



## VHLP6-23-3GR/A

1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 21.200-23.600 GHz, UBR220, gray antenna, polymer gray radome without flash, standard pack—one-piece reflector

#### **OBSOLETE**

This product was discontinued on: July 1, 2016

#### **Replaced By:**

VHLP6-23-3WH/A 1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 21.200-23.600

GHz, UBR220, white antenna, polymer white radome without flash, standard pack—one-piece

reflector

VHLP6-23-3WH/B 1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 21.200-23.600

GHz, UBR220, white antenna, flexible woven polymer gray radome without flash, standard

pack—one-piece reflector

### **General Specifications**

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

Diameter, nominal 1.8 m | 6 ft
Packing Standard pack

Radome Color Gray
Radome Material Polymer

Reflector Construction One-piece reflector

Antenna Input UBR220 Antenna Color Gray

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

Diameter, nominal 1.8 m | 6 ft

Flash Included No Polarization Single

### **Electrical Specifications**

Operating Frequency Band 21.200 – 23.600 GHz

Beamwidth, Horizontal 0.5 °
Beamwidth, Vertical 0.5 °
Cross Polarization Discrimination (XPD) 30 dB

Electrical Compliance Brazil Anatel Class 2 | Canada SRSP 321.8 Part A | ETSI 302 217 Class

3 | US FCC Part 101A

Front-to-Back Ratio 79 dB
Gain, Low Band 48.9 dBi
Gain, Mid Band 49.4 dBi
Gain, Top Band 49.9 dBi

Operating Frequency Band 21.200 – 23.600 GHz



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Radiation Pattern Envelope Reference (RPE) 7069A Return Loss 17.7 dB VSWR 1.30

### **Mechanical Specifications**

Fine Azimuth Adjustment	±20°
Fine Elevation Adjustment	±15°

Mounting Pipe Diameter 115 mm | 4.5 in Net Weight 95 kg | 209 lb

Side Struts, Included 1 inboard Side Struts, Optional 1 inboard

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

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

Axial Force (FA)	7128 N	1602 lbf
Side Force (FS)	3531 N	794 lbf

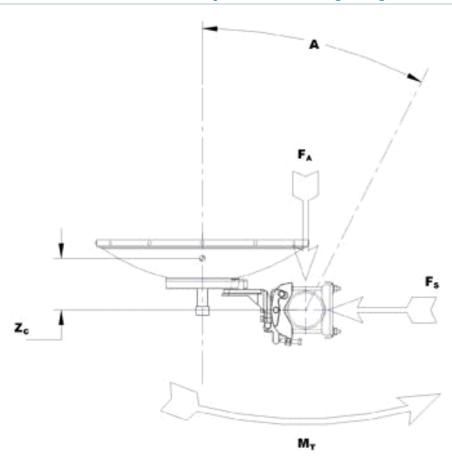
Twisting Moment (MT) 3197 N•m

Weight with 1/2 in (12 mm) Radial Ice 205 kg | 452 lb Zcg with 1/2 in (12 mm) Radial Ice 450 mm | 18 in Zcg without Ice 425 mm | 17 in



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## Wind Forces At Wind Velocity Survival Rating Image



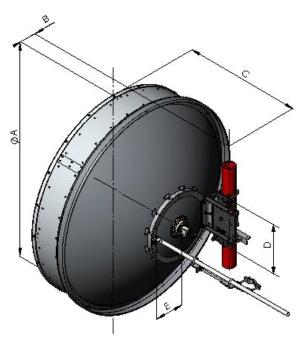
### **Packed Dimensions**

Gross Weight, Packed Antenna	130.0 kg   286.6 lb
Height	214.0 cm   84.3 in
Length	205.0 cm   80.7 in
Volume	2.9 m <sup>3</sup>
Width	66.0 cm   26.0 in



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



Dimensions in Inches (mm)							
Antenna Size, ft (m)	А	В	С	D	E		
6 (1.8)	73.6 (1871)	16.3 (415)	36.5 (927)	19.3 (490)	11.6 (295)		

### **Regulatory Compliance/Certifications**

Agency

Classification

ISO 9001:2008

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

### \* Footnotes

Front-to-Back Ratio

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. 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 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.



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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 define an antenna's ability to discriminate against

unwanted signals. Under still dry conditions, production antennas will not have any peak exceeding the current RPE by more than 3dB, maintaining an

angular accuracy of +/-1° throughout

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  $0.3 \times 10^{-2} = 0.3 \times 10^{-2}$ 

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.