

1.8 m | 6 ft ValuLine® High Performance Low Profile Antenna, dualpolarized, 7.125–8.500 GHz, PBR84, white antenna, flexible woven polymer gray radome without flash, standard pack—one-piece reflector

#### Product Classification

| Product BrandValuationGeneral SpecificationsVH_XP Valuatione High Performance Low Profile Antenna, dual-<br>polarizedAntenna TypeValuatione High Performance Low Profile Antenna, dual-<br>polarizedPolarizationDualAntenna InputVBR84Antenna ColorWhiteRaffector ConstructionOne piece reflectorRadome ColorGrayRadome MaterialPolymerFlash IncludedNoSide Struts, Included1Bide Struts, Included1DimensionsIniboardPlaneter, nominal1.8m16 ftGenting Erequency BandN25 - S000 GHzGain, Low Band4.01 dBiGain, Top Band4.03 dBiGing Top Band1.03 dBiGrand Cores Polarization Discrimination (XPD)3.04 GBiFort-to-Back Ratio6.03 GBiBeanwidth, Horizontal1.3*  | Product Type                                     | Microwave antenna   |
|---|--|---------------------|
| Antenna TypeUHLPX-ValuLine@High Performance Low Profile Antenna, dual-<br>polarizadi<br>polarizadi<br>polarizadi<br>polarizadi<br>polarizadi<br>polarizadi<br>polarizadiPolarizationUulAntenna InputPBR84Antenna ColorWhiteReflector ConstructionOne-piece reflectorRadome ColorGrayRadome MaterialPolymerFlash IncludedNoSide Struts, Included1Side Struts, Optional1DimensionSInboardFlaenter, nominal1.8m 16 ftGrayting Frequency BandAl.2 Sa 500 GHzGain, Low Band4.0.1 dBiGain, Top Band4.0.3 dBiGain, Top Band1.1 Sc BiFort-to-Back RatioS2 dBiFort-to-Back Ratio5.0 GHzFort-to-Back Ratio5.0 GHZ <th>Product Brand</th> <th>ValuLine®</th> | Product Brand                                    | ValuLine®           |
| PolarizedPolarizedPolarizedPolarizedPolarizedPolarizedPolarizedPatena InputPolarizedPolarizedReflector ConstructionRadome ColorRadome ColorRadome MaterialPolymerFlash IncludedPolymerSide Struts, IncludedPolymerSide Struts, OptionalDimensionsDimensionsPolameter, nominalPolarizedAntenialSide Struts, DecificationsPolarizedSin, Low BandGain, Low BandGain, Top BandBoresite Cross Polarization Discrimination (XPD)Side Struts, RatioGrotho-Back RatioFort-to-Back Ratio   | General Specifications                           |                     |
| Atena InputPBR84Atenna ColorWhiteAtenna ColorOne-piece reflectorReflector ConstructionOne-piece reflectorRadome ColorGrayRadome MaterialPolymerFash IncludedNoSide Struts, Included1Side Struts, Optional1 inboardDimensionsJamo BandPotertical Specifications1.810 GHzPorating Frequency Band0.125 = 8.500 GHzGain, Low Band40.1 dBiGain, Top Band40.3 dBiGain, Top Band32.03 GHzForte-Back Ratio52.03 GHzForte-Back Ratio67.03 GHz  | Antenna Type                                     |                     |
| Antenna ColorWhiteReflector ConstructionOne-pice reflectorRadome ColorGrayRadome MaterialPolymerFash IncludedNoSide Struts, Included1Side Struts, Optional1Dimensions   | Polarization                                     | Dual                |
| Reflector ConstructionOne-piece reflectorRadome ColorGrayRadome MaterialPolymerFash IncludedNoSide Struts, Included1Side Struts, Optional1DimensionsDimeter, nominalOperating Frequency BandGain, Low BandGain, Top BandGray BandGain, Top BandGain, Top BandGray  | Antenna Input                                    | PBR84               |
| Radome ColorGrayRadome MaterialPolymerRadome MaterialNoFlash IncludedNoSide Struts, Included1Side Struts, Optional1 inboardDimensions1Dimeter, nominal1.8 m   6 ftPoperating Frequency Band7.125 ~ 8.500 GHzGain, Low Band40.8 dBiGain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBiForte-Back Ratio67 dBi  | Antenna Color                                    | White               |
| Radome MaterialPolymerFlash IncludedNoSide Struts, Included1Side Struts, Optional1Dimensions1Diameter, nominal1.8 m   6 ftOperating Frequency Band7.125 = 8.500 GHzGain, Low Band40.1 dBiGain, Top Band41.5 dBiBorste Cross Polarization Discrimination (XPD)32 dBiFort-to-Back Ratio67 dBi   | Reflector Construction                           | One-piece reflector |
| Flash IncludedNoSide Struts, Included1Side Struts, Optional1 inboardDimensions1Dimeter, nominal1.8 m   6 ftElectrical Specifications7.125 - 8.500 GHzOperating Frequency Band40.1 dBiGain, Low Band40.8 dBiGain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBFront-o-Back Ratio67 dB   | Radome Color                                     | Gray                |
| Side Struts, Included1Side Struts, Optional1 inboardDimensions1Diameter, nominal1.8 m   6 ftElectrical Specifications7.125 - 8.500 GHzGain, Low Band40.1 dBiGain, Mid Band40.8 dBiGain, Top Band32 dBBoresite Cross Polarization Discrimination (XPD)32 dBFront-to-Back Ratio67 dB  | Radome Material                                  | Polymer             |
| Side Struts, Optional1 inboardDimensions  | Flash Included                                   | No                  |
| DimensionsDimeter, nominal1.8 m l 6 ftElectrical Specifications7.125 - 8.500 GHzOperating Frequency Band7.125 - 8.500 GHzGain, Low Band40.1 dBiGain, Mid Band40.8 dBiGain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBFront-to-Back Ratio67 dB  | Side Struts, Included                            | 1                   |
| Diameter, nominal1.8 m   6 ftElectrical Specifications7.125 - 8.500 GHzOperating Frequency Band7.125 - 8.500 GHzGain, Low Band40.1 dBiGain, Mid Band40.8 dBiGain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBiFront-to-Back Ratio67 dBi   | Side Struts, Optional                            | 1 inboard           |
| Electrical SpecificationsOperating Frequency Band7.125 - 8.500 GHzGain, Low Band40.1 dBiGain, Mid Band40.8 dBiGain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBFront-to-Back Ratio67 dB   | Dimensions                                       |                     |
| Operating Frequency Band7.125 – 8.500 GHzGain, Low Band40.1 dBiGain, Mid Band40.8 dBiGain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBFront-to-Back Ratio67 dB  | Diameter, nominal                                | 1.8 m   6 ft        |
| Gain, Low Band40.1 dBiGain, Mid Band40.8 dBiGain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBFront-to-Back Ratio67 dB   | Electrical Specifications                        |                     |
| Gain, Mid Band40.8 dBiGain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBFront-to-Back Ratio67 dB   | Operating Frequency Band                         | 7.125 – 8.500 GHz   |
| Gain, Top Band41.5 dBiBoresite Cross Polarization Discrimination (XPD)32 dBFront-to-Back Ratio67 dB   | Gain, Low Band                                   | 40.1 dBi            |
| Boresite Cross Polarization Discrimination (XPD)32 dBFront-to-Back Ratio67 dB   | Gain, Mid Band                                   | 40.8 dBi            |
| Front-to-Back Ratio 67 dB   | Gain, Top Band                                   | 41.5 dBi            |
|   | Boresite Cross Polarization Discrimination (XPD) | 32 dB               |
| Beamwidth, Horizontal 1.3 °   | Front-to-Back Ratio                              | 67 dB               |
|   | Beamwidth, Horizontal                            | 1.3 °               |

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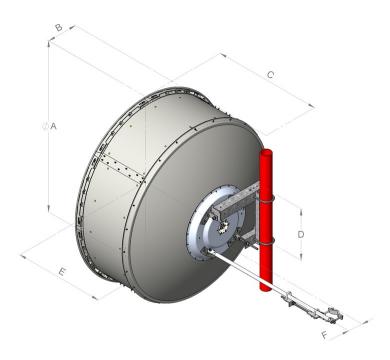
| Beamwidth, Vertical                        | 1.3 °  |
|--|--|
| Return Loss                                | 17.7 dB  |
| VSWR                                       | 1.3  |
| Radiation Pattern Envelope Reference (RPE) | 7082D  |
| Electrical Compliance                      | Brazil Anatel Class 3   Canada SRSP 307.1   Canada SRSP 307.7<br>Part B   ETSI 302 217 Class 3 |
| Mechanical Specifications                  |  |
| Compatible Mounting Pipe Diameter          | 115 mm-120 mm   4.5 in-4.7 in  |
| Fine Azimuth Adjustment Range              | ±15°   |
| Fine Elevation Adjustment Range            | ±5°  |
| Wind Speed, operational                    | 180 km/h   111.847 mph   |
| Wind Speed, survival                       | 250 km/h   155.343 mph   |

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Antenna Dimensions and Mounting Information



|                         | Dimensio       | ons in inch   | nes (mm)       |               |                |              |
|-------------------------|----------------|---------------|----------------|---------------|----------------|--------------|
| Antenna size, ft<br>(m) | A              | В             | с              | D             | Е              | F            |
| 6<br>(1.8)              | 74.8<br>(1899) | 13.4<br>(340) | 47.5<br>(1206) | 22.4<br>(570) | 39.4<br>(1001) | 6.9<br>(174) |

#### Wind Forces at Wind Velocity Survival Rating

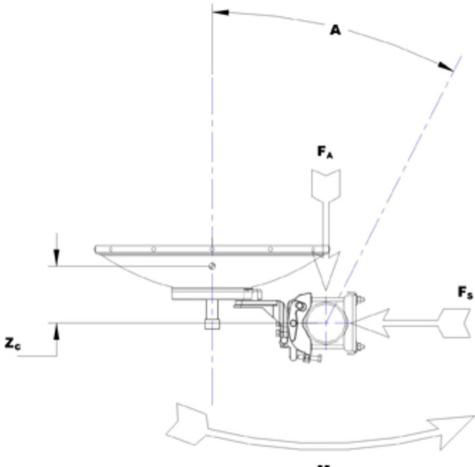
| Axial Force (FA)                      | 10670 N   2,398.712 lbf     |
|---------------------------------------|-----------------------------|
| Angle α for MT Max                    | -120 °                      |
| Side Force (FS)                       | 5286 N   1,188.34 lbf       |
| Twisting Moment (MT)                  | 4752 N-m   42,058.742 in lb |
| Zcg without Ice                       | 363 mm   14.291 in          |
| Zcg with 1/2 in (12 mm) Radial Ice    | 543 mm   21.378 in          |
| Weight with 1/2 in (12 mm) Radial Ice | 234 kg   515.881 lb         |

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Wind Forces at Wind Velocity Survival Rating Image



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#### Packaging and Weights

| Height, packed | 2110 mm   83.071 in |
|----------------|---------------------|
| Width, packed  | 450 mm   17.717 in  |
| Length, packed | 1900 mm   74.803 in |
| Packaging Type | Standard pack       |
| Volume         | 1.8 m³   63.566 ft³ |
| Weight, gross  | 127 kg   279.987 lb |
| Weight, net    | 86 kg   189.597 lb  |
|                |                     |

#### Regulatory Compliance/Certifications

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| Agency                  | Classification   |  |
|-------------------------|--|--|
| CHINA-ROHS              | Below maximum concentration value  |  |
| ISO 9001:2015           | Designed, manufactured and/or distributed under this quality management system |  |
| REACH-SVHC              | Compliant as per SVHC rev  | ision on www.commscope.com/ProductCompliance   |
| ROHS                    | Compliant  |  |
| UK-ROHS                 | Compliant  |  |
|                         |  |  |
| * Footnotes             |  |  |
| Operating Frequency B   | and  | 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.<br>The gain of Andrew antennas is determined by either gain by comparison<br>or by computer integration of the measured antenna patterns.  |
| Boresite Cross Polariza | tion 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 Envel | ope Reference (RPE)  | Radiation patterns define an antenna's ability to discriminate against<br>unwanted signals. Under still dry conditions, production antennas will not<br>have any peak exceeding the current RPE by more than 3dB, maintaining<br>an angular accuracy of +/-1° throughout |
| Wind Speed, operationa  | 1  | 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,<br>where applicable, will withstand without permanent deformation.<br>Realignment may be required. This wind speed is applicable to antenna<br>with the specified amount of radial ice.                |

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| Axial Force (FA)     | Maximum forces exerted on a supporting structure as a result of wind<br>from the most critical direction for this parameter. The individual<br>maximums specified may not occur simultaneously. All forces are<br>referenced to the mounting pipe. |
|----------------------|--|
| Side Force (FS)      | Maximum side force exerted on the mounting pipe as a result of wind from<br>the most critical direction for this parameter. The individual maximums<br>specified may not occur simultaneously. All forces are referenced to the<br>mounting pipe.  |
| Twisting Moment (MT) | Maximum forces exerted on a supporting structure as a result of wind<br>from the most critical direction for this parameter. The individual<br>maximums specified may not occur simultaneously. All forces are<br>referenced to the mounting pipe. |
| Packaging Type       | Andrew standard packing is suitable for export. Antennas are shipped as<br>standard in totally recyclable cardboard or wire-bound crates (dependent<br>on product). For your convenience, Andrew offers heavy duty export<br>packing options.      |

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