







#### VHLPX3-15-3GR

1.0 m | 3 ft ValuLine® High Performance Low Profile Antenna, dual-polarized, 14.400–15.350 GHz, UBR140, 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 1.0 m | 3 ft
Packing Standard pack

Radome Color Gray
Radome Material Polymer

Reflector Construction One-piece reflector

Antenna Input UBR140
Antenna Color Gray

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 14.400 – 15.350 GHz

Beamwidth, Horizontal 1.5 °
Beamwidth, Vertical 1.5 °
Cross Polarization Discrimination (XPD) 30 dB

Electrical Compliance Brazil Anatel Class 2 | Canada SRSP 314.5 Part A | ETSI 302 217 Class 3

Front-to-Back Ratio 69 dB
Gain, Low Band 40.8 dBi
Gain, Mid Band 41.1 dBi
Gain, Top Band 41.4 dBi

Operating Frequency Band 14.400 – 15.350 GHz

Radiation Pattern Envelope Reference (RPE) 7170
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

Side Struts, Optional 1 inboard



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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 °	
Axial Force (FA)	2979 N   670 lbf	
Side Force (FS)	936 N   210 lbf	
Twisting Moment (MT)	1184 N∙m	
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	
Zcg without Ice	324 mm   13 in	

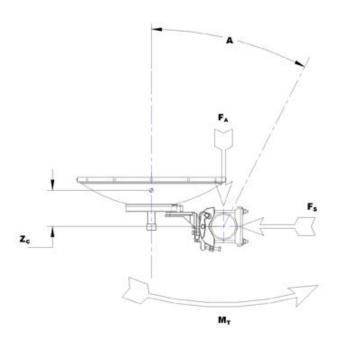


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## Wind Forces At Wind Velocity Survival Rating Image



### **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	

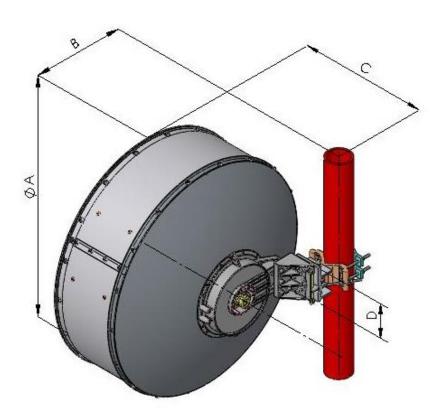


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### **Antenna Dimensions And Mounting Information**



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.

Front-to-Back Ratio

Denotes highest radiation relative to the main beam, at 180° ±40°, across



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the band. Production antennas do not exceed rated values by more than 2 dB unless stated otherwise.

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.

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 Packing

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.

Maximum side force exerted on the mounting pipe as a result of wind from Side Force (FS)

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 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.