

0.6m | 2ft ValuLine High Performance Antenna, single polarized, 21.200 – 23.600 GHz, OEM custom Flange, White Antenna, Grey Radome

#### **Product Classification**

Product Type Microwave antenna

Product Brand ValuLine®

General Specifications

Antenna Type VHLP - ValuLine® High Performance Low Profile Antenna, single-

polarized

PolarizationSingleAntenna InputCustom

Antenna Color White

**Reflector Construction** One-piece reflector

Radome Color Gray

Radome Material Composite Broadband

Flash Included No
Side Struts, Included 0
Side Struts, Optional 0

Dimensions

**Diameter, nominal** 0.6 m | 2 ft

**Electrical Specifications** 

Operating Frequency Band 21.200 – 23.600 GHz

Gain, Low Band40.2 dBiGain, Mid Band40.7 dBiGain, Top Band41.2 dBiBoresite Cross Polarization Discrimination (XPD)30 dBFront-to-Back Ratio66 dB

Beamwidth, Horizontal 1.7 °

COMMSCOPE®

Beamwidth, Vertical 1.7 °

**Return Loss** 17.7 dB

**VSWR** 1.3

Radiation Pattern Envelope Reference (RPE) 7205D

Electrical Compliance ACMA FX03\_22a | Brazil Anatel Class 3 | Canada SRSP 321.8

Part A | ETSI 302 217 Class 3 | US FCC Part 101A

Mechanical Specifications

**Compatible Mounting Pipe Diameter** 48 mm-120 mm | 1.9 in-4.7 in

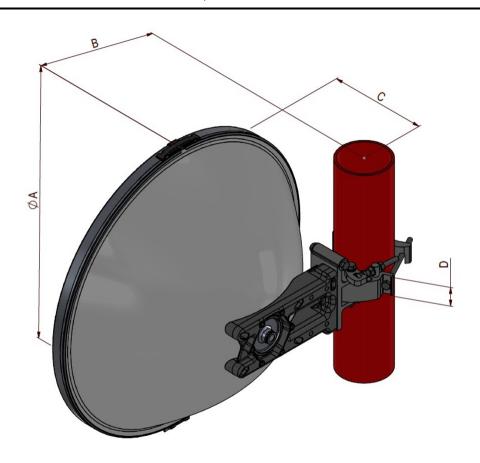
Fine Azimuth Adjustment Range ±15°
Fine Elevation Adjustment Range ±15°

 Wind Speed, operational
 180 km/h
 1 111.847 mph

 Wind Speed, survival
 252 km/h
 1 55.585 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  $\alpha$  for MT Max  $-50~^{\circ}$ 

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

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

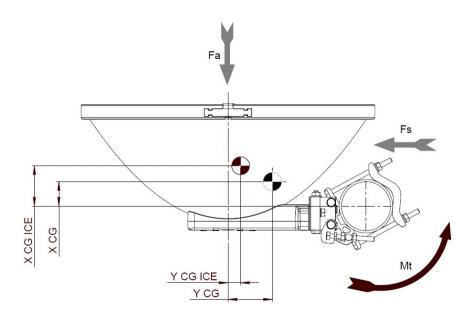
**Zcg without Ice** 55 mm | 2.165 in

**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

Height, packed	329 mm   12.953 in
Width, packed	729 mm   28.701 ir
Length, packed	697 mm   27.441 ir
Packaging Type	Standard pack
Volume	0.17 m³   6.003 ft³

 Weight, gross
 9.8 kg | 21.605 lb

 Weight, net
 6.7 kg | 14.771 lb

#### \* 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° ±40°, across

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

The figure that indicates the proportion of radio waves incident upon the antenna that are rejected as a ratio of those that are accepted.

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

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

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 degrees.

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.

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.

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.

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.

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)

Wind Speed, operational

**Return Loss** 

**VSWR** 

Wind Speed, survival

Axial Force (FA)

Side Force (FS)

**Twisting Moment (MT)** 

Packaging Type