

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, dual-

polarized

Polarization Dual

Antenna Input UBR220
Antenna Color White

Reflector Construction One-piece reflector

Radome Color Gray

Radome Material Composite Broadband

Flash Included No
Side Struts, Included 0
Side Struts, Optional 1

Dimensions

Diameter, nominal 0.9 m | 3 ft

Electrical Specifications

Operating Frequency Band 24.250 - 26.500 GHz

Gain, Low Band45.6 dBiGain, Mid Band45.8 dBiGain, Top Band46.2 dBiBoresite Cross Polarization Discrimination (XPD)30 dBFront-to-Back Ratio77 dB

Beamwidth, Horizontal $0.8\,^\circ$



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

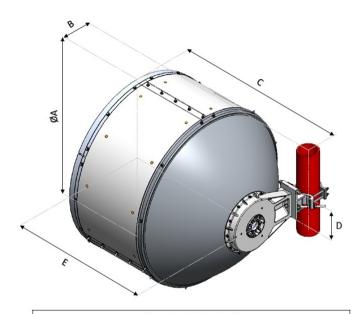
Fine Azimuth Adjustment Range ±15°

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



Dimensions in inches (mm)					
Antenna Size, ft (m)	А	В	С	D	Е
3 (0.9)	38.9 (987)	16 (407)	33.7 (855)	7.2 (183)	34.9 (887)

Wind Forces at Wind Velocity Survival Rating



Axial Force (FA) 3353 N | 753.785 lbf

Angle α for MT Max 30 $^{\circ}$

Side Force (FS) 1680 N | 377.679 lbf

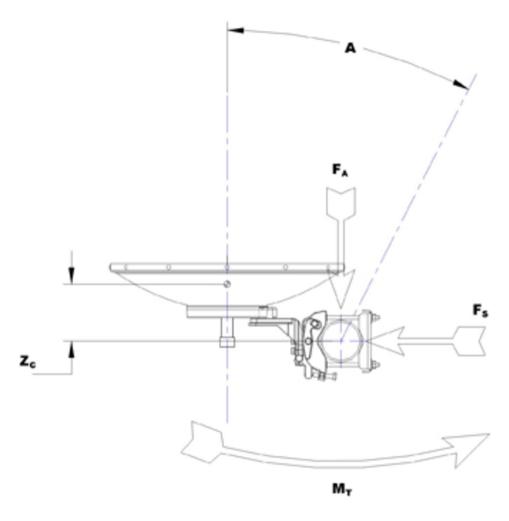
Twisting Moment (MT) 1605 N-m | 14,205.447 in lb

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

Wind Forces at Wind Velocity Survival Rating Image



Packaging and Weights

Height, packed

 Width, packed
 470 mm | 18.504 in

 Length, packed
 1120 mm | 44.095 in

ength, packed 1120 mm | 44.095 in

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



1220 mm | 48.032 in

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



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

Page 5 of 6



Wind Speed, survival

Axial Force (FA)

Side Force (FS)

Twisting Moment (MT)

Packaging Type

as a deflection is equal to or less than 0.1 degrees.

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.

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.