

20-port sector antenna, 4x694-960 (R1 & R2), 4x1427-2690 (Y3 & Y5) and 12 x 1695-2690 MHz (Y1/Y2/Y4/Y6/Y7/Y8), 65° HPBW, 10xRET

- 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
- Antenna shape optimized for wind load reduction
- RET configuration is factory pre-set for antenna sharing RET 1, 3, 5, 6, 7 assigned to AISG 2 and RET 2, 4, 8, 9, 10 assigned to AISG 1

### 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, high band 0
RF Connector Quantity, mid band 16
RF Connector Quantity, low band 4
RF Connector Quantity, total 20

### 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 (8)

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

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**Protocol** 3GPP/AISG 2.0 (Single RET)

**Dimensions** 

**Width** 498 mm | 19.606 in

**Depth** 197 mm | 7.756 in

**Length** 2688 mm | 105.827 in

Net Weight, antenna only 46.7 kg | 102.956 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG2	CPxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxR2
Y3	1427-2690	5 - 6	3	AISG2	CPxxxxxxxxxxxxxY3
Y5	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxY5
Y1	1695-2690	9 - 10	5	AISG2	CPxxxxxxxxxxxxxY1
Y2	1695-2690	11 - 12	6	AISG2	CPxxxxxxxxxxxxY2
Y4	1695-2690	13 - 14	7	AISG2	CPxxxxxxxxxxxx4
Y6	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxY6
Y7	1695-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxxY7
Y8	1695-2690	19 - 20	10	AISG1	CPxxxxxxxxxxxxxXY8

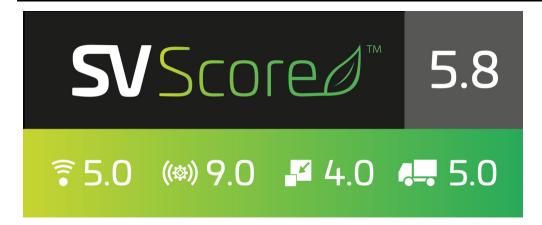
(Sizes of colored boxes are not true depictions of array sizes)

## Port Configuration



## Logo Image





### **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	Y1,Y2,Y4,Y6,Y7,Y8
Frequency Band, MHz	698-806	790-896	890-960	1695-1990
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	9 to 20
Gain at Mid Tilt, dBi	16.2	16.3	16.3	16.4
Beamwidth, Horizontal, degrees	67	62	63	70
Beamwidth, Vertical, degrees	8.5	7.6	7	7.3
Beam Tilt, degrees	2-14	2-14	2-14	2-12
USLS (First Lobe), dB	19	20	24	16
Front-to-Back Ratio at 180°, dB	35	31	31	34
Front-to-Back Total Power at 180° $\pm$ 30°, dB	23	22	22	29
CPR at Boresight, dB	31	24	24	23
CPR at Sector, dB	10	7	8	8
Isolation, Cross Polarization, dB	28	28	28	25
Isolation, Inter-band, dB	28	28	28	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,	250	250	250	200

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#### maximum, watts

## **Electrical Specifications**

	Y1,Y2,Y4,Y6,Y7,Y8	Y1,Y2,Y4,Y6,Y7,Y8	Y1,Y2,Y4,Y6,Y7,Y8	Y3,Y5
Frequency Band, MHz	1920-2300	2300-2500	2490-2690	1427-1518
RF Port	9 to 20	9 to 20	9 to 20	5,6,7,8
Gain at Mid Tilt, dBi	17.3	17.9	18.1	15.4
Beamwidth, Horizontal, degrees	62	56	56	66
Beamwidth, Vertical, degrees	6.5	5.7	5.3	9.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	20	21	17
Front-to-Back Ratio at 180°, dB	33	31	31	34
Front-to-Back Total Power at 180° ± 30°, dB	28	27	27	28
CPR at Boresight, dB	22	20	20	22
CPR at Sector, dB	6	6	4	9
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	200	200	200	200

## **Electrical Specifications**

	Y3,Y5	Y3,Y5	Y3,Y5	Y3,Y5
Frequency Band, MHz	1695-1990	1920-2300	2300-2500	2490-2690
RF Port	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8
Gain at Mid Tilt, dBi	16.7	17.4	18	18
Beamwidth, Horizontal, degrees	62	55	52	53
Beamwidth, Vertical, degrees	7.5	6.8	6	5.5
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	16	16	17
Front-to-Back Ratio at 180°, dB	38	37	34	34
Front-to-Back Total Power at 180° ± 30°, dB	32	31	29	28
CPR at Boresight, dB	21	21	25	22
CPR at Sector, dB	8	5	6	2

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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	200	200	200	200	

### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 970.0 N @ 150 km/h (218.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 304.0 N @ 150 km/h (68.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,162.0 N @ 150 km/h (261.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 667.0 N @ 150 km/h (149.9 lbf @ 150 km/h)

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

## Packaging and Weights

 Width, packed
 565 mm | 22.244 in

 Depth, packed
 318 mm | 12.52 in

 Length, packed
 2809 mm | 110.591 in

 Weight, gross
 66.5 kg | 146.607 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.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



#### 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.

BSAMNT-M4 – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round

members. Kit contains one scissor bracket set.



### \* Footnotes

**Performance Note** 

Severe environmental conditions may degrade optimum performance

