

12-port sector antenna, 4x 694–960, 4x 1427–2690 and 4x 1695-2690 MHz, 65° HPBW, 8x RET

- Independent Tilt DIPLEXED Antenna for 1800/2100 and for 2600 MHz when used with 4T4R multi-band radios
- Optimized Antenna to deliver high Pattern Efficiency for improved coverage area and capacity for a given area
- Reduces the amount of aluminum used to minimize CO2 release
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Retractable tilt indicator rods
- Innovative aerodynamic shape optimized for reduced wind loading in every direction

### General Specifications

Antenna Type Sector

Band Multiband

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

bracket

Performance NoteOutdoor usageRF Connector Interface4.3-10 Female

**RF Connector Location**Bottom

RF Connector Quantity, mid 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** 2 female | 2 male

Input Voltage 10-30 Vdc

Internal RET Low band (2) | Mid band (6)

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

Protocol 3GPP/AISG 2.0 (Single RET)



#### **Dimensions**

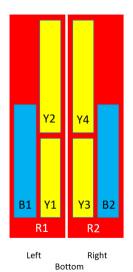
 Width
 430 mm | 16.929 in

 Depth
 197 mm | 7.756 in

 Length
 2769 mm | 109.016 in

Net Weight, antenna only 43.6 kg | 96.121 lb

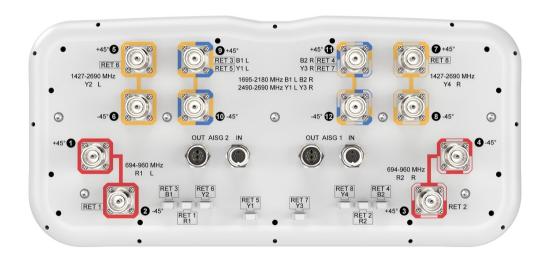
### Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxR2
B1	1695-2180	9-10	3	CPxxxxxxxxxxxxxB1
B2	1695-2180	11-12	4	CPxxxxxxxxxxxxxB2
Y1	2490-2690	9-10	5	CPxxxxxxxxxxxxxY1
Y2	1427-2690	5-6	6	CPxxxxxxxxxxxxxY2
Y3	2490-2690	11-12	7	CPxxxxxxxxxxxxxXY3
Y4	1427-2690	7-8	8	CPxxxxxxxxxxxxXY4

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

### Port Configuration



### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1427 – 2690 MHz | 1695 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 900 W @ 50 °C

### **Electrical Specifications**

	R1,R2	R1,R2	R1,R2	Y2,Y4	Y2,Y4	Y2,Y4	Y2,Y4	Y2,Y4	B1,B2	B1,B2	Y1,Y3
Frequency Band, MHz	698-80	6790-89	4890-96	01427-151	81695–199	51920-230	02300-250	02490-269	01695-199	51920-2180	02490-2690
RF Port	1-4	1-4	1-4	5-8	5-8	5-8	5-8	5-8	9-12	9-12	9-12
Gain at Mid	15.5	16.1	16.3	15.1	17	17.7	18.6	18.3	17	17.6	18.2

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Tilt, dBi											
Beamwidth, Horizontal, degrees	73	61	59	70	61	57	53	58	70	68	56
Beamwidth, Vertical, degrees	7.6	6.9	6.4	8.1	6.5	5.8	5.1	4.7	5.5	5.1	5
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	16	17	17	18	18	17	15	15	15	17
Front-to- Back Ratio at 180°, dB	30	31	29	32	35	35	35	35	33	30	30
Front-to- Back Total Power at 180° ± 30°, dB	22	22	21	23	29	29	29	29	25	25	25
Isolation, Cross Polarization, dB	27	27	27	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	27	27	27	26	26	26	26	26	26	26	26
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	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	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	200	200	200	200	200

### Electrical Specifications, BASTA

Frequency Band, MHz	698-80	6790-89	4890-96	01427-1518	31695 <b>–</b> 199	51920-230	02300-250	02490-269	01695–199	51920-2180	02490-2690
Gain by all Beam Tilts, average, dBi	15.4	16	16.2	15.1	16.9	17.6	18.4	18	16.9	17.5	18

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USLS, beampeak to 20° above beampeak, dB	14	14	14	13	16	14	14	13	14	14	15	
CPR at Boresight, dB	20	19	15	16	19	14	18	15	20	21	21	
CPR at Sector, dB	13	10	6	3	7	4	4	5	10	8	1	

#### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)

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

### Packaging and Weights

 Width, packed
 511 mm | 20.118 in

 Depth, packed
 318 mm | 12.52 in

 Length, packed
 2890 mm | 113.78 in

 Weight, gross
 58.3 kg | 128.529 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-3F – Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

#### \* Footnotes

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**Performance Note** 

Severe environmental conditions may degrade optimum performance

