







VHLPX3-13-3VVH

1.0 m | 3 ft ValuLine® High Performance Low Profile Antenna, dual-polarized, 12.700–13.250 GHz, UBR120, white antenna, polymer white radome without flash, standard pack—one-piece reflector

General Specifications

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

Diameter, nominal 1.0 m | 3 ft
Packing Standard pack

Radome Color White
Radome Material Polymer

Reflector Construction One-piece reflector

Antenna Input UBR120 Antenna Color White

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

Diameter, nominal 1.0 m | 3 ft

Flash Included No Polarization Dual

Electrical Specifications

Operating Frequency Band 12.700 – 13.250 GHz

Beamwidth, Horizontal 1.6 °
Beamwidth, Vertical 1.6 °
Cross Polarization Discrimination (XPD) 30 dB

Electrical Compliance Brazil Anatel Class 2 | Canada SRSP 312.7 Part B | ETSI 302 217 Class

3 | US FCC Part 101B

Front-to-Back Ratio 66 dB
Gain, Low Band 39.9 dBi
Gain, Mid Band 40.0 dBi
Gain, Top Band 40.1 dBi

Operating Frequency Band 12.700 – 13.250 GHz

Radiation Pattern Envelope Reference (RPE) 7181
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 115 mm | 4.5 in Net Weight 24 kg | 53 lb

Side Struts, Included 0



VHLPX3-13-3VVH

Zcg without Ice

POWERED BY



Side Struts, Optional 1 inboard

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

Wind Forces At Wind Velocity Survival Rating

Angle a for MT Max 0 $^{\circ}$ Axial Force (FA) 2979 N | 670 lbf Side Force (FS) 936 N | 210 lbf Twisting Moment (MT) 1184 N $_{\odot}$ Weight with 1/2 in (12 mm) Radial Ice 46 kg | 101 lb Zcg with 1/2 in (12 mm) Radial Ice 220 mm | 9 in

324 mm | 13 in

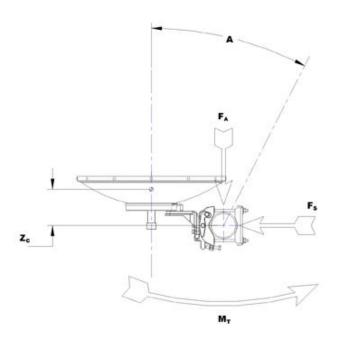


VHLPX3-13-3VVH

POWERED BY



Wind Forces At Wind Velocity Survival Rating Image



Packed Dimensions

Gross Weight, Packed Antenna	30.8 kg 67.9 lb	
Height	106.3 cm 41.9 in	
Length	119.8 cm 47.2 in	
Volume	467365.0 cc	
Width	36.7 cm 14.4 in	

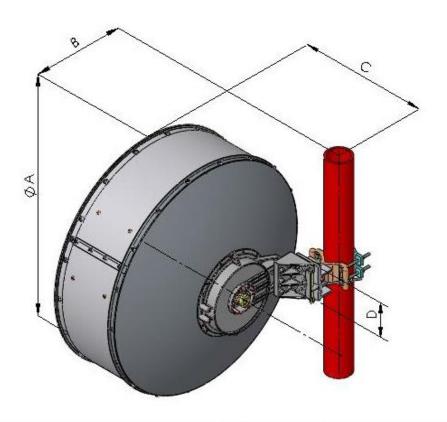


VHLPX3-13-3VVH





Antenna Dimensions And Mounting Information



Dimensions in Inches (mm)					
Antenna Size, ft (m)	Α	В	С	D	
3(0.9)	39.4 (1000)	17.5 (445)	23.1 (586)	6.3 (160)	

Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2008

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.



POWERED BY



Front-to-Back Ratio

Denotes highest radiation relative to the main beam, at $180^{\circ} \pm 40^{\circ}$, across the band. Production antennas do not exceed rated values by more than 2

dB unless stated otherwise.

Gain, Mid Band

VHLPX3-13-3VVH

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.

Packing

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 congestion. Radiation patterns are dependent on antenna series, size, and frequency.

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.

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.

VSWR

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

Wind Velocity Operational

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 $0.3 \times 10^{-2} \, \mathrm{m}$ x the 3 dB beam width of the antenna.

Wind Velocity Survival Rating

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.