

18-port sector antenna, 2x 694-862 (R1), 2x 880-960 (R2), 2x 694-960 (R3), 2x 1427-2690 (Y2) & 2x 1695-2690 (Y1) MHz, 65° HPBW and 8x 3300-3800 (P1) MHz, 90° HPBW, 6x RET.

- Includes 1x 4-Column Array for 3300-3800MHz and calibration port. Column spacing optimized to support Soft Split Beamforming
- Retractable tilt indicator rods
- S4 array uses MQ cluster connectors
- Includes six 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
- Antenna shape optimized for wind load reduction

#### General Specifications

Antenna Type Sector

Band Multiband

Calibration Connector Interface MQ5

Calibration Connector Quantity 1

Color Light Gray (RAL 7035)

**Grounding Type**RF connector inner conductor and body grounded to reflector and mounting

bracket

Performance Note Outdoor usage

Radome MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector Material Aluminum

**RF Connector Interface** 4.3-10 Female | MQ4 | MQ5

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, mid band

RF Connector Quantity, low band

RF Connector Quantity, total

Bottom

8

8

18

#### Remote Electrical Tilt (RET) Information

**RET Hardware** CommRET v2

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

ANDREW®
an Amphenol company

**RET Interface, quantity** 2 female | 2 male

Input Voltage10-30 VdcInternal Bias TeeCal Port

Internal RET High band (1) | Low band (3) | Mid band (2)

Protocol 3GPP/AISG 2.0

**Dimensions** 

 Width
 430 mm | 16.929 in

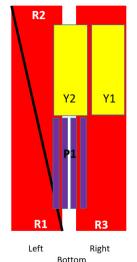
 Depth
 197 mm | 7.756 in

 Length
 2769 mm | 109.016 in

 Net Weight, without mounting kit
 53.3 kg | 117.506 lb

 TDD Column Spacing
 42 mm | 1.654 in

#### Array Layout



Array	Freq (MHz)	Conns	RET(SRET)	AISG RET UID
R1	694-862	1-2	1	CPxxxxxxxxxxxxxxR1
R2	880-960	3-4	2	CPxxxxxxxxxxxxxxR2
R3	694-960	5-6	3	CPxxxxxxxxxxxxxXR3
Y1	1695-2690	7-8	4	CPxxxxxxxxxxxxxY1
Y2	1427-2690	9-10	5	CPxxxxxxxxxxxxxXY2
P1	3300-3800	11-18	6	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 | 3300 – 3800 MHz | 694 – 862

MHz | 694 - 960 MHz | 880 - 960 MHz

Polarization ±45°

Total Input Power, maximum  $900~\mathrm{W} \ @ \ 50~\mathrm{^{\circ}C}$ 

# **Electrical Specifications**

Frequency Band, MHz	694-862	880-960	694-960	1427-151	81695-218	02300-269	01695-220	02300-269	03300-3800
Gain, dBi	15.5	16.3	16.3	16.3	17.3	17.6	17.4	18.1	15.9
Beamwidth, Horizontal, degrees	60	53	58	55	58	66	57	55	91
Beamwidth, Vertical, degrees	7.5	6.4	7	7.2	5.6	4.4	6.1	5	6.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	16	17	20	20	20	15	17	16
Front-to-Back Ratio at 180°, dB	31	30	30	32	30	32	30	32	30
Coupling level, Amp, Antenna port to Cal port, dB									26
Coupling level, max Amp $\Delta$ , Antenna port to Cal port, dB									±2
Coupler, max Amp $\Delta$ , Antenna port to Cal port, dB									0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees									7

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Isolation, Cross Polarization, dB	27	27	27	26	26	26	27	27	25
Isolation, Inter-band, dB	27	27	27	27	27	27	27	27	25
Isolation, Co-polarization, dB									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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153	-130
Input Power per Port at 50° C, maximum, watts	250	250	250	200	200	150	200	150	75
Electrical Specifications, Broadcast 65°									
Frequency Band, MHz									3300-3800
Gain, dBi									17.7
Beamwidth, Horizontal, degrees									29
Beamwidth, Vertical, degrees									6.1
Front-to-Back Total Power at 180° ± 30°, dB									26
USLS (First Lobe), dB									20
Electrical Specifications, Service Beam									
Frequency Band, MHz									3300-3800
Steered 0° Gain, dBi									20.7
Steered 0° Beamwidth, Horizontal, degrees									24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB									29
Steered 0° Horizontal Sidelobe, dB									14
Steered 30° Gain, dBi									19.4
Steered 30° Beamwidth, Horizontal, degrees									30
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB									27
Steered 30° Horizontal Sidelobe, dB									9

Electrical Specifications, Soft Split



Frequency Band, MHz	3300-3800
Gain, dBi	19.6
Beamwidth, Horizontal, degrees	31
Horizontal Sidelobe, dB	19

#### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)

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

#### Packaging and Weights

 Width, packed
 530 mm | 20.866 in

 Depth, packed
 356 mm | 14.016 in

 Length, packed
 2897 mm | 114.055 in

 Weight, gross
 73.7 kg | 162.48 lb

#### Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Above maximum concentration value

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



#### 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



# 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



# 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.

**Product Classification** 

**Product Type** Downtilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

**Dimensions** 

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net4.6 kg | 10.141 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



