

32-port sector antenna, $4 \times 694-862$ MHz (R1,R3), $4 \times 880-960$ MHz (R2,R4), and $8 \times 1695-2690$ MHz (Y1-Y4) 65° HPBW, $16 \times 2300-3800$ MHz (P1,P2), 90° HPBW, $10 \times RET$

- Two broadband beamforming arrays for 2300-2690 MHz or 3300-3800 MHz, each with a calibration port
- Design for site sharing for both FDD and TDD applications
- New aerodynamic endcaps for wind load optimization
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

General Specifications

Antenna Type Sector and beamforming

Band Multiband

Calibration Connector Interface MQ5
Calibration Connector Quantity 2

Color Light Gray (RAL 7035)

Grounding TypeRF connector inner conductor and body grounded to reflector and mounting

bracket

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Performance Note Outdoor usage

Radome Material Fiberglass, UV resistant

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

8

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 2 female | 2 male

Input Voltage 10-30 Vdc



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

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

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

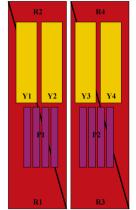
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2688 mm | 105.827 in

 Net Weight, antenna only
 74.3 kg | 163.803 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-862	1 - 2	1	AISG2	CPxxxxxxxxxxxxxXR1
R2	880-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxR2
R3	694-862	5 - 6	3	AISG2	CPxxxxxxxxxxxxxXR3
R4	880-960	7 - 8	4	AISG1	CPxxxxxxxxxxxxxR4
Y1	1695-2690	9 - 10	5	AISG2	CPxxxxxxxxxxxxxY1
Y2	1695-2690	11 - 12	6	AISG2	CPxxxxxxxxxxxxxY2
Y3	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxXY3
Y4	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxx4
P1	2300-3800	17 - 24	9	AISG2	CPxxxxxxxxxxxxxxP1
P2	2300-3800	25 - 32	10	AISG1	CPxxxxxxxxxxxxxx2

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

Port Configuration





Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2690 MHz | 2300 – 3800 MHz | 694 – 862 MHz | 880 – 960 MHz

Polarization ±45°

Total Input Power, maximum 1,600 W @ 50 °C

Electrical Specifications

	R1,R3	R2,R4	Y1-Y4	Y1-Y4	Y1-Y4	P1,P2	P1,P2
Frequency Band, MHz	694-862	880-960	1695-1920	1920-2200	2300-2690	2300-2690	3300-3800
RF Port	1,2,5,6	3,4,7,8	9-16	9-16	9-16	17-32	17-32
Gain at Mid Tilt, dBi	15.2	15.4	16.3	17.6	17.9	14.7	15.8
Beamwidth, Horizontal, degrees	62	60	71	62	58	92	69
Beamwidth, Vertical, degrees	8.8	7.6	6.3	5.6	4.8	5.9	5.5
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	19	18	18	21	11	14
Front-to-Back Ratio at 180°, dB	29	29	33	32	32	28	29
Front-to-Back Total Power at 180° ± 30°, dB	21	22	26	27	27	20	21
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	28	28	25	25	25	23	23
Isolation, Inter-band, dB	28	28	25	25	25	25	25
Isolation, Co-polarization, dB						18	18
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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-130	-130
Input Power per Port at 50°C, maximum, watts	250	250	250	250	200	75	75



Electrical Specifications, Broadcast 65	0
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Frequency Band, MHz	2300-2690	3300-3800
Gain, dBi	17.5	17.1
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Horizontal at 10 dB, degrees	114	112
Beamwidth, Vertical, degrees	5.9	5.5
Front-to-Back Total Power at 180° ± 30°, dB	24	24
USLS (First Lobe), dB	12	14

Electrical Specifications, Envelope Pattern

Frequency Band, MHz	2300-2690	3300-3800
Gain, dBi	20.2	21.3
Beamwidth, Horizontal at 10 dB, degrees	126	121
Beamwidth, Vertical at 3 dB, degrees	5.9	5.5
Front-to-Back Total Power at 180° ± 30°, dB	25	25
USLS (First Lobe), dB	12	15

Electrical Specifications, Service Beam

Frequency Band, MHz	2300-2690	3300-3800
Steered 0° Gain, dBi	20.2	21.4
Steered 0° Beamwidth, Horizontal, degrees	26	18
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	27	29
Steered 0° Horizontal Sidelobe, dB	12	10
Steered 30° Gain, dBi	19.4	19.5
Steered 30° Beamwidth, Horizontal, degrees	28	21
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	26	25

Electrical Specifications, Soft Split



Frequency Band, MHz	2300-2690
Gain, dBi	19.2
Beamwidth, Horizontal, degrees	32
Front-to-Back Total Power at 180° ± 30°, dB	27
Horizontal Sidelobe, dB	15

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 970.0 N @ 150 km/h (218.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 304.0 N @ 150 km/h (68.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,162.0 N @ 150 km/h (261.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 667.0 N @ 150 km/h (149.9 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

 Weight, gross
 95.8 kg | 211.203 lb

Regulatory Compliance/Certifications

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

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



