

0.9m | 3ft Sentinel® High Performance Antenna, dual-polarized, 5.925 - 7.125 GHz, PDR Flange, White Antenna, Grey Radome

#### **OBSOLETE**

This product was discontinued on: May 1, 2022

Replaced By:

SHPX3-6W-4WH/B

 $0.9m \mid 3ft \ Sentinel \\ \hbox{$^\circ$} \ High \ Performance \ Antenna, \ dual-polarized, \ 5.925 - 7.125 \ GHz, \ PDR \ Flange, \ White \ Polarized \ Polarized \ Polarized \ Polarized \ PDR \ Polarized \$ 

Antenna, Grey Radome

#### **Product Classification**

Product Type Microwave antenna

Product Brand Sentinel®

General Specifications

Antenna Type SHP - Sentinel® High Performance Antenna, single-

polarized

Polarization Dual
Antenna Input PDR70

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

**Dimensions** 

Diameter, nominal 0.9 m | 3 ft

**Electrical Specifications** 

**Operating Frequency Band** 5.925 – 7.125 GHz

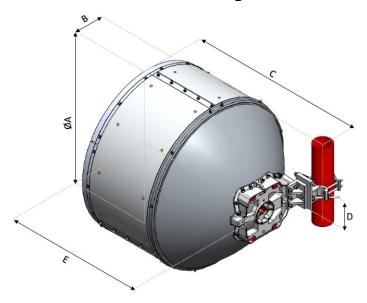
Page 1 of 6

Wind Speed, survival

32.3 dBi Gain, Low Band 33.6 dBi Gain, Mid Band 34.5 dBi Gain, Top Band **Boresite Cross Polarization Discrimination (XPD)** 30 dB 65 dB Front-to-Back Ratio 3.3° Beamwidth, Horizontal **Return Loss** 17.7 dB **VSWR** 1.3 Radiation Pattern Envelope Reference (RPE) 7290A **Electrical Compliance** Brazil Anatel Class 2 | ETSI 302 217 Class 3 | US FCC Part 101B2 **Cross Polarization Discrimination (XPD) Electrical Compliance** ETSI EN 302217 XPD Category 2 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 200 km/h | 124.274 mph

250 km/h | 155.343 mph

### Antenna Dimensions and Mounting Information



Dimensions in inches (mm)					
Antenna Size, ft (m)	А	В	С	D	E
3 (0.9)	38.9 (987)	16 (407)	36.3 (923)	7.2 (183)	34.7 (882.2)

#### 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

2956 N | 664.535 lbf

40°

1464 N | 329.12 lbf

1203 N-m | 10,647.447 in lb

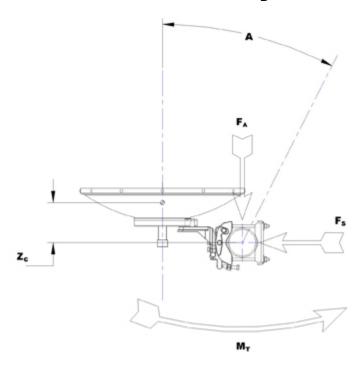
325 mm | 12.795 in

481 mm | 18.937 in

89 kg | 196.211 lb



### Wind Forces at Wind Velocity Survival Rating Image



### Packaging and Weights

 Height, packed
 1220 mm | 48.032 in

 Width, packed
 490 mm | 19.291 in

 Length, packed
 1120 mm | 44.095 in

 Packaging Type
 Standard pack

 Volume
 0.7 m³ | 24.72 ft³

 Weight, gross
 44.6 kg | 98.326 lb

 Weight, net
 27 kg | 59.525 lb

# Regulatory Compliance/Certifications

#### Agency Classification

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

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance



\* Footnotes



**Return Loss** 

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.

rated values by more than 2 dB unless stated otherwise.

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  $0.3\,\mathrm{x}$  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.

Page 5 of 6

Side Force (FS)

**Twisting Moment (MT)** 

**Packaging Type** 

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.