







### VHLP4-7W-3WH/D

1.2 m | 4 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 7.125–8.500 GHz, UBR84, 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 1.2 m | 4 ft
Packing Standard pack

Radome Color White
Radome Material Polymer

Reflector Construction One-piece reflector

Antenna Input UBR84
Antenna Color White

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

Diameter, nominal 1.2 m | 4 ft

Flash Included No Polarization Single

### **Electrical Specifications**

Operating Frequency Band 7.125 – 8.500 GHz

Beamwidth, Horizontal 2.2 °
Beamwidth, Vertical 2.2 °
Cross Polarization Discrimination (XPD) 32 dB

Electrical Compliance Brazil Anatel Class 2 | ETSI 302 217 Class 3

Front-to-Back Ratio 63 dB
Gain, Low Band 36.8 dBi
Gain, Mid Band 37.3 dBi
Gain, Top Band 37.7 dBi

Operating Frequency Band 7.125 – 8.500 GHz

Radiation Pattern Envelope Reference (RPE) 7079D
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 40 kg | 88 lb Side Struts, Included 1 inboard



VHLP4-7W-3WH/D

Side Struts, Optional

1 inboard

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

#### **POWERED BY** ANDREW

### **Wind Forces At Wind Velocity Survival Rating**

Axial Force (FA) 5326 N | 1197 lbf Side Force (FS) 2638 N | 593 lbf

Twisting Moment (MT) 2370 N•m

Weight with 1/2 in (12 mm) Radial Ice 75 kg | 165 lb Zcg with 1/2 in (12 mm) Radial Ice 310 mm | 12 in Zcg without Ice 210 mm | 8 in

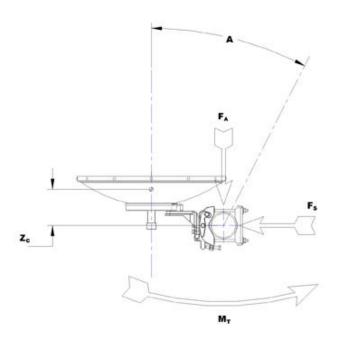


VHLP4-7W-3WH/D

POWERED BY



### Wind Forces At Wind Velocity Survival Rating Image



### **Packed Dimensions**

Gross Weight, Packed Antenna	72.0 kg   158.7 lb
Height	1520.0 mm   59.8 in
Length	1360.0 mm   53.5 in
Volume	0.9 m³
Width	410.0 mm   16.1 in

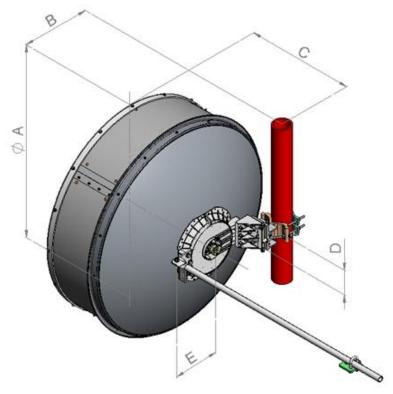


VHLP4-7W-3WH/D

**POWERED BY** 



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



Dimensions in Inches (mm)					
Antenna Size , ft (m)	Α	В	С	D	E
4 (1.2)	49.3 (1251)	17.5 (445)	27.4 (697)	6.3 (160)	11.9 (303)

#### **Included Products**

VHLP4-7W/D (Product Component—not orderable) — 1.2 m | 4 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 7.125-8.500 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



VHLP4-7W-3WH/D

**POWERED 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 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.