## P4-57W-PXA/A



1.2 m | 4 ft Standard Parabolic Unshielded Antenna, single-polarized, 5.725–6.425 GHz, CPR137G, gray antenna, molded gray radome with flash, standard pack—one-piece reflector

### **Product Classification**

Product Type Microwave antenna

### General Specifications

Antenna Type P - Standard Parabolic Unshielded Antenna, single-polarized

Diameter, nominal1.2 m | 4 ftPackingStandard pack

**Radome Color** Gray **Radome Material** Molded

**Reflector Construction** One-piece reflector

Antenna Input CPR137G
Antenna Color Gray

Antenna Type P - Standard Parabolic Unshielded Antenna, single-polarized

**Diameter, nominal** 1.2 m | 4 ft

Flash Included Yes
Polarization Single

## **Electrical Specifications**

**Operating Frequency Band** 5.725 – 6.425 GHz

Beamwidth, Horizontal2.9 °Beamwidth, Vertical2.9 °Cross Polarization Discrimination (XPD)30 dBFront-to-Back Ratio40 dBGain, Low Band34.6 dBiGain, Mid Band35.0 dBiGain, Top Band35.4 dBi

**Operating Frequency Band** 5.725 – 6.425 GHz

Radiation Pattern Envelope Reference (RPE) 4268
Return Loss 26.4 dB
VSWR 1.10

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# P4-57W-PXA/A

### Mechanical Specifications

Fine Azimuth Adjustment  $\pm 15^{\circ}$ Fine Elevation Adjustment  $\pm 20^{\circ}$ 

 Mounting Pipe Diameter
 115 mm | 4.5 in

 Net Weight
 54 kg | 119 lb

Side Struts, Included1 inboardSide Struts, Optional1 inboard

Wind Velocity Operational110 km/h68 mphWind Velocity Survival Rating200 km/h125 mph

### Wind Forces At Wind Velocity Survival Rating

Angle  $\alpha$  for MT Max -130 °

 Axial Force (FA)
 3881 N | 872 lbf

 Side Force (FS)
 552 N | 124 lbf

 Twisting Moment (MT)
 1236 N-m | 912 ft lb

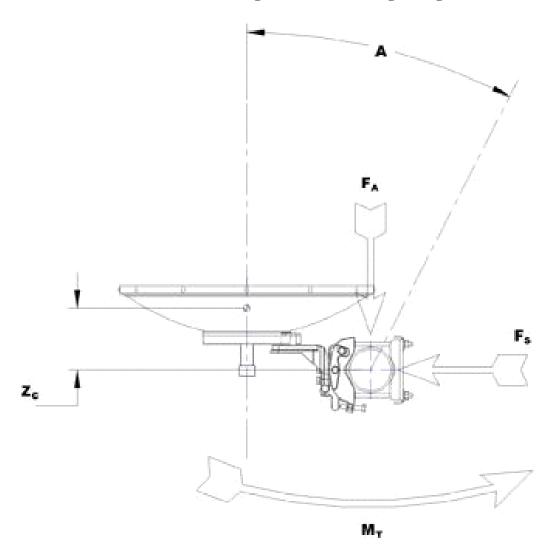
 Weight with 1/2 in (12 mm) Radial Ice
 130 kg | 287 lb

 Zcg with 1/2 in (12 mm) Radial Ice
 346 mm | 14 in

 Zcg without Ice
 203 mm | 8 in

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# Wind Forces At Wind Velocity Survival Rating Image



#### Packed Dimensions

 Gross Weight, Packed Antenna
 168.0 kg | 370.4 lb

 Height
 840.0 mm | 33.1 in

 Length
 1430.0 mm | 56.3 in

Volume 1.7 m<sup>3</sup>

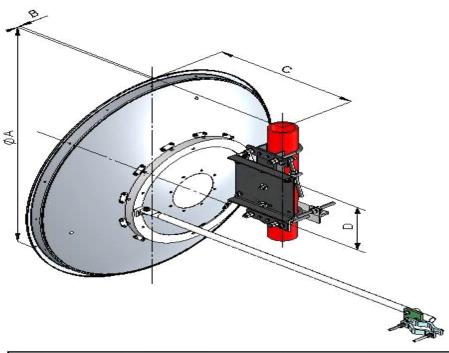
**Width** 1430.0 mm | 56.3 in

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# Antenna Dimensions And Mounting Information



Dimensions in Inches (mm)				
Antenna Size, ft (m)	Α	В	С	D
4 (1.2)	50.8 (1291)	12.5 (318)	16.2 (411)	11.8 (299)

## Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



### \* Footnotes

**Axial Force (FA)**Maximum forces exerted on a supporting structure as a result of wind from the most critical direction for this parameter. The individual maximums specified may not occur

simultaneously. All forces are referenced to the mounting pipe.

Cross Polarization Discrimination (XPD)

The difference between the peak of the co-polarized main beam and the maximum

cross-polarized signal over an angle twice the 3 dB beamwidth of the co-polarized main

beam.

**Front-to-Back Ratio** Denotes highest radiation relative to the main beam, at 180° ±40°, across the band.

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### P4-57\M-PXA/A

Production antennas do not exceed rated values by more than 2 dB unless stated

otherwise.

Gain, Mid Band

For a given frequency band, gain is primarily a function of antenna size. The gain of

Andrew antennas is determined by either gain by comparison or by computer integration

of the measured antenna patterns.

Operating Frequency Band

Bands correspond with CCIR recommendations or common allocations used throughout

the world. Other ranges can be accommodated on special order.

Packing Andrew standard packing is suitable for export. Antennas are shipped as standard in

totally recyclable cardboard or wire-bound crates (dependent on product). For your

convenience, Andrew offers heavy duty export packing options.

Radiation Pattern Envelope Reference (RPE) Radiation patterns define an antenna's ability to discriminate against unwanted signals.

Under still dry conditions, production antennas will not have any peak exceeding the current RPE by more than 3dB, maintaining an angular accuracy of +/-1° throughout

**Return Loss**The figure that indicates the proportion of radio waves incident upon the antenna that

are rejected as a ratio of those that are accepted.

**Side Force (FS)**Maximum side force exerted on the mounting pipe as a result of wind from the most

critical direction for this parameter. The individual maximums specified may not occur

simultaneously. All forces are referenced to the mounting pipe.

**Twisting Moment (MT)**Maximum forces exerted on a supporting structure as a result of wind from the most

critical direction for this parameter. The individual maximums specified may not occur

simultaneously. All forces are referenced to the mounting pipe.

**VSWR** Maximum; is the guaranteed Peak Voltage-Standing-Wave-Ratio within the operating

band.

Wind Velocity Operational The wind speed where the antenna deflection is equal to or less than 0.1 degrees. In the

case of ValuLine antennas, it is defined as a maximum deflection of 0.3 x the 3 dB

beam width of the antenna.

Wind Velocity Survival Rating

The maximum wind speed the antenna, including mounts and radomes, where

applicable, will withstand without permanent deformation. Realignment may be required. This wind speed is applicable to antenna with the specified amount of radial

ice.

