







VHLPX1-23-2GR

0.3 m | 1 ft ValuLine® High Performance Low Profile Antenna, dual-polarized, 21.200-23.600 GHz, PBR220, gray antenna, polymer gray radome without flash, standard pack—one-piece reflector

General Specifications

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

Diameter, nominal 0.3 m | 1 ft
Packing Standard pack
Radome Color Gray
Radome Material Polymer

Reflector Construction One-piece reflector

Antenna Input PBR220 Antenna Color Gray

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

Diameter, nominal 0.3 m | 1 ft
Flash Included No
Polarization Dual

Electrical Specifications

Operating Frequency Band 21.200 – 23.600 GHz

Beamwidth, Horizontal 3.0 °
Beamwidth, Vertical 3.0 °
Cross Polarization Discrimination (XPD) 30 dB

Electrical Compliance Brazil Anatel Class 2 | Canada SRSP 321.8 Part B | ETSI 302 217 Class 3 | US FCC Part 101A

 Front-to-Back Ratio
 62 dB

 Gain, Low Band
 34.6 dBi

 Gain, Mid Band
 35.3 dBi

 Gain, Top Band
 35.7 dBi

Operating Frequency Band 21.200 – 23.600 GHz

Radiation Pattern Envelope Reference (RPE) 7015A
Return Loss 17.7 dB
VSWR 1.30

Mechanical Specifications

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

Mounting Pipe Diameter 50 mm-115 mm | 2.0 in-4.5 in

Net Weight 7 kg | 14 lb

Side Struts, Included 0
Side Struts, Optional 0

Wind Velocity Operational 200 km/h | 124 mph Wind Velocity Survival Rating 250 km/h | 155 mph

Wind Forces At Wind Velocity Survival Rating

Axial Force (FA) 445 N | 100 lbf Side Force (FS) 221 N | 50 lbf Twisting Moment (MT) 166 N $_{\bullet}$ m Weight with 1/2 in (12 mm) Radial Ice 13 kg | 28 lb Zcg with 1/2 in (12 mm) Radial Ice 50 mm | 2 in Zcg without Ice 25 mm | 1 in

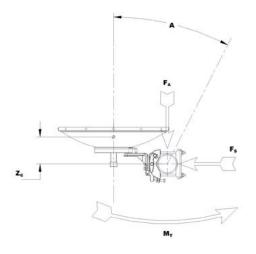


VHLPX1-23-2GR





Wind Forces At Wind Velocity Survival Rating Image



Packed Dimensions

Gross Weight, Packed Antenna 8.2 kg | 18.1 lb Height 325.0 mm | 12.8 in Length 640.0 mm | 25.2 in Volume 0.1 m 3

Width 460.0 mm | 18.1 in

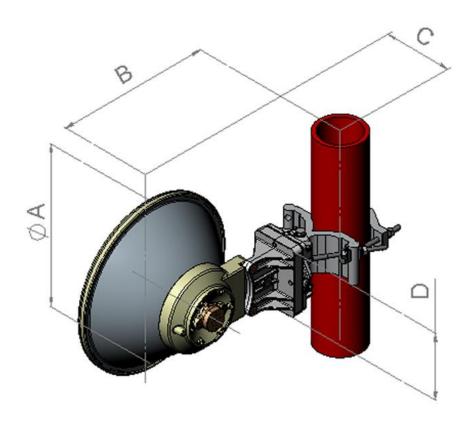


VHLPX1-23-2GR

POWERED BY



Antenna Dimensions And Mounting Information



Dimensions in inches (mm)				
Antenna size, ft (m)	ØΑ	В	С	D
1 (0.3)	15.3 (388)	147 (372)	6.5 (166)	6.3 (160)

Regulatory Compliance/Certifications

ISO 9001:2008

Classification

Designed, manufactured and/or distributed under this quality management system

* Footnotes 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.

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

Gain, Mid Band

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.

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.

Operating Frequency Band

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

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) Radiation patterns determine an antenna's ability to discriminate against unwanted signals under conditions of radio



VHLPX1-23-2GR

POWERED BY



Return Loss

Side Force (FS)

Twisting Moment (MT)

VSWR

Wind Velocity Operational

Wind Velocity Survival Rating

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 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.

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

The wind speed where the antenna deflection is equal to or less than 0.1 degrees. In the case of ValuLine antennas, it is defined as a maximum deflection of $0.3 \times 10^{-2} = 0.00 \times 10^{-2}$ x the 3 dB beam width of the antenna.

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.