



### PXL6-71W-D7A/A

1.8 m | 6 ft Standard Parabolic, Low VSWR Unshielded Antenna, dual-polarized, 7.125–8.500 GHz, PDR84, gray antenna, with flash, standard pack—one-piece reflector

### **Product Classification**

Product Type Microwave antenna

### **General Specifications**

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

Diameter, nominal1.8 m | 6 ftPackingStandard packReflector ConstructionOne-piece reflector

Antenna Input PDR84
Antenna Color Gray

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

Diameter, nominal 1.8 m | 6 ft

Flash Included Yes Polarization Dual

### **Electrical Specifications**

Operating Frequency Band 7.125 – 8.500 GHz

Beamwidth, Horizontal 1.5 °
Beamwidth, Vertical 1.5 °
Cross Polarization Discrimination (XPD) 30 dB
Front-to-Back Ratio 48 dB
Gain, Low Band 39.7 dBi
Gain, Mid Band 40.3 dBi
Gain, Top Band 40.9 dBi

Operating Frequency Band 7.125 – 8.500 GHz

Return Loss 23.1 dB VSWR 1.15

### **Mechanical Specifications**

Fine Azimuth Adjustment ±15°
Fine Elevation Adjustment ±20°

Mounting Pipe Diameter  $115 \text{ mm} \mid 4.5 \text{ in}$ Net Weight  $70 \text{ kg} \mid 154 \text{ lb}$ 

Side Struts, Included 1 inboard



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Zcg without Ice

Side Struts, Optional 1 inboard

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

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

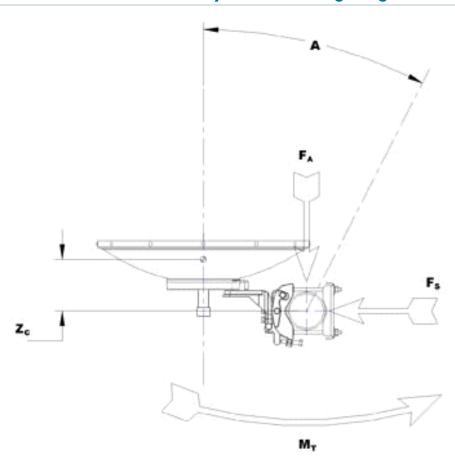
Angle a for MT Max	-130 °	
Axial Force (FA)	8779 N   1974 lbf	
Side Force (FS)	1946 N   437 lbf	
Twisting Moment (MT)	3826 N•m	
Weight with 1/2 in (12 mm) Radial Ice	122 kg   269 lb	
Zcg with 1/2 in (12 mm) Radial Ice	347 mm   14 in	

278 mm | 11 in



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## Wind Forces At Wind Velocity Survival Rating Image



### **Packed Dimensions**

Width

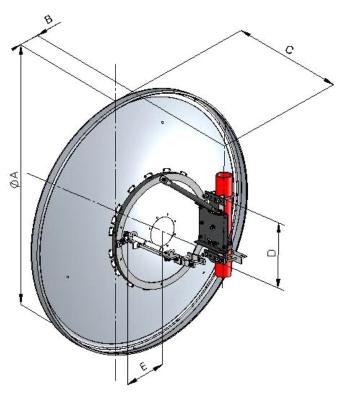
Gross Weight, Packed Antenna 117.0 kg | 257.9 lb Height 2100.0 mm | 82.7 in Length 2070.0 mm | 81.5 in Volume 3.4 m $^3$ 

780.0 mm | 30.7 in



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



Dimensions in Inches (mm)						
Antenna Size, ft (m)	Α	В	С	D	E	
6 (1.8)	76.3 (1939)	17.1 (435)	17.9 (455)	19.3 (490)	14.3 (362)	

## **Regulatory Compliance/Certifications**

Agency Classificatio

ISO 9001:2008 Designed, manufactured and/or distributed under this quality management system

### **Included Products**

PXL6-71W/A (Product Component—not orderable) — 1.8 m | 6 ft Standard Parabolic, Low VSWR Unshielded Antenna, dual-polarized, 7.125–8.500 GHz

#### \* 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.



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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.

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.

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.