

14-port sector antenna, 2x 698-960(R1), 4x 1695-2690(Y1&Y2) MHz, 65° HPBW and 8x 3300-3800(P1) MHz, 90° HPBW, 4x RET.

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- M-LOC cluster connector for 3.3-3.8GHz, equipped with calibration port
- Combination of FDD MIMO antenna and 3.5GHz 8T8R TDD beam forming antenna, all in one for 5G ready

#### 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

RF Connector Quantity, high band

RF Connector Quantity, mid band

4

RF Connector Quantity, low band

2

#### Remote Electrical Tilt (RET) Information

**RF Connector Quantity, total** 

**RET Hardware** CommRET v2

RET Interface 8-pin DIN Female | 8-pin DIN Male

**RET Interface, quantity** 1 female | 1 male

Input Voltage 10-30 Vdc

Internal RET High band (1) | Mid band (2)

Power Consumption, active state, maximum 10 W

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Power Consumption, idle state, maximum 2 W

Protocol 3GPP/AISG 2.0

**Dimensions** 

 Width
 395 mm | 15.551 in

 Depth
 228 mm | 8.976 in

 Length
 800 mm | 31.496 in

 Net Weight, antenna only
 16.6 kg | 36.597 lb

#### Array Layout

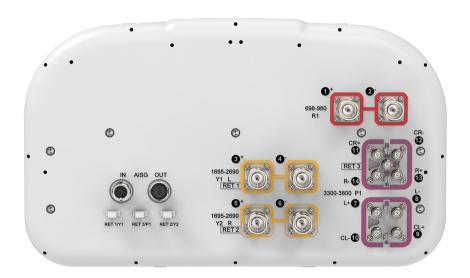


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-960	1-2	NA	NA
Y1	1695-2690	3-4	1	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	2	CPxxxxxxxxxxxxxxY2
P1	3300-3800	7-14	3	CPxxxxxxxxxxxxxxxP1

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

# Port Configuration





### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2690 MHz | 3300 – 3800 MHz | 698 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 800 W @ 50 °C

# **Electrical Specifications**

	R1	R1	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	698-862	880-960	1695-1920	1920-2200	2300-2690
RF Port	1,2	1,2	3-6	3-6	3-6
Gain at Mid Tilt, dBi	11.5	11.7	14.2	14.4	15.1
Beamwidth, Horizontal, degrees	70	68	70	71	63
Beamwidth, Vertical, degrees	27.7	22.8	13.2	12	10.3
Beam Tilt, degrees	12	12	2-12	2-12	2-12
USLS (First Lobe), dB	14	13	16	15	15
Front-to-Back Ratio at 180°, dB	32	33	33	34	31
Front-to-Back Total Power at 180° ± 30°, dB	21	22	26	28	27
CPR at Boresight, dB	20	23	22	24	19

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CPR at Sector, dB	10	10	15	11	8
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	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum. watts	200	200	200	200	150

# **Electrical Specifications**

'		
	P1	P1
Frequency Band, MHz	3300-3600	3600-3800
RF Port	7-14	7-14
Gain at Mid Tilt, dBi	14.5	14.9
Beamwidth, Horizontal, degrees	81	74
Beamwidth, Vertical, degrees	7.2	6.8
Beam Tilt, degrees	0-10	0-10
USLS (First Lobe), dB	15	14
Front-to-Back Ratio at 180°, dB	29	29
Front-to-Back Total Power at 180° ± 30°, dB	20	22
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
CPR at Boresight, dB	14	15
CPR at Sector, dB	7	6
Isolation, Cross Polarization, dB	25	25
Isolation, Inter-band, dB	25	25
Isolation, Co-polarization, dB	20	20
VSWR   Return loss, dB	1.5   14.0	1.5   14.0



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PIM, 3rd Order, 2 x 20 W, dBc	-140	-140
Input Power per Port at 50°C,	75	75
maximum watts		

# Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300-3600	3600-3800
Gain, dBi	17.6	17.8
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Vertical, degrees	7.1	6.6
Front-to-Back Total Power at 180° ± 30°, dB	26	28
USLS (First Lobe), dB	19	17

### Electrical Specifications, Envelope Pattern

Frequency Band, MHz	3300-3600	3600-3800
Gain, dBi	19.5	19.7
Beamwidth, Horizontal at 10 dB, degrees	119	111
Front-to-Back Total Power at 180° ± 30°, dB	26	28
USLS (First Lobe), dB	19	19

### Electrical Specifications, Service Beam

Frequency Band, MHz	3300-3600	3600-3800
Steered 0° Gain, dBi	19.5	19.7
Steered 0° Beamwidth, Horizontal, degrees	24	22
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	29	30
Steered 0° Horizontal Sidelobe, dB	13	13
Steered 30° Gain, dBi	18.2	18.9
Steered 30° Beamwidth, Horizontal, degrees	29	26
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	27	28

#### Mechanical Specifications

**Wind Loading @ Velocity, frontal** 110.0 N @ 150 km/h (24.7 lbf @ 150 km/h)

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Wind Loading @ Velocity, lateral
93.0 N @ 150 km/h (20.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 220.0 N @ 150 km/h (49.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 126.0 N @ 150 km/h (28.3 lbf @ 150 km/h)

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

#### Packaging and Weights

 Width, packed
 509 mm | 20.039 in

 Depth, packed
 386 mm | 15.197 in

 Length, packed
 941 mm | 37.047 in

 Weight, gross
 26.1 kg | 57.541 lb

#### Regulatory Compliance/Certifications

#### Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

#### Included Products

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

ApplicationOutdoorColorSilver

**Dimensions** 

Agency

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net6.2 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

# 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



