

20-port sector antenna, 4x 694-960, 4x 1427-2690, 4x 1695-2690 MHz, 65° HPBW and 8x 3300-3800 MHz, 90° HPBW, 7x RET.

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Cluster connectors for the beam-forming array, including eight RF ports plus one calibration port
- Antenna shape optimized for wind load reduction
- M-LOC cluster connector for 3.3-3.8GHz, equipped with calibration port
- Includes seven Internal RET's
- Retractable tilt indicator rods

#### General Specifications

Antenna Type Sector and beamforming

BandMultibandCalibration Connector InterfaceM-LOCCalibration Connector Quantity1

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 | M-LOC

**RF Connector Location** Bottom

RF Connector Quantity, high band 8
RF Connector Quantity, mid band 8
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 High band (1) | Low band (2) | Mid band (4)



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

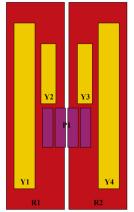
 Depth
 197 mm | 7.756 in

 Length
 2100 mm | 82.677 in

 Net Weight, antenna only
 38.2 kg | 84.216 lb

 TDD Column Spacing
 42 mm | 1.654 in

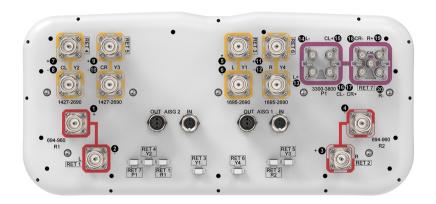
### Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY1
Y2	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxY2
Y3	1427-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxXY3
Y4	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxx4
P1	3300-3800	13 - 20	7	AISG1	CPxxxxxxxxxxxxxxxP1

(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 | 3300 – 3800 MHz | 694 – 960

MHz

Polarization ±45°

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

### **Electrical Specifications**

	R1,R2	R1,R2	R1,R2	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3
Frequency Band, MHz	698-806	790-896	890-960	1427-151	8 1695–199	0 1920-230	0 2300-250	0 2490-2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	7,8,9,10	7,8,9,10	7,8,9,10	7,8,9,10	7,8,9,10
Gain at Mid Tilt, dBi	14	14.7	14.9	13.6	15	15.8	16.6	16.5
Beamwidth, Horizontal, degrees	71	62	58	67	62	62	59	59
Beamwidth, Vertical, degrees	10.5	9.3	8.5	9.8	7.9	7.1	6.4	6
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	18	15	12	16	19	22	22
Front-to-Back Ratio at 180°, dB	32	31	30	34	34	33	31	33
Isolation, Cross Polarization, dB	27	27	27	26	26	26	26	26

Page 3 of 9



Isolation, Inter-band, dB	27	27	27	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, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C,	250	250	250	200	200	200	150	150

### **Electrical Specifications**

	Y1,Y4	Y1,Y4	Y1,Y4	Y1,Y4
Frequency Band, MHz	1695-1990	0 1920-230	0 2300-2500	2490-2690
RF Port	5,6,11,12	5,6,11,12	5,6,11,12	5,6,11,12
Gain at Mid Tilt, dBi	16.7	17.6	18.3	18.4
Beamwidth, Horizontal, degrees	70	67	64	64
Beamwidth, Vertical, degrees	5.3	4.9	4.4	4.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	18	18	18	18
Front-to-Back Ratio at 180°, dB	34	34	35	32
Isolation, Cross Polarization, dB	27	27	27	27
Isolation, Inter-band, dB	26	26	26	26
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	150	150

### **Electrical Specifications**

	P1	P1
Frequency Band, MHz	3300-3600	3600-3800
RF Port	13-20	13-20
Gain at Mid Tilt, dBi	15.1	15.6
Beamwidth, Horizontal, degrees	85	81
Beamwidth, Vertical, degrees	6.4	6
Beam Tilt, degrees	2-12	2-12
USLS (First Lobe), dB	17	15
Front-to-Back Ratio at 180°, dB	29	29



Coupling level, Amp, Antenna port to Cal port, dB	26	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.9	0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees	7	7
Isolation, Cross Polarization, dB	25	25
Isolation, Inter-band, dB	25	25
Isolation, Co-polarization, dB	19	19
VSWR   Return loss, dB	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-140	-140
Input Power per Port at 50°C, maximum, watts	75	75

### Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300-360	0 3600-3800
Gain, dBi	18.2	18.5
Beamwidth, Horizontal at 3 dB, degrees	65	65
Beamwidth, Horizontal at 10 dB, degrees	111	102
Beamwidth, Vertical, degrees	6	6
Front-to-Back Total Power at 180° ± 30°, dB	25	26
USLS (First Lobe), dB	21	20

### Electrical Specifications, Service Beam

Frequency Band, MHz	3300-3600	3600-3800
Steered 0° Gain, dBi	20.6	20.8
Steered 0° Beamwidth, Horizontal, degrees	25	22
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	28	29
Steered 0° Horizontal Sidelobe, dB	13	13
Steered 30° Gain, dBi	19.3	19.4



Steered 30° Beamwidth, 30 28 Horizontal, degrees

Steered 30° Front-to-Back Total Power at 180° ± 30°, dB 26 28

### Electrical Specifications, Soft Split

3300-3600 3600-3800 Frequency Band, MHz 19.4 19.7 Gain, dBi Beamwidth, Horizontal, 29 32 degrees 27 Front-to-Back Total Power at 26 180° ± 30°, dB 15 Horizontal Sidelobe, dB 14

#### 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)

### Packaging and Weights

 Width, packed
 530 mm | 20.866 in

 Depth, packed
 349 mm | 13.74 in

 Length, packed
 2272 mm | 89.449 in

 Weight, gross
 53.2 kg | 117.286 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



Page 6 of 9

BSAMNT-3

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



### **BSAMNT-3**



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** 

**UK-ROHS** 

Compatible Diameter, maximum 115 mm | 4.528 in Compatible Diameter, minimum 60 mm | 2.362 in Weight, net 6.2 kg | 13.669 lb

Material Specifications

**Material Type** Galvanized steel

### Packaging and Weights

Included Brackets | Hardware

**Packaging quantity** 

Weight, gross 6.4 kg | 14.11 lb

### Regulatory Compliance/Certifications

Classification

Compliant

#### Agency 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



