Base Product



0.6m | 2 ft ValuLine® High Performance Antenna, dual polarized, 10.000 – 11.700 GHz

Product Classification

Product Type Microwave antenna

Product Brand ValuLine®

General Specifications

Antenna Type VHLPX - ValuLine® High Performance Low Profile Antenna, dual-

polarized

Polarization Dual

Side Struts, Included

Side Struts, Optional 0

Dimensions

Diameter, nominal 0.6 m | 2 ft

Electrical Specifications

Operating Frequency Band 10.000 – 11.700 GHz

Gain, Low Band33.7 dBiGain, Mid Band34.5 dBiGain, Top Band35.2 dBiBoresite Cross Polarization Discrimination (XPD)30 dB

Front-to-Back Ratio 61 dB

Beamwidth, Horizontal 3.3 °

Beamwidth, Vertical 3.3 °

Return Loss 17.7 dB

VSWR 1.3

Radiation Pattern Envelope Reference (RPE) 7212B | 7213B

Electrical Compliance ACMA FX03_10b | ACMA FX03_11b | Brazil Anatel Class

3 | Canada SRSP 310.7 Part B | ETSI 302 217 Class 3 | US

Page 1 of 4



FCC Part 101A | US FCC Part 101B

Mechanical Specifications

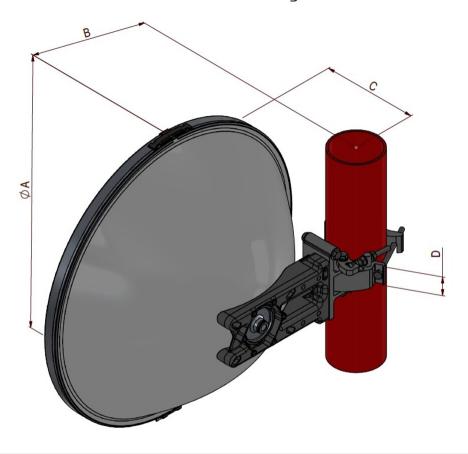
Compatible Mounting Pipe Diameter 48 mm – 120 mm | 1.9 in – 4.7 in

Fine Azimuth Adjustment Range ±15°
Fine Elevation Adjustment Range ±15°

 Wind Speed, operational
 201 km/h | 124.896 mph

 Wind Speed, survival
 252 km/h | 156.585 mph

Antenna Dimensions and Mounting Information



Dimensions in Inches (mm)				
Antenna Size, ft (m)	Α	В	С	D
2 (0.6)	25.9 (660)	12.2 (310)	8.9 (228)	1.8 (45)

Wind Forces at Wind Velocity Survival Rating



Axial Force (FA) 1400 N | 314.733 lbf

Angle α for MT Max $-50\,^{\circ}$

Side Force (FS) -350 N | -78.683 lbf

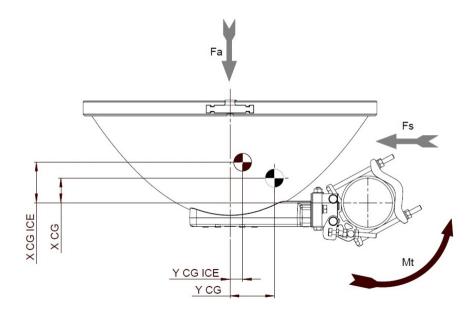
Twisting Moment (MT) 500 N-m | 4,425.373 in lb

 Zcg without Ice
 55 mm | 2.165 in

 Zcg with 1 in (25 mm) Radial Ice
 91 mm | 3.583 in

 Weight with 1 in (25 mm) Radial Ice
 20 kg | 44.092 lb

Wind Forces at Wind Velocity Survival Rating Image



Packaging and Weights

Weight, net 6.7 kg | 14.771 lb

Regulatory Compliance/Certifications

Agency Classification

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

* Footnotes

Operating Frequency Band

Bands correspond with CCIR recommendations or common allocations used throughout the world. Other ranges can be accommodated on special order.



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.

Boresite 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.

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.

VSWR

Maximum; is the guaranteed Peak Voltage-Standing-Wave-Ratio within the operating band.

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

Wind Speed, operational

For VHLP(X), SHP(X), HX and USX antennas, the wind speed where the maximum antenna deflection is $0.3 \times 10^{-2} \times 10^{-2}$ x the 3 dB beam width of the antenna. For other antennas, it is defined as a deflection is equal to or less than 0.1×10^{-2} degrees.

Wind Speed, survival

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.

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.

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.

