Data
- Point to Point Data Links

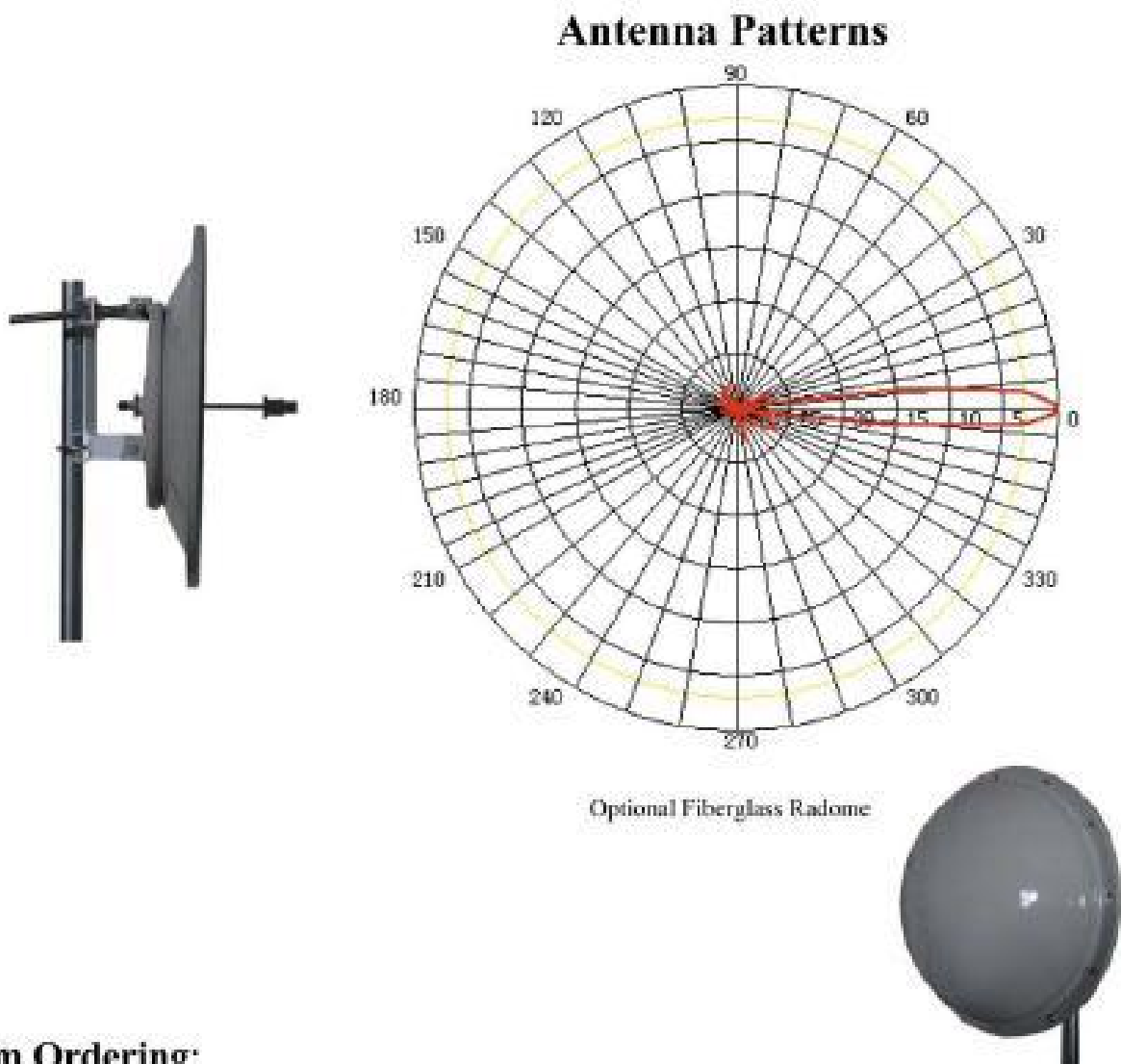


Description

The Parabolic Dish Antenna systems offered by Photonix Comm are constructed of an aluminum alloy dish with powder coat paint finish for excellent mechanical, electrical and environmental performance. The parabolic reflector is made with a special one-step molding technology which achieves excellent consistency and long term stability. They come complete with universal galvanized steel, powder coat paint mounting system for pole mount applications. Because of its' superb electrical performance and mechanical stability, the parabolic dish antenna can be used in a wide variety of high performance 5GHz wireless applications. An optional Fiberglass Radome is available for added environmental protection.

Specifications

Parameter	Min	Typ	Max	Units
<i>Frequency Range</i>	5725		5850	MHz
<i>Gain</i>		29		dBi
<i>Input Return Loss (S₁₁)</i>		-14		dB
<i>VSWR</i>		1.5:1		
<i>3db Beam Angle</i>		6		Deg
<i>Cross Pole</i>		-32		dB
<i>Front to Back</i>	25			dB
<i>Side Lobe</i>		-28		dB
<i>Impedance</i>		50		OHM
<i>Input Power</i>			100	W
<i>Pole Diameter (OD)</i>	1.5 (38)		3.0 (76)	Inch (mm)
<i>Operating Temperature</i>	-40		+70	Deg C
<i>Rated Wind Velocity</i>			125	mph
<i>Focal Length</i>		254		mm
<i>Weight</i>		5		Kg
<i>Dimensions (Dia)</i>		648		mm



System Ordering:

PX-R07-ANT-29/DB/5.8/DISH 29dBi 5.725GHz to 5.850GHz Parabolic Dish Antenna

PX-R07-ANT-DISH-RADOME RADOME Radome Kit for Parabolic Dish Antenna

Parabolic Dish Antenna 5 GHz Operation

Features

1. High Gain 32 dBi Antenna
2. Adjustable tilt pole mount
3. Vertical or Horizontal Polarization
4. Type N Female Connector
5. DC Grounded for lightning protection
6. Rugged, Lightweight and Waterproof

Applications

- 5.8 GHz ISM Band Applications
- 5.3 GHz UNII Band Applications
- Point to Point Data Links
- 802.11a Wireless Data
- Long Distance Backhaul Data links
- Building to Building High Speed Links



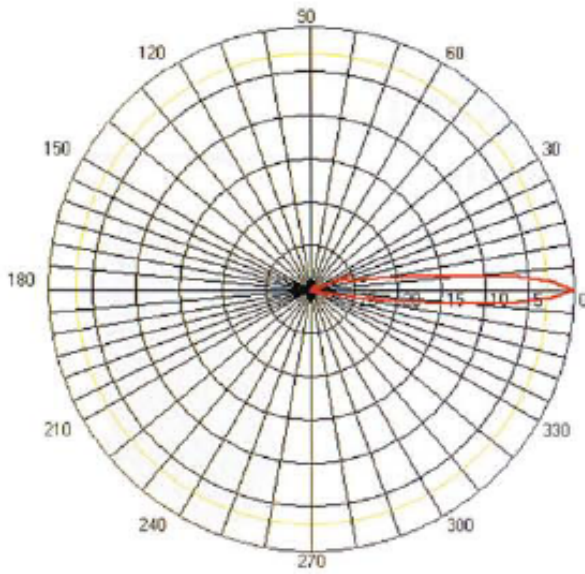
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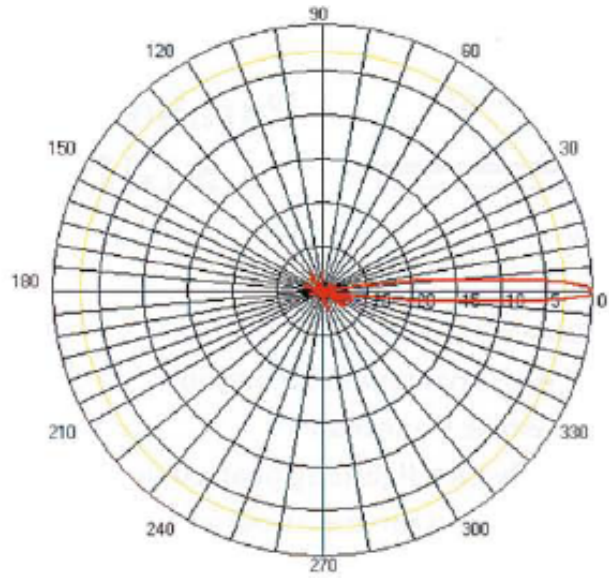
Specifications

Parameter		Min	Typ	Max	Units
<i>Frequency Range</i>	"5.8"	5725		5850	MHz
	"5.4"	5400		5700	
	"5.3"	5150		5350	
<i>Gain</i>	"5.8"		32.5		dBi
	"5.4"		32		
	"5.3"		32		
<i>Input Return Loss (S₁₁)</i>			-14		dB
<i>VSWR</i>			1.5:1		
<i>3dB Beam Angle</i>			4		Deg
<i>Cross Pole</i>			-34		dB
<i>Front to Back</i>		38			dB
<i>Side Lobe</i>			-30		dB
<i>Impedance</i>			50		OHM
<i>Input Power</i>				100	W
<i>Pole Diameter(OD)</i>		1.5 (38)		3.0 (76)	Inch (mm)
<i>Operating Temp</i>		-40		70	Deg C
<i>Rated Wind Velocity</i>				125	mph
<i>Weight</i>			22 (10)		Lbs (Kg)
<i>Dimensions (Dia)</i>			35.4 (900)		Inch (mm)

Antenna Patterns



EPlane – Vertical/Elevation



HPlane – Horizontal/Azimuth

Optional Fiberglass Radome

