

on the go



## PXL8-71W-P7A

2.4 m | 8 ft Standard Parabolic, Low VSWR Unshielded Antenna, dual-polarized, 7.125–8.500 GHz, CPR112G, gray antenna, with flash, standard pack—one-piece reflector

## General Specifications

Packing Standard pack
Reflector Construction One-piece reflector

Antenna Input CPR112G
Antenna Color Gray

Antenna Type PXL - Standard Parabolic, Low VSWR Unshielded Antenna, dual-polarized

Diameter, nominal 2.4 m | 8 ft

Flash Included Yes
Polarization Dual

## **Electrical Specifications**

Beamwidth, Horizontal 1.1° Beamwidth, Vertical 1.1° 33 dB Cross Polarization Discrimination (XPD) **Electrical Compliance** ETSI Class 1 Front-to-Back Ratio 50 dB Gain, Low Band 42.2 dBi 42.8 dBi Gain, Mid Band Gain, Top Band 43.5 dBi

Operating Frequency Band 7.125 – 8.500 GHz

Radiation Pattern Envelope Reference (RPE) 4736
Return Loss 26.4 dB
VSWR 1.10

### Mechanical Specifications

Fine Azimuth Adjustment  $\pm 5^{\circ}$ Fine Elevation Adjustment  $\pm 5^{\circ}$ 

Mounting Pipe Diameter 115 mm | 4.5 in Net Weight 114 kg | 251 lb

Side Struts, Included 0

Side Struts, Optional 1 inboard | 1 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



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Zcg without Ice

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

427 mm | 17 in 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 8.2 m<sup>3</sup>

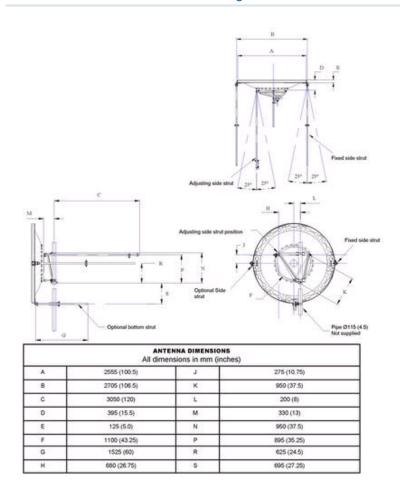
Width 1200.0 mm | 47.2 in



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### Antenna Dimensions And Mounting Information



## Regulatory Compliance/Certifications

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### Classification

ISO 9001:2008

Designed, manufactured and/or distributed under this quality management system

### \* Footnotes

Gain, Mid Band

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

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.