

0.9m | 3ft Sentinel® High Performance Antenna, dual-polarized, 24.250 – 26.500 GHz, UBR220 Flange, White Antenna, Grey Radome

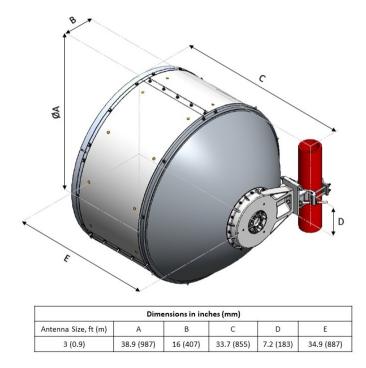
Product Classification **Product Type** Microwave antenna **Product Brand** Sentinel® General Specifications Antenna Type SHPX - Sentinel® High Performance Antenna, dualpolarized Polarization Dual **UBR220** Antenna Input Antenna Color White **Reflector Construction** One-piece reflector **Radome Color** Gray **Radome Material** Composite Broadband Flash Included No Side Struts, Included 0 1 Side Struts, Optional Dimensions **Diameter**, nominal 0.9 m | 3 ft **Electrical Specifications Operating Frequency Band** 24.250 - 26.500 GHz 45.6 dBi Gain, Low Band 45.8 dBi Gain, Mid Band Gain, Top Band 46.2 dBi **Boresite Cross Polarization Discrimination (XPD)** 30 dB 77 dB Front-to-Back Ratio Beamwidth, Horizontal 0.8°

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Return Loss	17.7 dB
VSWR	1.3
Radiation Pattern Envelope Reference (RPE)	7304B
Electrical Compliance	Brazil Anatel Class 2 Canada SRSP 324.25 ETSI 302 217 Class 4 US FCC Part 101A
Cross Polarization Discrimination (XPD) Electrical Compliance	ETSI EN 302217 XPD Category 3
Mechanical Specifications	
Compatible Mounting Pipe Diameter	90 mm-120 mm 3.5 in-4.7 in
Fine Azimuth Adjustment Range	±15°
Fine Elevation Adjustment Range	±15°
Wind Speed, operational	180 km/h 111.847 mph
Wind Speed, survival	250 km/h 155.343 mph

Antenna Dimensions and Mounting Information



Wind Forces at Wind Velocity Survival Rating

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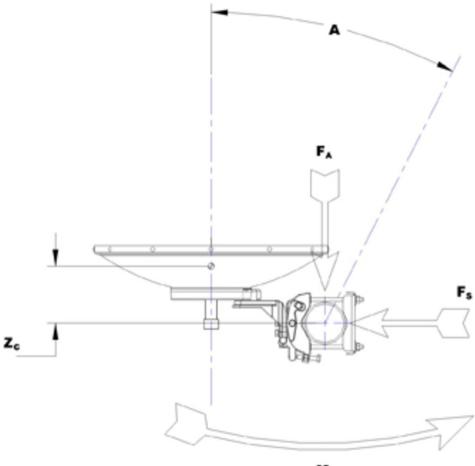


Axial Force (FA)	3353 N 753.785 lbf
Angle α for MT Max	30 °
Side Force (FS)	1680 N 377.679 lbf
Twisting Moment (MT)	1605 N-m 14,205.447 in lb
Zcg without Ice	310 mm 12.205 in
Zcg with 1/2 in (12 mm) Radial Ice	388 mm 15.276 in
Weight with 1/2 in (12 mm) Radial Ice	87 kg 191.802 lb

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Wind Forces at Wind Velocity Survival Rating Image



MT

Packaging and Weights Height, packed 1220 mm | 48.032 in Width, packed Length, packed **Packaging Type** Standard pack Volume 0.64 m³ | 22.601 ft³ Weight, gross 40 kg | 88.185 lb Weight, net 24 kg | 52.911 lb

Regulatory Compliance/Certifications

470 mm | 18.504 in 1120 mm | 44.095 in

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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 revision on www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



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
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 x the 3 dB beam width of the antenna. For other antennas, it is defined

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	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.

