

10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100-4000 MHz, 55° HPBW, 2x RETs.

- Utilizes Pattern Shaping Technology to reduce cell overlap and maximize SINR (Signal to Interference and Noise Ratio)
- Superior SPR (Sector Power Ratio) for best-in-class data throughput rates
- Excellent pattern overlay across all bands
- Low band and mid band performance mirrors performance of the equivalent hex port antenna
- Internal SBTs on low and mid band allow remote RET control from the radio over the RF jumper cable
- One LB RET and one MB RET. Both mid band arrays are controlled by one RET to ensure same tilt level for best 4x4 MIMO performance
- Use optional BSAMNT-SBS-2-2 for side-by-side mounting of two hex and/or ten port 55° antennas

#### General Specifications

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

**Grounding Type**RF connector inner conductor and body grounded to reflector and mounting

bracket

Performance Note Outdoor usage

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, mid band 4
RF Connector Quantity, low band 2

RF Connector Quantity, total 10

## Remote Electrical Tilt (RET) Information

**RET Hardware** CommRET v2

**RET Interface**4x 8 pin connector as per IEC 60130-9 Daisy chain in: Male / Daisy chain out: Female Pin3: RS485A(AISG\_B), Pin5: RS485B(AISG\_A), Pin6: DC 10~30V, Pin7:

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DC\_Return

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

Input Voltage 10-30 Vdc

Internal Bias Tee Port 1 | Port 3

Internal RET Low band (1) | Mid band (1)

Power Consumption, active state, maximum  $10~\mathrm{W}$ Power Consumption, idle state, maximum  $2~\mathrm{W}$ 

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

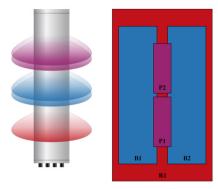
**Dimensions** 

 Width
 395 mm | 15.551 in

 Depth
 228 mm | 8.976 in

 Length
 1828 mm | 71.969 in

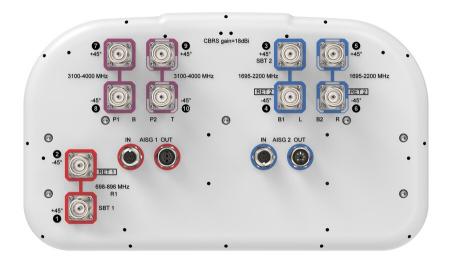
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID		
R1	698-896			AISG1	1	1	CPxxxxxxxxxxxxxxxR1		
B1	1695-2200	3 - 4	,	NECO	-	2	60		
B2	1695-2200	5 - 6	2	AISG2	3	2	CPxxxxxxxxxxxxxxxB1		
P1	3100-4000	7 - 8							
P2	3100-4000	9 - 10	N/A	NA			N/A		

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

## Port Configuration



## **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2200 MHz | 3100 – 4000 MHz | 698 – 896 MHz

Polarization ±45°

**Total Input Power, maximum** 1,000 W @ 50 °C

## **Electrical Specifications**

	R1	R1	B1,B2	B1,B2	B1,B2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	698-806	806-896	1695-188	0 1850-199	0 1920-220	0 3100-355	0 3550-370	0 3700-4000
RF Port	1,2	1,2	3,4,5,6	3,4,5,6	3,4,5,6	7,8,9,10	7,8,9,10	7,8,9,10
Gain, dBi	15.1	15	18	18.4	18.5	16.4	17.3	17.4
Beamwidth, Horizontal, degrees	58	54	56	55	52	66	53	54
Beamwidth, Vertical, degrees	12.6	10.9	5.7	5.3	5	6	5.4	5.1
Beam Tilt, degrees	0-14	0-14	0-7	0-7	0-7	4	4	4
USLS (First Lobe), dB	16	15	17	17	15	15	17	15
Front-to-Back Ratio at 180°, dB	26	28	29	28	28	26	27	25
Isolation, Cross Polarization,	25	25	25	25	25	25	25	25

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dB								
Isolation, Inter-band, dB	25	25	25	25	25	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	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	250	250	200	200	200	100	100	100

#### Mechanical Specifications

Effective Projective Area (EPA), frontal  $0.26 \text{ m}^2 \mid 2.799 \text{ ft}^2$ Effective Projective Area (EPA), lateral  $0.23 \text{ m}^2 \mid 2.476 \text{ ft}^2$ 

 Wind Loading @ Velocity, frontal
 272.0 N @ 150 km/h (61.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 244.0 N @ 150 km/h (54.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 547.0 N @ 150 km/h (123.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 311.0 N @ 150 km/h (69.9 lbf @ 150 km/h)

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

## Packaging and Weights

 Width, packed
 505 mm | 19.882 in

 Depth, packed
 386 mm | 15.197 in

 Length, packed
 1960 mm | 77.165 in

 Weight, gross
 42.7 kg | 94.137 lb

## Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Above maximum concentration value

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

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**Performance Note** 

Severe environmental conditions may degrade optimum performance