

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

#### 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  $8~\mathrm{W}$  Power Consumption, idle state, maximum  $1~\mathrm{W}$ 

Protocol 3GPP/AISG 2.0 (Single RET)



Page 1 of 7

#### **Dimensions**

**Width** 498 mm | 19.606 in

**Depth** 197 mm | 7.756 in

**Length** 2688 mm | 105.827 in

Net Weight, antenna only 46.1 kg | 101.633 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxR2
Y3	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY3
Y5	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxY5
Y1	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxY1
Y2	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxY2
Y4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxY4
Y6	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxXY6
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



## **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  $^{\circ}$ 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	2-13	2-13	2-13	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° ± 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, maximum, watts	250	250	250	200

## **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	15.3
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	17.9
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
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	914.0 N @ 150 km/h (205.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	239.0 N @ 150 km/h (53.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,215.0 N @ 150 km/h (273.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	629.0 N @ 150 km/h (141.4 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

## Regulatory Compliance/Certifications

Agency	Classification
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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-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



# BSAMNT-2F



Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

#### Product Classification

**Product Type** Fixed tilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

**Dimensions** 

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net3.8 kg | 8.378 lb

Material Specifications

Material Type Galvanized steel

## Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

**Weight, gross** 4 kg | 8.818 lb

## Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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
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Page 6 of 7

