

0.3 m | 1 ft ValuLine® High Performance Low Profile Antenna, dual-polarized, 37.000 – 40.000 GHz, UG-599 flange, white antenna, gray radome without flash, standard pack—one-piece reflector

Product Classification

Product Type Microwave antenna

Product Brand ValuLine®

General Specifications

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

polarized

Polarization Dual

Antenna Input UG-599/U Modified

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 0.3 m | 1 ft

Electrical Specifications

Operating Frequency Band 37.000 – 40.000 GHz

Gain, Low Band39.6 dBiGain, Mid Band40.1 dBiGain, Top Band40.7 dBiBoresite Cross Polarization Discrimination (XPD)30 dB

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Front-to-Back Ratio61 dBBeamwidth, Horizontal1.6 °Beamwidth, Vertical1.6 °Return Loss17.7 dBVSWR1.3Radiation Pattern Envelope Reference (RPE)7031B

Electrical Compliance Brazil Anatel Class 2 | Canada SRSP 338.6 Part A | ETSI 302 217

Class 3B | US FCC Part 101A

Mechanical Specifications

Compatible Mounting Pipe Diameter 50 mm – 120 mm | 2.0 in – 4.7 in

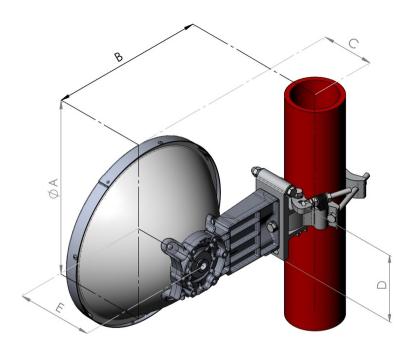
Fine Azimuth Adjustment Range $\pm 15^{\circ}$ Fine Elevation Adjustment Range $\pm 15^{\circ}$

 Wind Speed, operational
 180 km/h
 1111.847 mph

 Wind Speed, survival
 250 km/h
 155.343 mph



Antenna Dimensions and Mounting Information



Dimensions in inches (mm)					
Antenna size, ft (m)	Α	В	С	D	Е
1 (0.3)	15(382)	12.7(323)	6(151)	6.1(155)	7(177)

Wind Forces at Wind Velocity Survival Rating

 Axial Force (FA)
 446 N | 100.265 lbf

 Side Force (FS)
 198 N | 44.512 lbf

Twisting Moment (MT) 144 N-m | 1,274.507 in lb

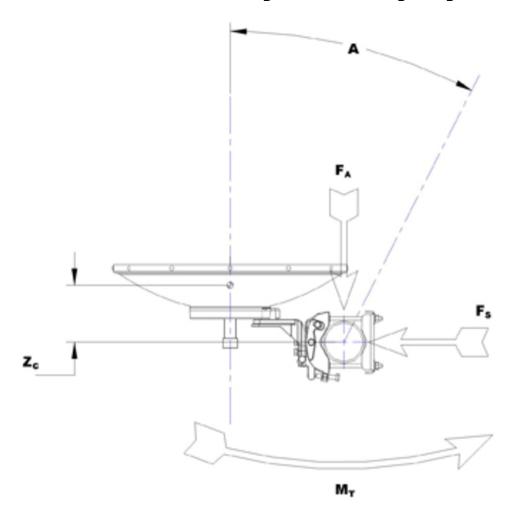
 Zcg without Ice
 28 mm | 1.102 in

 Zcg with 1/2 in (12 mm) Radial Ice
 54 mm | 2.126 in

 Weight with 1/2 in (12 mm) Radial Ice
 12 kg | 26.455 lb



Wind Forces at Wind Velocity Survival Rating Image



Packaging and Weights

Height, packed350 mm | 13.78 inWidth, packed400 mm | 15.748 inLength, packed400 mm | 15.748 inPackaging TypeStandard pack

 Volume
 0.1 m³ | 3.531 ft³

 Weight, gross
 8 kg | 17.637 lb

 Weight, net
 6 kg | 13.228 lb

Regulatory Compliance/Certifications



Agency Classification

CHINA-ROHS Below maximum concentration value

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

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant



* Footnotes

Operating Frequency BandBands 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

the band. Production antennas do not exceed rated values by more than 2

dB unless stated otherwise.

Return LossThe 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 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.

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

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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.

Twisting Moment (MT)

Side Force (FS)

Packaging Type