

# 18-port sector antenna, 2x 694–862, 2x 880-960, 2x 694–960, 4x 1427–2690, 4x 1695-2200 and 4x 2490-2690 MHz, 65° HPBW, 8x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- 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
- Antenna shape optimized for wind load reduction

#### 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
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	12
RF Connector Quantity, low band	6
RF Connector Quantity, total	18

#### 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 (3)   Mid band (5)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)
Dimensions	
Width	430 mm   16.929 in



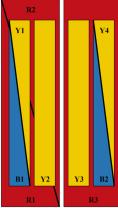
Length

2100 mm | 82.677 in

Net Weight, antenna only

46.5 kg | 102.515 lb

#### Array Layout



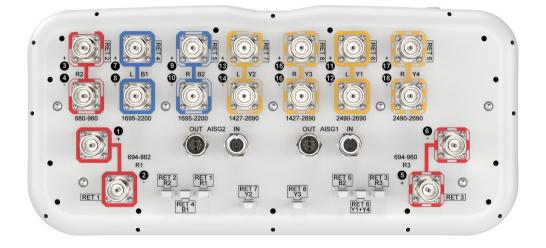
5	Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
	R1	694-862	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
	R2	880-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
	R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxR3
	B1	1695-2200	7 - 8	4	AISG1	CPxxxxxxxxxxxxxB1
	B2	1695-2200	9 - 10	5	AISG1	CPxxxxxxxxxxxxxB2
	¥1	2490-2690	11 - 12	6	AISG1	CD:
	¥4	2490-2690	17 - 18	0	AISGT	CPxxxxxxxxxxxxxxXY1
	¥2	1427-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxXXXXXXXXXXXXXXXXXXXXXXXX
	¥3	1427-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxXXXXXXXXXXXXXXXXXXXXXXXX

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

### Port Configuration

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### **Electrical Specifications**

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz   1695 – 2200 MHz   2490 – 2690 MHz   694 – 862 MHz   694 – 960 MHz   880 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,200 W @ 50 °C

### **Electrical Specifications**

	R1	R1	R2	R3	R3	R3
Frequency Band, MHz	698-806	790-862	880-960	698-806	790-894	890-960
RF Port	1,2	1,2	3,4	5,6	5,6	5,6
Gain at Mid Tilt, dBi	14	14.4	14.7	14.3	15	15.2

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Beamwidth, Horizontal, degrees	70	62	58	69	61	58
Beamwidth, Vertical, degrees	10.5	9.8	8.6	10.6	9.4	8.6
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	15	17	15	16	16	15
Front-to-Back Ratio at 180°, dB	30	31	32	29	30	31
Isolation, Cross Polarization, dB	27	27	27	27	27	27
Isolation, Inter-band, dB	27	27	27	27	27	27
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, typical, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	300	300	300

### Electrical Specifications, BASTA

Frequency Band, MHz	698-806	790-862	880-960	698-806	790-894	890-960
Gain by all Beam Tilts, average, dBi	14	14.4	14.6	14.3	14.9	15.1
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.3	±0.5	±0.6	±0.4	±0.4
Beamwidth, Horizontal Tolerance, degrees	±9	±4	±5	±8	±4	±4
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.6	±0.4	±0.8	±0.7	±0.6
USLS, beampeak to 20° above beampeak, dB	15	13	14	15	13	13
Front-to-Back Total Power at 180° ± 30°, dB	22	22	22	22	22	22
CPR at Boresight, dB	24	23	26	24	23	24
CPR at Sector, dB	12	7	7	11	7	7

### **Electrical Specifications**

	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	B1,B2	B1,B2	Y1,Y4
Frequency Band, MHz	1427-1518	8 1695–1995	1920-2300	2300-2500	2490-2690	) 1695–1995	5 1920-2180	) 2490–2690
RF Port	13-16	13-16	13-16	13-16	13-16	7-10	7-10	11,12,17,18
Gain at Mid Tilt, dBi	15.4	16.3	17.4	18.1	18.1	16.7	17.5	17.6
Beamwidth, Horizontal, degrees	71	67	63	61	58	68	61	59

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Beamwidth, Vertical, degrees	6.8	5.6	5.1	4.6	4.4	5.4	5	4.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	16	17	19	17	15	17	19
Front-to-Back Ratio at 180°, dB	28	35	33	32	31	32	29	31
Isolation, Cross Polarization, dB	25	26	26	26	26	26	26	26
Isolation, Inter-band, dB	25	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
PIM, 3rd Order, typical, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	250	250	200

### Electrical Specifications, BASTA

Frequency Band, MHz	1427-1518	8 1695-1998	5 1920-2300	0 2300-2500	0 2490-2690	0 1695-1995	5 1920-218	0 2490-2690
Gain by all Beam Tilts, average, dBi	15.3	16.2	17.2	18	17.8	16.6	17.4	17.4
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.6	±0.9	±0.4	±0.6	±0.8	±0.4	±0.4
Beamwidth, Horizontal Tolerance, degrees	±10	±6	±6	±б	±б	±7	±7	±6
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.4	±0.4	±0.2	±0.2	±0.4	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	16	16	16	17	16	14	15	15
Front-to-Back Total Power at 180° ± 30°, dB	21	27	27	27	25	25	24	24
CPR at Boresight, dB	18	19	18	18	16	20	21	19
CPR at Sector, dB	9	б	5	7	3	8	7	6

### Mechanical Specifications

Wind Loading @ Velocity, frontal	494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	266.0 N @ 150 km/h (59.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	780.0 N @ 150 km/h (175.4 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)

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#### Packaging and Weights

Width, packed	530 mm   20.866 in
Depth, packed	349 mm   13.74 in
Length, packed	2270 mm   89.37 in
Weight, gross	58.7 kg   129.411 lb

#### Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant
9001:2015	

#### 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

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