



VHLP6-13-3GR/A

1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 12.700-13.250 GHz, UBR120, gray antenna, polymer gray radome without flash, standard pack—one-piece reflector

OBSOLETE

This product was discontinued on: July 1, 2016

Replaced By:

VHLP6-13-3WH/B

1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, single-polarized, 12.700–13.250 GHz, UBR120, white antenna, flexible woven polymer gray radome without flash, standard pack—one-piece reflector

Product Classification

Brand ValuLine®

Product Type Microwave antenna

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 UBR120 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 12.700 – 13.250 GHz

Beamwidth, Horizontal 0.9 °
Beamwidth, Vertical 0.9 °
Cross Polarization Discrimination (XPD) 30 dB

Electrical Compliance Brazil Anatel Class 2 | Canada SRSP 310.7 Part B | ETSI 302 217 Class 3 | US FCC Part 101A

Front-to-Back Ratio 72 dB
Gain, Low Band 44.8 dBi
Gain, Mid Band 45.2 dBi
Gain, Top Band 45.5 dBi

Operating Frequency Band 12.700 – 13.250 GHz

Radiation Pattern Envelope Reference (RPE) 7051A
Return Loss 17.7 dB
VSWR 1.30

Mechanical Specifications

Fine Azimuth Adjustment $\pm 20^{\circ}$ Fine Elevation Adjustment $\pm 15^{\circ}$

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



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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 | 125 mph

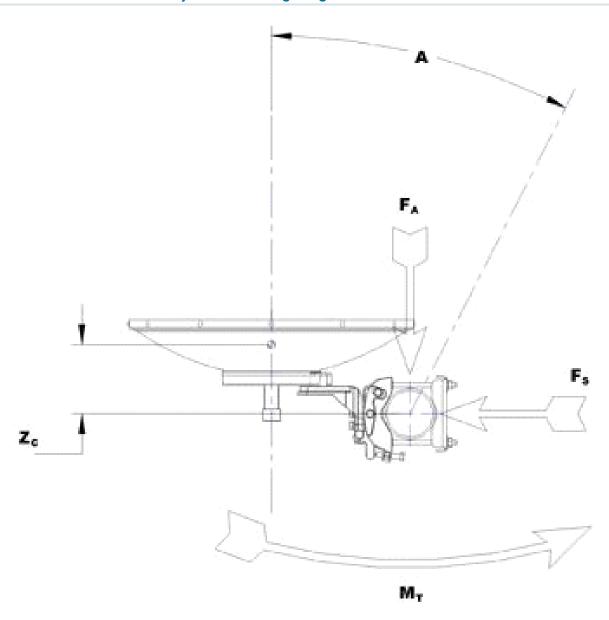
Wind Forces At Wind Velocity Survival Rating

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



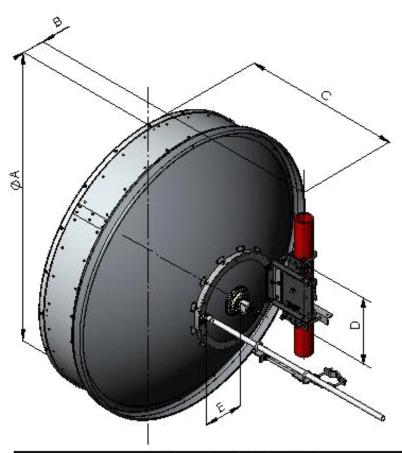
Packed Dimensions

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 ³
Width	66.0 cm 26.0 in



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Antenna Dimensions And Mounting Information



Dimensions in Inches (mm)								
Antenna Size, ft (m)	Α	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

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 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



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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 standard in totally Packing

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.

Maximum forces exerted on a supporting structure as a result of wind from the most critical direction Twisting Moment (MT)

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.