







#### PARX8-59VV-PXA

2.4 m | 8 ft Parabolic Unshielded Antenna for Relocation-Category A, dual-polarized, 5.925-7.125 GHz, CPR137G, gray antenna, molded gray radome with flash, standard pack—one-piece reflector

### **General Specifications**

Antenna Type PARX - Parabolic Unshielded Antenna for Relocation-Category A, dual-

polarized

Diameter, nominal 2.4 m | 8 ft
Packing Standard pack

Radome Color Gray
Radome Material Molded

Reflector Construction One-piece reflector

Antenna Input CPR137G Antenna Color Gray

Antenna Type PARX - Parabolic Unshielded Antenna for Relocation-Category A, dual-

polarized

Diameter, nominal 2.4 m | 8 ft

Flash Included Yes
Polarization Dual

#### **Electrical Specifications**

Operating Frequency Band 5.925 – 7.125 GHz

Beamwidth, Horizontal 1.6 °
Beamwidth, Vertical 1.6 °
Cross Polarization Discrimination (XPD) 30 dB

Electrical Compliance ETSI Class 1 | US FCC Part 101A | US FCC Part 74A

Front-to-Back Ratio 60 dB
Gain, Low Band 40.4 dBi
Gain, Mid Band 40.7 dBi
Gain, Top Band 40.9 dBi

Operating Frequency Band 5.925 – 7.125 GHz

Radiation Pattern Envelope Reference (RPE) 4372
Return Loss 26.4 dB
VSWR 1.10

### **Mechanical Specifications**

Fine Azimuth Adjustment ±5°
Fine Elevation Adjustment ±5°

Mounting Pipe Diameter 115 mm | 4.5 in

Net Weight 125 kg | 276 lb



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Side Struts, Included 1 inboard Side Struts, Optional 3 outboard

Wind Velocity Operational 110 km/h | 68 mph Wind Velocity Survival Rating 200 km/h | 124 mph

### **Wind Forces At Wind Velocity Survival Rating**

Angle a for MT Max	-125 °
Axial Force (FA)	15372 N   3456 lbf
Side Force (FS)	4196 N   943 lbf
Twisting Moment (MT)	-5349 N∙m

Weight with 1/2 in (12 mm) Radial Ice 243 kg | 536 lb Zcg with 1/2 in (12 mm) Radial Ice 427 mm | 17 in Zcg without Ice 343 mm | 14 in

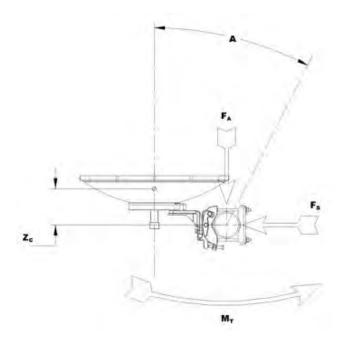


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## **Wind Forces At Wind Velocity Survival Rating Image**



#### **Packed Dimensions**

Gross Weight, Packed Antenna	338.0 kg   745.2 lb
Height	2520.0 mm   99.2 in
Length	2710.0 mm   106.7 in
Volume	3.8 m <sup>3</sup>
Width	1200.0 mm   47.2 in

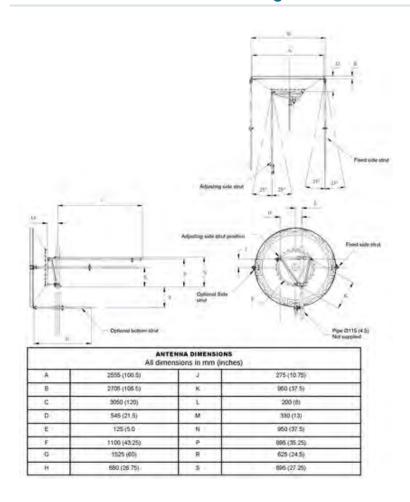


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### **Antenna Dimensions And Mounting Information**



## **Regulatory Compliance/Certifications**

Agency

Classification

ISO 9001:2008

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  $180^{\circ} \pm 40^{\circ}$ , across the band. 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.



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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 determine an antenna's ability to discriminate against unwanted signals under conditions of radio congestion. Radiation patterns are dependent on antenna series, size, and frequency.

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.