

0.6 m | 2 ft Sentinel® High Performance Antenna, dual-polarized, 40.5–43.5 GHz, OEM custom flange, OEM custom colour

Product Classification

Product Type Microwave antenna

Product Brand Sentinel®

General Specifications

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

polarized

Polarization Dual

Antenna Input Custom

Antenna Color Custom

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 40.500 – 43.500 GHz

Gain, Low Band45.7 dBiGain, Mid Band46 dBiGain, Top Band46.3 dBi

Boresite Cross Polarization Discrimination (XPD) 30 dB

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Front-to-Back Ratio 71 dB

Beamwidth, Horizontal 0.8 °

Beamwidth, Vertical 0.8 °

Return Loss 17.7 dB

VSWR 1.3

Radiation Pattern Envelope Reference (RPE) 7268B

Electrical Compliance Brazil Anatel Class 2 | ETSI 302 217 Class 4

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

Mechanical Specifications

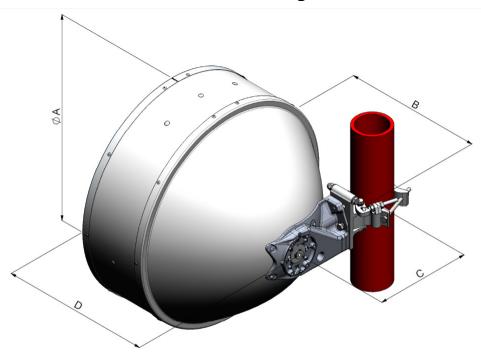
Compatible Mounting Pipe Diameter 50 mm – 115 mm | 2.0 in – 4.5 in

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

Antenna Dimensions and Mounting Information



Dimension in Inches(mm)				
Antenna size, ft(m)	Α	В	С	D
2(0.6)	26.1(664)	17.4(441)	12.1(307)	18.8(478)

Wind Forces at Wind Velocity Survival Rating

Axial Force (FA)

Angle α for MT Max

Side Force (FS)

Twisting Moment (MT)

Zcg without Ice

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

Weight with 1/2 in (12 mm) Radial Ice

1290 N | 290.004 lbf

0°

639 N | 143.653 lbf

395 N-m | 3,496.045 in lb

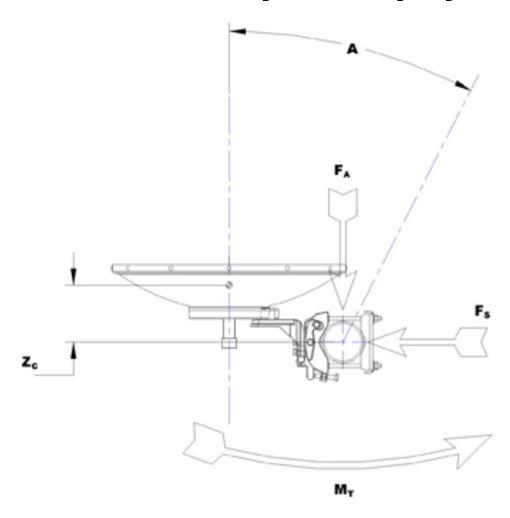
187 mm | 7.362 in

185 mm | 7.283 in

34 kg | 74.957 lb



Wind Forces at Wind Velocity Survival Rating Image



Packaging and Weights

Weight, net

 Height, packed
 580 mm
 22.835 in

 Width, packed
 735 mm
 28.937 in

Length, packed 735 mm | 28.937 in

Packaging Type Standard pack

Volume 0 m³ | 0 ft³

Weight, gross 16 kg | 35.274 lb

Regulatory Compliance/Certifications

COMMSCOPE®

11 kg | 24.251 lb

Agency

Classification

ISO 9001:2015

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

* 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.

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

where the maximum antenna deflection is $0.3\,\mathrm{x}$ the $3\,\mathrm{dB}$ 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.

or radiance.

es, COMMSCOPE®

Axial Force (FA)

Side Force (FS)

Twisting Moment (MT)

Packaging Type

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.

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 for this parameter. The individual maximums specified may not occur simultaneously. All forces are referenced to the mounting pipe.

Andrew standard packing is suitable for export. Antennas are shipped as standard in totally recyclable cardboard or wirebound crates (dependent on product). For your convenience, Andrew offers heavy duty export packing options.