

8-port sector antenna, 2x 698–803, 2x 824–894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers. Internal SBT's on first LB(Port 1) and first HB(Port 5)

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

#### General Specifications

Antenna Type Sector

Band Multiband

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 Low loss circuit board

Reflector Material Aluminum

**RF Connector Interface** 4.3-10 Female

**RF Connector Location**Bottom

RF Connector Quantity, high band 4
RF Connector Quantity, low band 4

RF Connector Quantity, total 8

#### Remote Electrical Tilt (RET) Information

**RET Hardware** CommRET v2

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

**RET Interface, quantity** 2 female | 2 male

Input Voltage 10-30 Vdc

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Internal Bias Tee Port 1 | Port 5

Internal RET High band (1) | Low band (2)

Power Consumption, idle state, maximum 1 W

Power Consumption, normal conditions, maximum 8 W

Protocol 3GPP/AISG 2.0 (Single RET)

**Dimensions** 

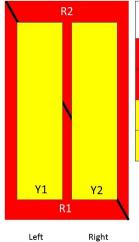
**Width** 350 mm | 13.78 in

**Depth** 208 mm | 8.189 in

**Length** 2438 mm | 95.984 in

Net Weight, without mounting kit 36.1 kg | 79.587 lb

### Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-803	1-2	1	CPxxxxxxxxxxxxxXR1
R2	824-894	3-4	2	CPxxxxxxxxxxxxxxR2
Y1	1695-2360	5-6	•	CDV1
Y2	1695-2360	7-8	3	CPxxxxxxxxxxxxxY1

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

## Port Configuration

Bottom





## **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2360 MHz | 698 – 803 MHz | 824 – 894 MHz

Polarization ±45°

**Total Input Power, maximum** 800 W @ 50 °C

## **Electrical Specifications**

'						
Frequency Band, MHz	698-803	824-894	1695-1880	1850-1990	1920-2200	2300-2360
Gain, dBi	15.6	16.1	18.2	18.6	18.8	18.9
Beamwidth, Horizontal, degrees	67	64	62	60	61	63
Beamwidth, Vertical, degrees	9.9	8.4	5.6	5.2	4.9	4.5
Beam Tilt, degrees	0-11	0-11	0-10	0-10	0-10	0-10
USLS (First Lobe), dB	22	23	18	18	18	18
Front-to-Back Ratio at 180°, dB	33	31	30	34	37	35
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR   Return loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0

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PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C,	200	200	250	250	250	200
maximum, watts						

### Electrical Specifications, BASTA

Frequency Band, MHz	698-803	824-894	1695-1880	1850-1990	1920-2200	2300-2360
Gain by all Beam Tilts, average, dBi	15.2	15.9	17.6	18.4	18.5	18.5
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.7	±0.4	±0.5	±0.6
Gain by Beam Tilt, average, dBi	0 °   15.1 5 °   15.3 11 °   15.2	0 °   15.6 5 °   16.0 11 °   15.9	0° 17.4 5° 17.7 10° 17.5	0° 18.1 5° 18.5 10° 18.4	0 °   18.1 5 °   18.6 10 °   18.4	0° 18.1 5° 18.7 10° 18.3
Beamwidth, Horizontal Tolerance, degrees	±0.9	±1.6	±3.5	±2.5	±2.7	±4.1
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.3	±0.2	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	16	14	15	16	16	15
Front-to-Back Total Power at 180° ± 30°, dB	26	23	25	30	28	29
CPR at Boresight, dB	22	22	21	24	22	22
CPR at Sector, dB	12	11	10	13	12	7

### Mechanical Specifications

Effective Projective Area (EPA), frontal	0.4 m <sup>2</sup>   4.306 ft <sup>2</sup>
Effective Projective Area (EPA), lateral	0.34 m <sup>2</sup>   3.66 ft <sup>2</sup>

Mechanical Tilt Range 0°-12°

 Wind Loading @ Velocity, frontal
 425.0 N @ 150 km/h (95.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 361.0 N @ 150 km/h (81.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 900.0 N @ 150 km/h (202.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 451.0 N @ 150 km/h (101.4 lbf @ 150 km/h)

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

### Packaging and Weights

Width, packed	456 mm   17.953 in
Depth, packed	357 mm   14.055 in
Length, packed	2585 mm   101.772 in

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**Weight, gross** 51.1 kg | 112.656 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.

### \* Footnotes

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

