

1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 21.200–23.600 GHz, PBR220, white antenna, flexible woven polymer gray radome without flash, standard pack—one-piece reflector

OBSOLETE

This product was discontinued on: May 1, 2022 Replaced By:

VHLPX6-23-2WH/B

1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, dual-polarized, 21.200–23.600 GHz, PBR220, 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 VHLP - ValuLine® High Performance Low Profile Antenna, single-

polarized

PolarizationSingleAntenna InputPBR220Antenna ColorWhite

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 21.200 – 23.600 GHz

Gain, Low Band48.7 dBiGain, Mid Band49.2 dBiGain, Top Band49.7 dBiBoresite Cross Polarization Discrimination (XPD)30 dBFront-to-Back Ratio80 dBBeamwidth, Horizontal0.5 °Beamwidth, Vertical0.5 °

 Return Loss
 17.7 dB

 VSWR
 1.3

Radiation Pattern Envelope Reference (RPE) 7069B

Electrical Compliance 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 115 mm – 120 mm | 4.5 in – 4.7 in

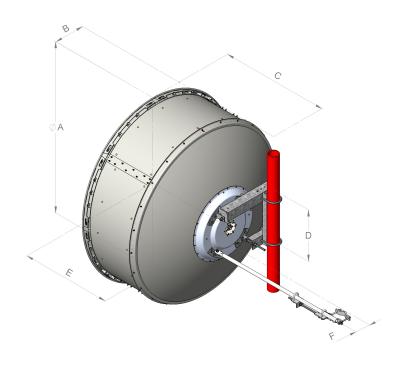
Fine Azimuth Adjustment Range $\pm 15^{\circ}$ Fine Elevation Adjustment Range $\pm 5^{\circ}$

 Wind Speed, operational
 180 km/h | 111.847 mph

 Wind Speed, survival
 250 km/h | 155.343 mph



Antenna Dimensions and Mounting Information



Dimensions in inches (mm)						
Antenna size, ft (m)	А	В	С	D	E	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 $^{\circ}$

Side Force (FS) 5286 N | 1,188.34 lbf

Twisting Moment (MT) 4752 N-m | 42,058.742 in lb

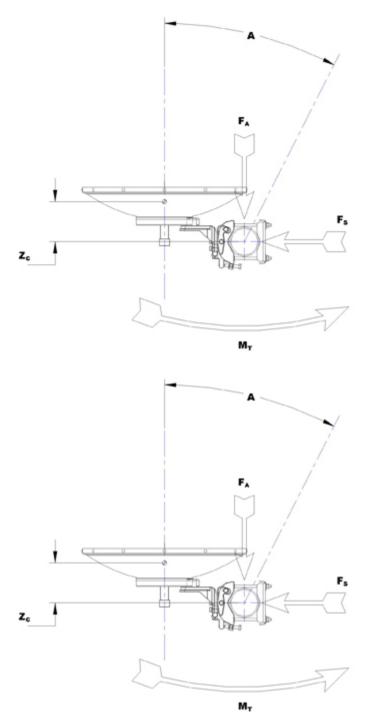
Zcg without Ice 363 mm | 14.291 in

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



Packaging and Weights

COMMSCOPE®

 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

Agency Classification

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



* 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 BandFor 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.

VSWRMaximum; 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

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maximum antenna deflection is $0.3 \times 10^{10} \times 10^{10}$ 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^{10} 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.

Axial Force (FA)

Wind Speed, survival

Side Force (FS)

Twisting Moment (MT)

Packaging Type