

# 12-port sector/multibeam antenna, 4x 698–960 MHz 65° HPBW and 8x 1710–2690 MHz 4x 33°HPBW, 6x RET with tilt indicators

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

#### General Specifications

Antenna Type Multibeam

Band Multiband

**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 Copper | Low loss circuit board

Reflector Material Aluminum

**RF Connector Interface** 4.3-10 Female

**RF Connector Location** Bottom

RF Connector Quantity, high band 8
RF Connector Quantity, mid band 0
RF Connector Quantity, low band 4
RF Connector Quantity, total 12

#### 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

Internal RET High band (4) | Low band (2)

Power Consumption, idle state, maximum 1 W
Power Consumption, normal conditions, maximum 8 W

Protocol 3GPP/AISG 2.0 (Single RET)



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#### Dimensions

**Width** 498 mm | 19.606 in

**Depth** 197 mm | 7.756 in

**Length** 2100 mm | 82.677 in

Net Weight, without mounting kit 43 kg | 94.799 lb

### Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID	
R1	698-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxR1	
R2	698-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxR2	
Y1	1710-2690	5 - 6	33°	3	AISG1	CPxxxxxxxxxxxxxY1	
Y2	1710-2690	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxxY2	
Y3	1710-2690	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxxXY3	
Y4	1710-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxx4	

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

### Port Configuration



#### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1710 – 2690 MHz | 698 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 1,000 W

#### **Electrical Specifications**

Frequency Band, MHz	698-803	824-880	880-960	1710-1880	1920-2170	2300-2490	2490-2690
Gain, dBi	15.1	15.4	15.5	17.4	18.9	19	19.5
Beam Centers, Horizontal, degrees				±27	±25	±24	±22
Beamwidth, Horizontal, degrees	70	64	61	32	29	27	24
Beamwidth, Vertical, degrees	10.9	9.7	9.1	8.9	7.9	6.8	6.4
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	18	18	18	18	20	19	19
Front-to-Back Ratio at 180°, dB	30	30	34	34	36	34	33
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	29	28	29	29	31	30	30
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	400	400	400	250	250	250	250

#### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 803.0 N @ 150 km/h (180.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 275.0 N @ 150 km/h (61.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,040.0 N @ 150 km/h (233.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 661.0 N @ 150 km/h (148.6 lbf @ 150 km/h)

Wind Speed, maximum 241.4 km/h (150 mph)

### Packaging and Weights



 Width, packed
 565 mm | 22.244 in

 Depth, packed
 309 mm | 12.165 in

 Length, packed
 2287 mm | 90.039 in

 Weight, gross
 57.4 kg | 126.545 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-4 – 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

