

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
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

#### 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 MaterialFiberglass, UV resistantRadiator MaterialLow 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

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Input Voltage 10-30 Vdc

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** 

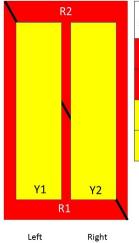
**Width** 350 mm | 13.78 in

**Depth** 208 mm | 8.189 in

**Length** 2438 mm | 95.984 in

Net Weight, without mounting kit 36.2 kg | 79.807 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	2	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** 900 W @ 50 °C

### **Electrical Specifications**

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Frequency Band, MHz	698-803	824-894	1695-1880	1850-1990	1920-2200	2300-2360
Gain, dBi	15.7	16.1	18.2	18.8	19.1	19.5
Beamwidth, Horizontal, degrees	67	65	63	60	60	64
Beamwidth, Vertical, degrees	9.6	8.6	5.6	5.1	4.8	4.4
Beam Tilt, degrees	0-11	0-11	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	18	18	20	19	20	20
Front-to-Back Ratio at 180°, dB	30	32	36	40	37	37
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	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C,	300	300	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	15.5	15.9	17.9	18.5	18.8	19.1
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.4	±0.6	±0.4	±0.4	±0.6
Gain by Beam Tilt, average, dBi	0° 15.2 5° 15.6 11° 15.5	0° 15.6 5° 16.0 11° 15.9	2 °   17.7 7 °   18.0 12 °   17.8	2° 18.2 7° 18.6 12° 18.4	2° 18.5 7° 18.9 12° 18.7	2° 18.7 7° 19.2 12° 19.0
Beamwidth, Horizontal Tolerance, degrees	±1.4	±1.1	±3.7	±1.4	±2	±4.7
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.5	±0.3	±0.2	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	17	17	15	16	16	16
Front-to-Back Total Power at 180° ± 30°, dB	25	25	29	30	27	28
CPR at Boresight, dB	17	17	18	19	19	18
CPR at Sector, dB	10	11	11	9	10	8

#### Mechanical Specifications

Effective Projective Area (EPA), frontal $0.4 \text{ m}^2 \mid 4.306 \text{ ft}^2$ Effective Projective Area (EPA), lateral $0.34 \text{ m}^2 \mid 3.66 \text{ ft}^2$ 

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



**Weight, gross** 48.5 kg | 106.924 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-2F – Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical

tilt applications.

### \* Footnotes

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

