

# 2-port sector antenna, 2x 698–896 MHz, 45° HPBW, 1x RET, internal SBT

- Broadband, providing future-ready single antenna for application in 700 MHz and existing 850 MHz cellular operation
- Specifically designed to have physical dimensions similar to most existing cellular antennas

### General Specifications

Antenna Type Sector

**Band** Single band

Color Light Gray (RAL 7035)

**Grounding Type**RF connector body grounded to reflector and mounting bracket

Performance Note

Outdoor usage | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

**Radome Material** Fiberglass, UV resistant

Radiator Material Aluminum | Copper | Low loss circuit board

Reflector Material Aluminum

**RF Connector Interface** 7-16 DIN Female

RF Connector Location Bottom

RF Connector Quantity, high band 0

RF Connector Quantity, mid band

RF Connector Quantity, low band

RF Connector Quantity, total

### Remote Electrical Tilt (RET) Information

RET Interface 8-pin DIN Female | 8-pin DIN Male

**RET Interface, quantity** 1 female | 1 male

Input Voltage 10-30 Vdc

**Internal Bias Tee** Port 1

Internal RET Low band (1)

Power Consumption, idle state, maximum 2 W
Power Consumption, normal conditions, maximum 13 W

**Protocol** 3GPP/AISG 2.0 (Single RET)

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Page 1 of 4

#### **Dimensions**

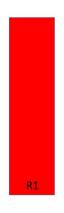
 Width
 457 mm | 17.992 in

 Depth
 178 mm | 7.008 in

 Length
 2437 mm | 95.945 in

 Net Weight, without mounting kit
 32 kg | 70.548 lb

### Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Bottom

(Sizes of colored boxes are not true depictions of array sizes)

### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 698 – 896 MHz

Polarization ±45°

### **Electrical Specifications**

Frequency Band, MHz	698-806	806-896
Gain, dBi	18.2	18.5
Beamwidth, Horizontal, degrees	47	43
Beamwidth, Vertical, degrees	9	8.3
Beam Tilt, degrees	2-12	2-12
USLS (First Lobe), dB	14	14
Front-to-Back Ratio at 180°, dB	29	30



CPR at Boresight, dB	24	20
CPR at 10 dB Horizontal Beamwidth, dB	11	13
Isolation, Cross Polarization, dB	25	25
VSWR   Return loss, dB	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153
Input Power per Port, maximum, watts	350	350

### Mechanical Specifications

Effective Projective Area (EPA), frontal  $1.4 \text{ m}^2 \mid 15.069 \text{ ft}^2$ Effective Projective Area (EPA), lateral  $0.3 \text{ m}^2 \mid 3.229 \text{ ft}^2$ 

Mechanical Tilt Range 0°-11°

 Wind Loading @ Velocity, frontal
 1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 315.0 N @ 150 km/h (70.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 1,304.0 N @ 150 km/h (293.2 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

### Packaging and Weights

 Width, packed
 567 mm | 22.323 in

 Depth, packed
 311 mm | 12.244 in

 Length, packed
 2559 mm | 100.748 in

 Weight, gross
 51.7 kg | 113.979 lb

### Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Above maximum concentration value

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

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



#### Included Products

BSAMNT-3 – Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members.

Kit contains one scissor top bracket set and one bottom bracket set.

BSAMNT-M – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round

members. Kit contains one scissor bracket set.

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### \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance

