

# 18-port sector antenna, 6x 694-960, 4x 1427-2690 and 8x 1695-2690 MHz, 65° HPBW, 9xRET

- 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

#### General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
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 (6)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0

#### Dimensions

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Width	579 mm   22.795 in
Depth	212 mm   8.346 in
Length	2100 mm   82.677 in
Net Weight, antenna only	47.9 kg   105.601 lb

#### Array Layout

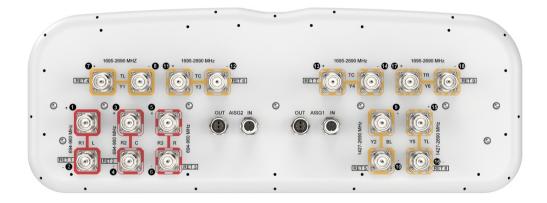
						Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
						R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxR1
						R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxR2
						R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxxR3
Y1	Y	,	¥4		Y6	¥1	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxXXXXXY1
	<u> </u>	<b>.</b> .	Ē			Y2	1427-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxX2
						Y3	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxXXXXXXXXXXXXXXXXXXXXXXXXX
						¥4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxXY4
						Y5	1427-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxXY5
	Y2			¥5		Y6	1695-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxXY6

(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 – 2690 MHz   694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,500 W @ 50 °C

### **Electrical Specifications**

	R1,R3	R1,R3	R1,R3	R2	R2	R2
Frequency Band, MHz	698-806	790-896	890-960	698-806	790-896	890-960
RF Port	1,2,5,6	1,2,5,6	1,2,5,6	3,4	3,4	3,4
Gain at Mid Tilt, dBi	13.8	14.4	14.5	12.7	13.9	14.8

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Beamwidth, Horizontal, degrees	64	62	58	63	58	52
Beamwidth, Vertical, degrees	10.3	9.2	8.6	11.2	10.6	10
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	15	16	16	13	14	18
Front-to-Back Ratio at 180°, dB	28	26	25	24	26	30
Front-to-Back Total Power at 180° ± 30°, dB	23	22	21	21	22	27
CPR at Boresight, dB	22	22	22	16	19	22
Isolation, Cross Polarization, typical, dB	25	25	25	25	25	25
lsolation, Inter-band, typical, 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	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	300	300	300
Electrical Spec	ifications, BA	STA				
Frequency Band, MHz	698-806	790-896	890-960	698-806	790-896	890-960
Gain by all Beam Tilts, average, dBi	13.7	14.3	14.4	12.6	13.8	14.7
USLS, beampeak to 20° above beampeak, dB	15	15	14	13	14	17

#### **Electrical Specifications**

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CPR at Sector, dB

Frequency Band, MHz	Y2,Y5 1427–1518	Y2,Y5 1695–1990	Y2,Y5 1920–2300	Y2,Y5 2300-2500	Y2,Y5 2490–2690
RF Port	9,10,15,16	9,10,15,16	9,10,15,16	9,10,15,16	9,10,15,16
Gain at Mid Tilt, dBi	14.4	16.7	17.6	18	17.9

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Beamwidth, Horizontal, degrees	58	55	57	62	61
Beamwidth, Vertical, degrees	7.8	6.4	5.8	5.1	4.7
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	15	18	19	20	18
Front-to-Back Ratio at 180°, dB	29	35	35	35	29
Front-to-Back Total Power at 180° ± 30°, dB	24	29	29	27	25
CPR at Boresight, dB	18	18	18	19	19
Isolation, Cross Polarization, dB	25	25	25	25	25
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200

#### Electrical Specifications, BASTA

Frequency Band, MHz	1427-1518	1695–1990	1920-2300	2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	14.3	16.6	17.4	17.8	17.6
USLS, beampeak to 20° above beampeak, dB	11	16	16	15	15
CPR at Sector, dB	4	5	2	7	5

#### **Electrical Specifications**

	Y1,Y3,Y4,Y6	Y1,Y3,Y4,Y6	Y1,Y3,Y4,Y6	Y1,Y3,Y4,Y6
Frequency Band, MHz	1695-1990	1920-2300	2300-2500	2490-2690
RF Port	7,8,11,12,13,14,17,1	87,8,11,12,13,14,17,1	8 7,8,11,12,13,14,17,1	87,8,11,12,13,14,17,18
Gain at Mid Tilt, dBi	15.8	16.8	17.5	17.6
Beamwidth,	66	60	63	60

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Horizontal, degrees				
Beamwidth, Vertical, degrees	6.8	6.2	5.5	5.3
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	17	19	18
Front-to-Back Ratio at 180°, dB	28	29	31	33
Front-to-Back Total Power at 180° ± 30°, dB	22	24	25	27
CPR at Boresight, dB	20	20	20	20
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
VSWR   Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	250	250	200	200

#### Electrical Specifications, BASTA

Frequency Band, MHz	1695-1990	1920-2300	2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	15.7	16.7	17.3	17.4
USLS, beampeak to 20° above beampeak, dB	14	15	15	15
CPR at Sector, dB	6	4	4	4

#### Mechanical Specifications

Wind Loading @ Velocity, frontal	568.0 N @ 150 km/h (127.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	223.0 N @ 150 km/h (50.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,037.0 N @ 150 km/h (233.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	576.0 N @ 150 km/h (129.5 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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#### Packaging and Weights

Width, packed	681 mm   26.811 in
Depth, packed	368 mm   14.488 in
Length, packed	2239 mm   88.15 in
Weight, gross	62.5 kg   137.789 lb

#### Regulatory Compliance/Certifications

#### Agency

Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



#### 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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### **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.

Product Classification		
Product Type	Downtilt mounting kit	
General Specifications		
Application	Outdoor	
Color	Silver	
Dimensions		
Compatible Diameter, maximum	115 mm   4.528 in	
Compatible Diameter, minimum	60 mm   2.362 in	
Weight, net	6.5 kg   14.33 lb	
Material Specifications		
Material Type	Galvanized steel	
Packaging and Weights		
Included	Brackets   Hardware	

#### Included

**Packaging quantity** 1

#### 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



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