

0.6 m | 2 ft Sentinel® High Performance Antenna, dual-polarized, 37.0–40.0 GHz, UBR flange, white antenna, grey radome

Product Classification

Product Type Microwave antenna

Product Brand Sentinel®

General Specifications

Antenna Type SHPX - Sentinel® High Performance Antenna, dual-

polarized

Polarization Dual

Antenna Input UBR320

Antenna Color White

Reflector Construction One-piece reflector

Radome Color Gray

Radome Material Polymer

Flash Included No

Side Struts, Included 0

Side Struts, Optional 0

Dimensions

Diameter, nominal 0.6 m | 2 ft

Electrical Specifications

Operating Frequency Band 37.000 – 40.000 GHz

Gain, Low Band44.6 dBiGain, Mid Band45.2 dBi

Gain, Top Band 45.8 dBi

Boresite Cross Polarization Discrimination (XPD) 30 dB

ANDREW® an Amphenol company

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Front-to-Back Ratio72 dBBeamwidth, Horizontal0.9°Beamwidth, Vertical0.9°Return Loss17.7 dBVSWR1.3

VSWR 1.3

Electrical Compliance Brazil Anatel Class 2 | Canada SRSP

338.6 | ETSI 302 217 Class 4 | US FCC Part

101A

7266B

Cross Polarization Discrimination (XPD) Electrical Compliance ETSI EN 302217 XPD Category 2

Mechanical Specifications

Radiation Pattern Envelope Reference (RPE)

Compatible Mounting Pipe Diameter 50 mm-115 mm | 2.0 in-4.5 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) 1290 N | 290.004 lbf

Angle α for MT Max 0 $^{\circ}$

Side Force (FS) 639 N | 143.653 lbf

Twisting Moment (MT) 395 N-m | 3,496.045 in lb

 Zcg without Ice
 187 mm | 7.362 in

 Zcg with 1/2 in (12 mm) Radial Ice
 185 mm | 7.283 in

 Weight with 1/2 in (12 mm) Radial Ice
 34 kg | 74.957 lb

Packaging and Weights

 Height, packed
 580 mm
 | 22.835 in

 Width, packed
 735 mm
 | 28.937 in

 Length, packed
 735 mm
 | 28.937 in

Packaging TypeStandard packVolume0 m³ | 0 ft³



 Weight, gross
 16 kg | 35.274 lb

 Weight, net
 11 kg | 24.251 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Above maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



* 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 LossThe 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

Cross Polarization Discrimination (XPD) Electrical Compliance 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.

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