

0.3 m | 1 ft Sentinel® High Performance Antenna, dual-polarized, 24.25–26.5 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	UBR220
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	0.3 m   1 ft
Electrical Specifications	
Operating Frequency Band	24.250 – 26.500 GHz
Gain, Low Band	36.4 dBi
Gain, Mid Band	36.8 dBi
Gain, Top Band	37.3 dBi
Boresite Cross Polarization Discrimination (XPD)	30 dB
	Page 1 of 6

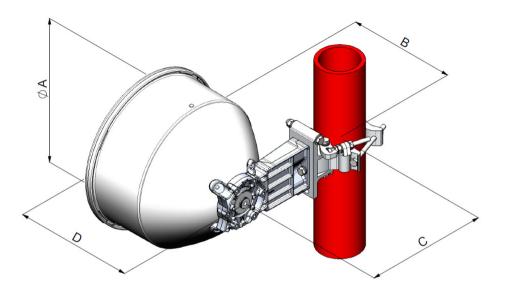


Front-to-Back Ratio	69 dB
Beamwidth, Horizontal	2.4 °
Beamwidth, Vertical	2.4 °
Return Loss	17.7 dB
VSWR	1.3
Radiation Pattern Envelope Reference (RPE)	7278B
Electrical Compliance	Brazil Anatel Class 2   Canada SRSP 321.8 Part B   ETSI 302 217 Class 4
Cross Polarization Discrimination (XPD) Electrical Compliance	ETSI EN 302217 XPD Category 2
Cross Polarization Discrimination (XPD) Electrical Compliance Mechanical Specifications	ETSI EN 302217 XPD Category 2
	ETSI EN 302217 XPD Category 2 50 mm-115 mm   2.0 in-4.5 in
Mechanical Specifications	
Mechanical Specifications Compatible Mounting Pipe Diameter	50 mm-115 mm   2.0 in-4.5 in
Mechanical Specifications Compatible Mounting Pipe Diameter Fine Azimuth Adjustment Range	50 mm-115 mm   2.0 in-4.5 in ±15°
Mechanical Specifications Compatible Mounting Pipe Diameter Fine Azimuth Adjustment Range Fine Elevation Adjustment Range	50 mm-115 mm   2.0 in-4.5 in ±15° ±15°

Page 2 of 6



Antenna Dimensions and Mounting Information



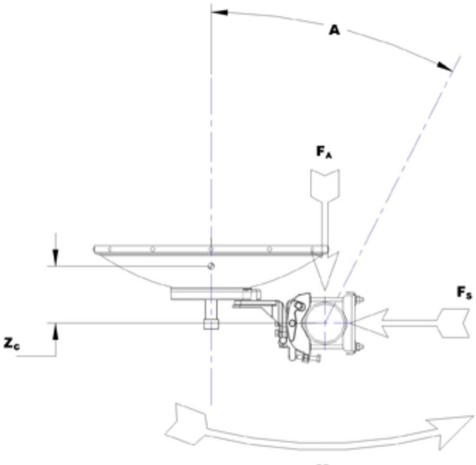
Dimension in Inches(mm)				
Antenna size, ft(m)	A	В	С	D
1(0.3)	15.3(389)	11.3(287)	12.8(326)	12.6(319)

#### Wind Forces at Wind Velocity Survival Rating

Axial Force (FA)	446 N   100.265 lbf
Angle α for MT Max	0 °
Side Force (FS)	222 N   49.908 lbf
Twisting Moment (MT)	144 N-m   1,274.507 in lb
Zcg without Ice	74 mm   2.913 in
Zcg with 1/2 in (12 mm) Radial Ice	111 mm   4.37 in
Weight with 1/2 in (12 mm) Radial Ice	19 kg   41.888 lb

Page 3 of 6

Wind Forces at Wind Velocity Survival Rating Image



M<sub>T</sub>

Packaging and Weights 450 mm | 17717 in Height, packed Width, packed Length, packed Packaging Type Volume Weight, gross Weight, net

#### Regulatory Compliance/Certifications

450 mm   17.717 in		
400 mm   15.748 in		
400 mm   15.748 in		
Standard pack		
0.1 m³   3.531 ft³		
9 kg   19.842 lb		
6 kg   13.228 lb		

Page 4 of 6



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 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 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.

Page 5 of 6



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.

