

28-port sector antenna, 4x 694-960, 4x 1427-2690 and 4x 1695-2690 MHz 65° HPBW, 8x 2300-2690 and 8x 3300-3800MHz, 90° HPBW, 8x RET

- Also includes 1x 4-Column Array for 2300-2690 MHz and a separate 1x 4-Column Array for 3300-3800MHz. Column spacing optimized to support Soft Split Beamforming
- Includes eight Internal RET's
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- New end cap shape for additional wind load reduction
- 2x MQ4 and 2x MQ5 cluster connectors (comprising 16 RF ports + 2 calibration ports in total) are provided for the beam-forming arrays

#### General Specifications

Antenna Type Sector and beamforming

**Band** Multiband

Calibration Connector Interface MQ5

**Calibration Connector Quantity** 2

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 | MQ4 | MQ5

**RF Connector Location** Bottom

RF Connector Quantity, high band 16

RF Connector Quantity, mid band 8

RF Connector Quantity, low band 4

RF Connector Quantity, total

#### 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

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Input Voltage 10-30 Vdc

Internal RET High band (2) | Low band (2) | Mid band (4)

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

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

**Dimensions** 

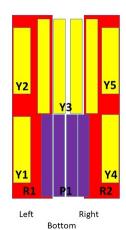
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2180 mm | 85.827 in

 Net Weight, without mounting kit
 48 kg | 105.822 lb

#### Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxXR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxXR2
Y1	1427-2690	5-6	3	CPxxxxxxxxxxxxxY1
Y2	1695-2690	7-8	4	CPxxxxxxxxxxxxxxY2
Y3	2300-2690	9-16	5	CPxxxxxxxxxxxxxXY3
Y4	1427-2690	17-18	6	CPxxxxxxxxxxxxxY4
Y5	1695-2690	19-20	7	CPxxxxxxxxxxxxxxY5
P1	3300-3800	21-28	8	CPxxxxxxxxxxxxxxP1

(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 | 2300 – 2690 MHz | 3300 – 3800

MHz | 694 - 960 MHz

Polarization ±45°

**Total Input Power, maximum** 1,900 W @ 50 °C

### **Electrical Specifications**

Frequency Band, MHz	694-79	00790-89	0 890-96	6 <b>0 1427-15</b> 1	181695-218	802300-269	001695-218	302300-269	002300-269	003300-3800
Gain, dBi	15.1	15.5	15.7	14.7	16.3	17.2	15.7	16.8	15.2	16
Beamwidth, Horizontal, degrees	70	63	61	82	68	63	73	58	91	90
Beamwidth, Vertical, degrees	10.3	9.4	8.6	10.1	7.9	5.9	8.9	7	5.6	6.1
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	18	20	15	16	17	16	18	17	17
Front-to-Back Ratio at 180°, dB	31	29	29	31	29	33	31	30	31	30
Coupling level, Amp, Antenna port to Cal port, dB									26	26



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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	20	20	21	18	18	14	17	19	16	17
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25	25	25	25
Isolation, Inter- band, dB	28	28	28	25	25	25	25	25	25	25
Isolation, Co- polarization, dB									20	20
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	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150	-130	-130
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	250	200	150	75

## Electrical Specifications, Broadcast 65°

Frequency Band, MHz	2300-26903300-3800	
Gain, dBi	17.6	18
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Vertical, degrees	5.7	6.3
Front-to-Back Total Power at 180° ± 30°, dB	27	27
USLS (First Lobe), dB	18	21

## Electrical Specifications, Service Beam

Frequency Band,	2300-26903300-3800
MHz	

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Steered 0° Gain, dBi	20.3	20.8
Steered 0° Beamwidth, Horizontal, degrees	25	24
Steered 0° Front-to- Back Total Power at 180° ± 30°, dB	31	30
Steered 0° Horizontal Sidelobe, dB	14	13
Steered 30° Gain, dBi	19.3	20.1
Steered 30° Beamwidth, Horizontal, degrees	29	27
Steered 30° Front- to-Back Total Power at 180° ± 30°, dB	28	28

## Electrical Specifications, Soft Split

Frequency Band, MHz	2300-26903300-3800	
Gain, dBi	19.2 20	
Beamwidth, Horizontal, degrees	33 31	
Front-to-Back Total Power at 180° ± 30°, dB	30 28	
Horizontal Sidelobe, dB	17 17	

### Mechanical Specifications

Wind Loading @ Velocity, frontal	760.0 N @ 150 km/h (170.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	233.0 N @ 150 km/h (52.4 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	911.0 N @ 150 km/h (204.8 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	523.0 N @ 150 km/h (117.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

### Packaging and Weights

**Width, packed** 565 mm | 22.244 in

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 Depth, packed
 368 mm | 14.488 in

 Length, packed
 2359 mm | 92.874 in

 Weight, gross
 61.9 kg | 136.466 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



## 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

ApplicationOutdoorColorSilver

**Dimensions** 

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net6.5 kg | 14.33 lb

Material Specifications

Material Type Galvanized steel

### Packaging and Weights

Included Brackets | Hardware

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.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

