

12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 6x RET.

- Features broadband Low Band (698-896 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for Band 14, AWS, PCS and WCS applications
- Independent tilt for all arrays
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics
- 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

**Grounding Type** RF connector inner conductor and 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 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** 1 female | 1 male

Input Voltage 10-30 Vdc



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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 (Multi-RET)

**Dimensions** 

 Width
 498 mm | 19.606 in

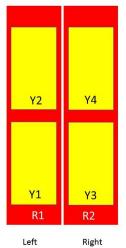
 Depth
 197 mm | 7.756 in

 Length
 2438 mm | 95.984 in

Net Weight, without mounting kit 39.9 kg | 87.964 lb



## Array Layout

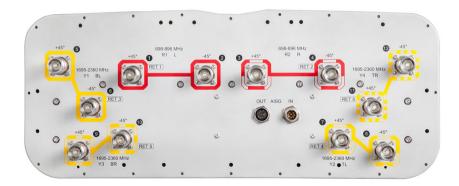


Array	Freq (MHz)	Conns	RET (MRET)	AISG RET UID
R1	698-896	1-2	1	CPxxxxxxxxxxxxxxxxmm.1
R2	698-896	3-4	2	CPxxxxxxxxxxxxxxxxmm.2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxmm.3
Y2	1695-2360	7-8	4	CPxxxxxxxxxxxxxxxmm.4
Y3	1695-2360	9-10	5	CPxxxxxxxxxxxxxxxmm.5
Y4	1695-2360	11-12	6	CPxxxxxxxxxxxxxmm.6

(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 – 896 MHz

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Polarization ±45°

Total Input Power, maximum  $900~\mathrm{W} \ @ \ 50~\mathrm{^{\circ}C}$ 

### **Electrical Specifications**

Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2180	2300-2360
Gain, dBi	15.7	16.1	17	17.5	17.7	17.8
Beamwidth, Horizontal, degrees	75	73	58	59	61	59
Beamwidth, Vertical, degrees	9.7	8.6	7.9	7.4	7	6.3
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	19	17	18	20	18
Front-to-Back Ratio at 180°, dB	32	33	39	42	39	40
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200

### Mechanical Specifications

Effective Projective Area (EPA), frontal  $0.9 \text{ m}^2 \mid 9.688 \text{ ft}^2$ Effective Projective Area (EPA), lateral  $0.31 \text{ m}^2 \mid 3.337 \text{ ft}^2$ 

Mechanical Tilt Range 0°-10°

 Wind Loading @ Velocity, frontal
 954.0 N @ 150 km/h (214.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 331.0 N @ 150 km/h (74.4 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,235.0 N @ 150 km/h (277.6 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 785.0 N @ 150 km/h (176.5 lbf @ 150 km/h)

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

### Packaging and Weights

 Width, packed
 565 mm | 22.244 in

 Depth, packed
 309 mm | 12.165 in

 Length, packed
 2625 mm | 103.347 in



**Weight, gross** 52.6 kg | 115.963 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