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VHLP1-18-1WH

0.3 m | 1 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 17.700-19.700 GHz, UG-595, white antenna, polymer white radome without flash, standard pack—one-piece reflector

General Specifications

Antenna Type VHLP - ValuLine® High Performance Low Profile Antenna, single-polarized

Diameter, nominal 0.3 m | 1 ft
Packing Standard pack

Radome Color White
Radome Material Polymer

Reflector Construction One-piece reflector

Antenna Input UG-595 Antenna Color White

Antenna Type VHLP - ValuLine® High Performance Low Profile Antenna, single-polarized

Diameter, nominal 0.3 m | 1 ft

Flash Included No Polarization Single

Electrical Specifications

Operating Frequency Band 17.700 – 19.700 GHz

Beamwidth, Horizontal 3.3 °
Beamwidth, Vertical 3.3 °
Cross Polarization Discrimination (XPD) 30 dB

Electrical Compliance Brazil Anatel Class 2 | ETSI 302 217 Class 2 | US FCC Part 101B2

Front-to-Back Ratio 57 dB
Gain, Low Band 33.6 dBi
Gain, Mid Band 34.2 dBi
Gain, Top Band 34.5 dBi

Operating Frequency Band 17.700 – 19.700 GHz

Radiation Pattern Envelope Reference (RPE) 7010D
Return Loss 17.7 dB
VSWR 1.30

Mechanical Specifications

Fine Azimuth Adjustment ±15°
Fine Elevation Adjustment ±15°

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



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Wind Velocity Survival Rating 250 km/h | 155 mph

Wind Forces At Wind Velocity Survival Rating

445 N 100 lbf
221 N 50 lbf
166 N∙m
13 kg 28 lb
50 mm 2 in
25 mm 1 in

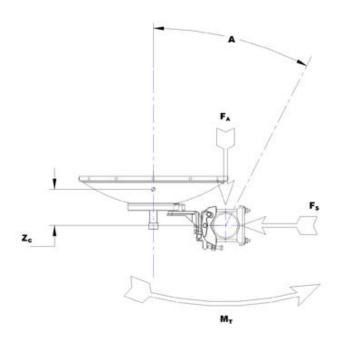


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Wind Forces At Wind Velocity Survival Rating Image



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	$0.1 \; \text{m}^{3}$
Width	460.0 mm 18.1 in

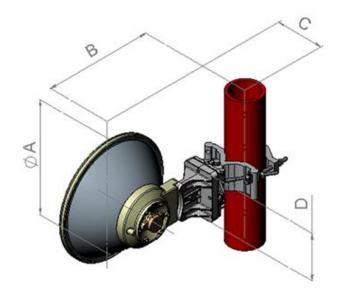


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Antenna Dimensions And Mounting Information



	Din	nensions in inches (m	nm)	
Antenna size, t (m)	ØA	В	C	D
1 (0.3)	15.3 (388)	147 (372)	6.5 (166)	6.3 (160)

Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2008

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

Included Products

VHLP1-18 (Product Component—not orderable) — 0.3 m | 1 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 17.700–19.700 GHz

* 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 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.



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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.

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)

Return Loss

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 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.