

0.2 m | 0.67 ft ValuLine® High Performance Low Profile Antenna, dual-polarized, 37.000 – 40.000 GHz, PBR320, polymer radome without flash, standard pack—one-piece reflector

#### **Product Classification**

Product Type Microwave antenna

Product Brand ValuLine®

General Specifications

Antenna Type VHLPX - ValuLine® High Performance Low Profile Antenna, dual-

0

polarized

**Polarization** Dual

Antenna Input PBR320

Antenna Color Custom

**Reflector Construction** One-piece reflector

Radome Color Custom

**Radome Material** Polymer

Flash Included No

Side Struts, Optional 0

**Dimensions** 

Side Struts, Included

**Diameter, nominal** 0.2 m | 0.67 ft

**Electrical Specifications** 

**Operating Frequency Band** 37.000 – 40.000 GHz

Gain, Low Band37.3 dBiGain, Mid Band37.5 dBiGain, Top Band37.7 dBiBoresite Cross Polarization Discrimination (XPD)30 dB

Front-to-Back Ratio 62 dB



Beamwidth, Horizontal2.3 °Beamwidth, Vertical2.3 °Return Loss17.7 dB

**VSWR** 1.3

Radiation Pattern Envelope Reference (RPE) 7313A

Electrical Compliance ETSI 302 217 Class 3

Mechanical Specifications

**Compatible Mounting Pipe Diameter** 48 mm – 120 mm | 1.9 in – 4.7 in

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

 Wind Speed, operational
 180 km/h | 111.847 mph

 Wind Speed, survival
 250 km/h | 155.343 mph

### Wind Forces at Wind Velocity Survival Rating

 Axial Force (FA)
 290 N | 65.195 lbf

 Side Force (FS)
 144 N | 32.372 lbf

 Twisting Moment (MT)
 86 N-m | 761.164 in lb

 Zcg without Ice
 11 mm | 0.433 in

 Zcg with 1 in (25 mm) Radial Ice
 18 mm | 0.709 in

**Weight with 1 in (25 mm) Radial Ice** 7 kg | 15.432 lb

### Packaging and Weights

 Height, packed
 230 mm | 9.055 in

 Width, packed
 380 mm | 14.961 in

 Length, packed
 400 mm | 15.748 in

Packaging Type Standard pack

 Volume
 0.034 m³ | 1.201 ft³

 Weight, gross
 5 kg | 11.023 lb

#### \* Footnotes

**Operating Frequency Band** 

Bands correspond with CCIR recommendations or common allocations used throughout the world. Other ranges can be accommodated on special order.



**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.

**Boresite 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.

**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.

**VSWR** Maximum; is the guaranteed Peak Voltage-Standing-Wave-Ratio within the

operating band.

**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

**Wind Speed, operational** For VHLP(X), SHP(X), HX and USX antennas, the wind speed where the

maximum antenna deflection is 0.3 x the 3 dB beam width of the antenna. For other antennas, it is defined as a deflection is equal to or less than 0.1

degrees.

Wind Speed, survival

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.

**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.

**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.

Packaging Type 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.

