

1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, dualpolarized, 7.125–8.500 GHz, PDR84, white antenna, flexible woven polymer 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	PDR84
Antenna Color	White
Reflector Construction	One-piece reflector
Radome Color	Gray
Radome Material	Polymer
Flash Included	No
Side Struts, Included	1
Side Struts, Optional	1 inboard
Dimensions	
Diameter, nominal	1.8 m 6 ft
Electrical Specifications	
Operating Frequency Band	7.125 – 8.500 GHz
Gain, Low Band	40.1 dBi
Gain, Mid Band	40.8 dBi
Gain, Top Band	41.5 dBi
Boresite Cross Polarization Discrimination (XPD)	32 dB
Front-to-Back Ratio	67 dB
Beamwidth, Horizontal	1.3 °

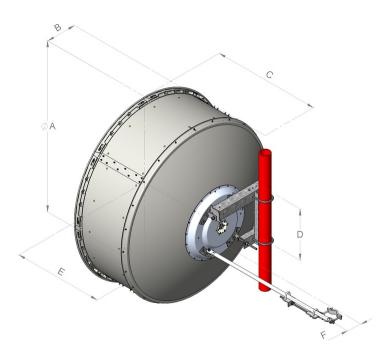
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Beamwidth, Vertical	1.3 °
Return Loss	17.7 dB
VSWR	1.3
Radiation Pattern Envelope Reference (RPE)	7082D
Electrical Compliance	Brazil Anatel Class 3 Canada SRSP 306.4 Part B Canada SRSP 307.1 ETSI 302 217 Class 3
Mechanical Specifications	
Compatible Mounting Pipe Diameter	115 mm-120 mm 4.5 in-4.7 in
Fine Azimuth Adjustment Range	±15°
Fine Elevation Adjustment Range	±5°
Wind Speed, operational	180 km/h 111.847 mph
Wind Speed, survival	250 km/h 155.343 mph



Antenna Dimensions and Mounting Information



	Dimensio	ons in inch	nes (mm)			
Antenna size, ft (m)	A	В	с	D	Е	F
6 (1.8)	74.8 (1899)	13.4 (340)	47.5 (1206)	22.4 (570)	39.4 (1001)	6.9 (174)

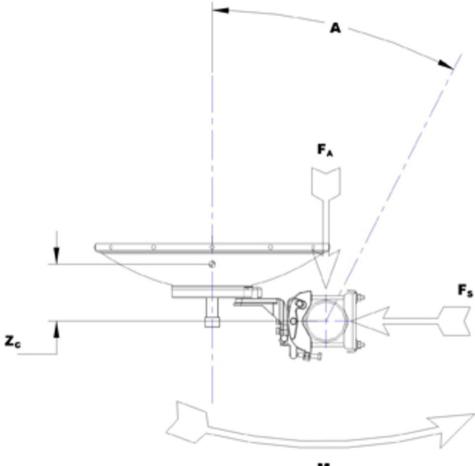
Wind Forces at Wind Velocity Survival Rating

Axial Force (FA)	10670 N 2,398.712 lbf
Angle α for MT Max	-120 °
Side Force (FS)	5286 N 1,188.34 lbf
Twisting Moment (MT)	4752 N-m 42,058.742 in lb
Zcg without Ice	363 mm 14.291 in
Zcg with 1/2 in (12 mm) Radial Ice	543 mm 21.378 in
Weight with 1/2 in (12 mm) Radial Ice	234 kg 515.881 lb

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Wind Forces at Wind Velocity Survival Rating Image



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Packaging and Weights

Height, packed	2110 mm 83.071 in
Width, packed	450 mm 17.717 in
Length, packed	1900 mm 74.803 in
Packaging Type	Standard pack
Volume	1.8 m³ 63.566 ft³
Weight, gross	127 kg 279.987 lb
Weight, net	86 kg 189.597 lb

Regulatory Compliance/Certifications

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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	
UK-ROHS	Compliant	
* Footnotes		
Operating Frequency Ba	Ind	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 Polariza	tion 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 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 Envel	ope 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, operationa	I	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.

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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.
Packaging Type	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.

