







PL6-44-D7B/F

1.8 m | 6 ft Standard Parabolic, Low VSWR Unshielded Antenna, single-polarized, 4.400-5.000 GHz, PDR48, gray antenna, without flash, non-standard pack—one-piece reflector

General Specifications

Antenna Type PL - Standard Parabolic, Low VSWR Unshielded Antenna, single-polarized

Diameter, nominal 1.8 m | 6 ft

Packing Non-standard pack Reflector Construction One-piece reflector

Antenna Input PDR48
Antenna Color Gray

Antenna Type PL - Standard Parabolic, Low VSWR Unshielded Antenna, single-polarized

Diameter, nominal 1.8 m | 6 f

Flash Included No Polarization Single

Electrical Specifications

Beamwidth, Horizontal

Operating Frequency Band 4.400 – 5.000 GHz

2.5°

Beamwidth, Vertical 2.5 °
Cross Polarization Discrimination (XPD) 30 dB
Electrical Compliance ETSI Class 1
Front-to-Back Ratio 44 dB
Gain, Low Band 36.0 dBi
Gain, Mid Band 36.6 dBi
Gain, Top Band 37.1 dBi

Operating Frequency Band 4.400 – 5.000 GHz

Radiation Pattern Envelope Reference (RPE) 2552E
Return Loss 30.7 dB
VSWR 1.06

Mechanical Specifications

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

Mounting Pipe Diameter 115 mm | 4.5 in Net Weight 70 kg | 154 lb

Side Struts, Included 1 inboard
Side Struts, Optional 1 inboard



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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•r	n	

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 Zcg without Ice 278 mm | 11 in

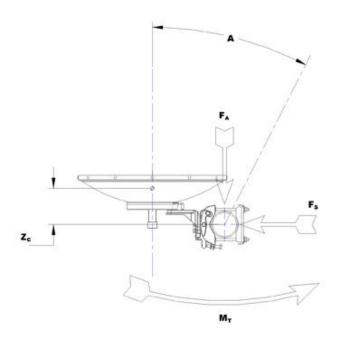


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Wind Forces At Wind Velocity Survival Rating Image



Packed Dimensions

Gross Weight, Packed Antenna Note 117.0 kg | 257.9 lb

Non-standard packing option—contact 1-800-255-1479 (North America), 1-800-873-2307 (International), or an Andrew representative

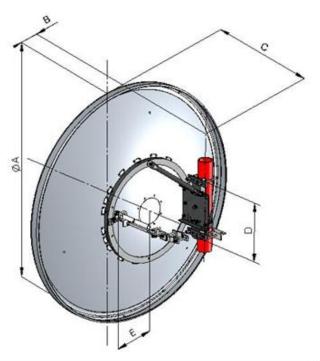


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Antenna Dimensions And Mounting Information



Dimensions in Inches (mm)							
Antenna Size, ft (m)	A	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 Classification

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

* Footnotes

Front-to-Back Ratio

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

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

the co-polarized main bean

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.



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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.