

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 MQ4/MQ5 type cluster connector(s)
- 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

General Specifications

Antenna Type Sector- and beamforming

Band Multiband

Calibration Connector InterfaceMQ5Calibration Connector Quantity2

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

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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

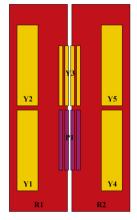
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2688 mm | 105.827 in

 Net Weight, without mounting kit
 59.4 kg | 130.954 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxY2
Y3	2300-2690	9 - 16	5	AISG1	CPxxxxxxxxxxxxxXY3
Y4	1427-2690	17 - 18	6	AISG1	CPxxxxxxxxxxxxxY4
Y5	1695-2690	19 - 20	7	AISG1	CPxxxxxxxxxxxxxxY5
P1	3300-3800	21 - 28	8	AISG1	CPxxxxxxxxxxxxxxxP1

(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	694-790	790-890	890-960	1427-151	8 1695-218	0 2300-269	0 2300-269	0 3300-3800
Gain, dBi	15.7	16	16.1	14.9	16.8	17.8	16.3	15.9
Beamwidth, Horizontal, degrees	72	66	63	79	70	60	90	89
Beamwidth, Vertical, degrees	8.8	7.8	7.2	9.2	7.1	5.5	4.8	6.5
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	19	23	25	21	23	19	16
Front-to-Back Ratio at 180°, dB	34	30	29	35	32	31	31	29
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,							7	9

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Antenna port to Cal port, degrees								
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25	25
Isolation, Inter-band, dB	28	28	28	25	25	25	28	28
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	150	75
Electrical Specificati	ons, BA	STA						
Frequency Band, MHz	694-790	790-890	890-960	1427-15	18 1695–21	80 2300-26	90 2300-26	90 3300-3800
Gain by all Beam Tilts, average, dBi	15.4	15.7	15.9	14.6	16.1	17.3	15.7	15.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.3	±0.5	±0.9	±0.5	±0.7	±1
Beamwidth, Horizontal Tolerance, degrees	±5.5	±3.3	±3.8	±6.5	±7.5	±5.8	±12.2	±21.6
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.6	±0.3	±0.4	±0.9	±0.5	±0.3	±0.6
USLS, beampeak to 20° above beampeak, dB	15	14	15	15	16	15	16	13
Front-to-Back Total Power at 180° ± 30°, dB	22	21	21	25	25	26	23	21
CPR at Boresight, dB	18	19	19	18	19	19	15	16
CPR at Sector, dB	11	7	10	6	5	3	9	7
Electrical Specificati	Electrical Specifications, Broadcast 65°							
Frequency Band, MHz							2300-26	90 3300-3800
Gain, dBi							18.2	17.9
Beamwidth, Horizontal, degrees							65	65
Beamwidth, Vertical, degrees							4.9	6.5
Front-to-Back Total Power at 180° ± 30°, dB							27	25
USLS (First Lobe), dB							18	17
Electrical Specifications, Service Beam								
Frequency Band, MHz 2300-2690 3300-3800							90 3300-3800	

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Steered 0° Gain, dBi	21.2	20.3	
Steered 0° Beamwidth, Horizontal, degrees	25	24	
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	32	28	
Steered 0° Horizontal Sidelobe, dB	13	12	
Steered 30° Gain, dBi	20.4	19.7	
Steered 30° Beamwidth, Horizontal, degrees	29	27	
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	31	27	

Electrical Specifications, Soft Split

Frequency Band, MHz	2300-269	0 3300-3800
Gain, dBi	20.2	19.5
Beamwidth, Horizontal, degrees	32	30
Front-to-Back Total Power at 180° ± 30°, dB	33	29
Horizontal Sidelobe, dB	21	16

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	597 mm 23.504 in
Depth, packed	349 mm 13.74 in
Length, packed	2829 mm 111.378 in
Weight, gross	80 kg 176.37 lb

Regulatory Compliance/Certifications

Agency Classification

COMMSCOPE®

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-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

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.commscope.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.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



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