

20-port sector antenna,4 \times 694-960 MHz (R1-R2), and 8 \times 1695-2690 MHz (Y1-Y4), 65° HPBW, 8 \times 2300-3800 MHz (P1), 90° HPBW, 7 \times RET

- Includes 1x 4-column array for 2300-3800 MHz and callibration port. Column spacing optimized to support soft split beamforming
- Q4 array uses MQ4/5 cluster connectors
- Seven internal RETs control the antenna arrays
- New aerodynamic endcaps for wind load optimization

General Specifications

Antenna Type Sector and beamforming

Band Multiband

Calibration Connector InterfaceMQ5Calibration Connector Quantity1

Color Light Gray (RAL 7035)

Grounding TypeRF 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

RF Connector Quantity, high band

RF Connector Quantity, mid band

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

Input Voltage 10-30 Vdc

Internal RET High band (1) | Low band (2) | Mid band (4)

Power Consumption, active state, maximum 8 W

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Power Consumption, idle state, maximum 1 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

 Width
 498 mm | 19.606 in

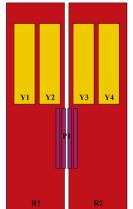
 Depth
 197 mm | 7.756 in

 Length
 2688 mm | 105.827 in

 Net Weight, antenna only
 44.5 kg | 98.106 lb

 TDD Column Spacing
 58 mm | 2.283 in

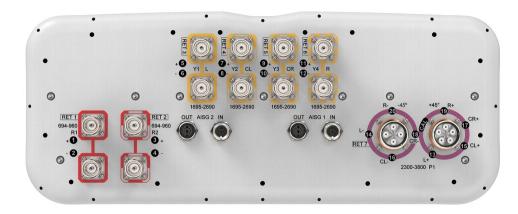
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxXY3
Y4	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxx4
P1	2300-3800	13 - 20	7	AISG1	CPxxxxxxxxxxxxxxP1

(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 – 960 MHz

Polarization ±45°

Total Input Power, maximum 900 W @ 50 °C

Electrical Specifications

	R1-R2	R1-R2	R1-R2	Y1-Y4	Y1-Y4	Y1-Y4	P1	P1
Frequency Band, MHz	694-790	790-890	890-960	1695-1920	0 1920-2200	0 2300-269	0 2300–269	0 3400-3800
RF Port	1-4	1-4	1-4	5-12	5-12	5-12	13-20	13-20
Gain, dBi	15.8	16.2	16.4	15.8	17	17.6	15.9	16.6
Beamwidth, Horizontal, degrees	71	64	63	70	62	59	88	64
Beamwidth, Vertical, degrees	8.9	8	7.3	7.4	6.5	5.4	6	5.1
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	16	16	16	16	16	14	14
Front-to-Back Ratio at 180°, dB	30	30	30	30	30	30	30	28
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	28	25	25	25	23	23
Isolation, Inter-band, dB	28	28	28	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-130	-130
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	75	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz 2300-2690 3400-3800

Gain, dBi 17.7 17.4

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Beamwidth, Horizontal, degrees	65	65		
Beamwidth, Vertical, degrees	5.9	5.1		
Front-to-Back Total Power at 180° ± 30°, dB	28	25		
USLS (First Lobe), dB	14	15		
Electrical Specifications, Envelope Pattern				
Frequency Band, MHz	2300-2690 3400-3800			
Gain, dBi	20.4	21.8		
Beamwidth, Horizontal at 10 dB, degrees	125	120		
Beamwidth, Vertical at 3 dB, degrees	5.9	5.1		
Front-to-Back Total Power at 180° ± 30°, dB	28	27		
USLS (First Lobe), dB	15	15		
Electrical Specifications, Service Beam				
Frequency Band, MHz	2300-269	0 3400-3800		
Steered 0° Gain, dBi	20.5	21.8		
Steered 0° Beamwidth, Horizontal, degrees	24	18		
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	30	29		
Steered 0° Horizontal Sidelobe, dB	12	12		
Steered 30° Gain, dBi	20	19.9		
Steered 30° Beamwidth, Horizontal, degrees	28	22		
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	30	25		
Electrical Specifications, Soft Split				
Frequency Band, MHz	2300-2690			
Gain, dBi	19.7			
Beamwidth, Horizontal, degrees	30			
Front-to-Back Total Power at 180° ± 30°, dB	30			



Horizontal Sidelobe, dB 18

Mechanical Specifications

Effective Projective Area (EPA), frontal 0.89 m² | 9.58 ft²

Effective Projective Area (EPA), lateral 0.27 m² | 2.906 ft²

 Wind Loading @ Velocity, frontal
 944.0 N @ 150 km/h (212.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 292.0 N @ 150 km/h (65.6 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,130.0 N @ 150 km/h (254.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 650.0 N @ 150 km/h (146.1 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 565 mm | 22.244 in

 Depth, packed
 309 mm | 12.165 in

 Length, packed
 2935 mm | 115.551 in

Weight, gross 65 kg | 143.3 lb

Regulatory Compliance/Certifications

Agency	Classification
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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

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.

BSAMNT-M – 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 NoteSevere 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





BSAMNT-M



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, net4.5 kg | 9.921 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



