

12-port sector antenna, 2x 698-803, 2x 824-894 and 8x 1695-2360 MHz, 65° HPBW, 4x RETs and low bands have diplexers.

- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- One RET for 700MHz, one RET for 850MHz, and one RET for each side-by-side pair of high bands to ensure same tilt level for 4x Rx or 4x MIMO
- 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 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, 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

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

Power Consumption, active state, maximum 8 W
Power Consumption, idle state, maximum 1 W

COMMSC PE°

Power Consumption, normal conditions, maximum 8 W

Protocol 3GPP/AISG 2.0 (Multi-RET)

**Dimensions** 

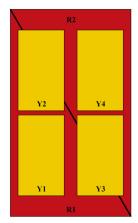
 Width
 350 mm | 13.78 in

 Depth
 208 mm | 8.189 in

 Length
 1828 mm | 71.969 in

# Array Layout

Net Weight, antenna only

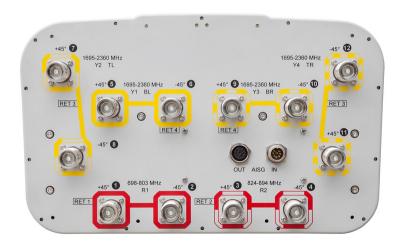


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (MRET)	AISG No.	AISG RET UID
R1	698-803	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxMM.1
R2	824-894	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxXMM.2
Y2	1695-2360	7 - 8	65°	3	AISG1	CD: annual annual AMA 2
Y4	1695-2360	11 - 12	65°	3	AISGT	CPxxxxxxxxxxxMM.3
Y1	1695-2360	5 - 6	65°	_	AISG1	CDAMA 4
Y3	1695-2360	9 - 10	65°	4	AISGI	CPxxxxxxxxxxxMM.4

32.7 kg | 72.091 lb

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

# Port Configuration



## **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

## **Electrical Specifications**

	R1	R2	Y1-Y2	Y1-Y2	Y1-Y2	Y1-Y2
Frequency Band, MHz	698-803	824-894	1695-1880	1850-1990	1920-2180	2300-2360
RF Port	1-2	3-4	5-12	5-12	5-12	5-12
Gain, dBi	14.9	15.4	15.8	16.1	16.3	16.8
Beamwidth, Horizontal, degrees	68	66	63	61	63	68
Beamwidth, Vertical, degrees	11.8	10.4	11	10.3	9.7	8.9
Beam Tilt, degrees	2-14	2-14	2-14	2-14	2-14	2-14
USLS (First Lobe), dB	20	19	18	18	19	19
Front-to-Back Ratio at 180°, dB	32	34	35	39	35	38
Isolation, Cross Polarization, dB	25	25	25	25	25	25

Page 3 of 5

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
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

### Electrical Specifications, BASTA

Frequency Band, MHz	698-803	824-894	1695-1880	1850-1990	1920-2180	2300-2360
Gain by all Beam Tilts, average, dBi	14.5	15	15	15.6	15.8	16.2
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.7	±0.3	±0.3	±0.4
Beamwidth, Horizontal Tolerance, degrees	±1.7	±1.3	±3.9	±1.9	±2.1	±4
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.4	±0.6	±0.6	±0.6	±0.3
USLS, beampeak to 20° above beampeak, dB	20	18	18	18	18	16
Front-to-Back Total Power at 180° ± 30°, dB	25	23	27	29	26	28
CPR at Boresight, dB	18	17	18	20	18	19
CPR at Sector, dB	10	11	11	9	11	10

### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 301.0 N @ 150 km/h (67.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 254.0 N @ 150 km/h (57.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 638.0 N @ 150 km/h (143.4 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 319.0 N @ 150 km/h (71.7 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
 1975 mm | 77.756 in

 Weight, gross
 42.1 kg | 92.815 lb

#### Regulatory Compliance/Certifications

Agency Classification

COMMSCSPE®

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

