

24-port sector antenna, 4x 694–960 and 4x 1427-2690 MHz 65° HPBW, 8x 2300–2690 and 8x 3300-3800MHz, 90° HPBW, 6x RET

- Antenna includes 2x Single Column X-Pol Arrays for 694-960MHz and 2x Single Column X-Pol Arrays for 1427-2690MHz, suitable for 4x MIMO applications
- 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
- A calibration port is provided for each 4-Column Array. Six Internal RET's provide independent electrical tilt control for each array

General Specifications

Antenna Type Sector- and beamforming

Band Multiband

Calibration Connector Interface 4.3-10 Female

Calibration Connector Quantity 2

Color Light Gray (RAL 7035)

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

bracket

Performance Note Outdoor usage | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

Radome Material Fiberglass, UV resistant

Low loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 8

RF Connector Quantity, mid band 12

RF Connector Quantity, low band

RF Connector Quantity, total 24

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v2

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

RET Interface, quantity 1 female | 1 male

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Input Voltage 10-30 Vdc

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

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

Protocol 3GPP/AISG 2.0 (Single RET)

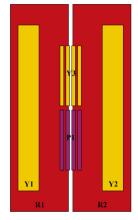
Dimensions

 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2100 mm | 82.677 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	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY1
Y2	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxY2
Y3	2300-2690	9 - 16	5	AISG1	CPxxxxxxxxxxxxxY3
P1	3300-3800	17 - 24	6	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 | 2300 – 2690 MHz | 3300 – 3800 MHz | 694 – 960

 MHz

Polarization ±45°

Total Input Power, maximum 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	15.1	15.4	15.6	16	17.8	18.3	15.3	15.9
Beamwidth, Horizontal, degrees	71	65	63	77	70	59	94	90
Beamwidth, Vertical, degrees	10.4	9.4	8.4	7	5.5	4.4	6.3	6.6
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	15	17	17	19	16	17	15	15
Front-to-Back Ratio at 180°, dB	32	33	31	31	30	29	31	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

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Coupler, max Amp Δ, Antenna port to Cal port, dB							0.9	0.9
Coupler, max Phase Δ , Antenna port to Cal port, degrees							9	9
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25	25
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	-150	-145
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	150	75

Electrical Specifications, BASTA

Frequency Band, MHz	694-790	790-890	890-960	1427-151	8 1695-218	0 2300-269	0 2300-269	0 3300-3800
Gain by all Beam Tilts, average, dBi	14.7	15.1	15.4	15.6	17	18	14.7	15.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.3	±0.4	±0.8	±0.4	±0.7	±0.7
Beamwidth, Horizontal Tolerance, degrees	±6.2	±3.7	±3.4	±5.4	±6.6	±6.4	±13.9	±17.7
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.5	±0.2	±0.7	±0.3	±0.5	±0.6
USLS, beampeak to 20° above beampeak, dB	14	17	17	17	16	14	14	14
Front-to-Back Total Power at 180° ± 30°, dB	21	20	21	25	24	24	23	21
CPR at Boresight, dB	20	20	18	16	17	17	15	16
CPR at Sector, dB	13	9	11	8	4	3	10	8

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	2300-2690 3300-3		
Gain, dBi	17.3	17.1	
Beamwidth, Horizontal, degrees	57	56	
Beamwidth, Vertical, degrees	6.2	6.5	
USLS (First Lobe), dB	14	16	

Electrical Specifications, Service Beam

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Frequency Band, MHz	2300-2690 3300-3800					
Steered 0° Gain, dBi	20.6 20.9					
Steered 0° Beamwidth, Horizontal, degrees	26 24					
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	33 30					
Steered 0° Horizontal Sidelobe, dB	11 13					
Steered 30° Gain, dBi	19.8 19.7					
Steered 30° Beamwidth, Horizontal, degrees	28 28					

Electrical Specifications, Soft Split

Frequency Band, MHz	2300-2690 3300-380			
Gain, dBi	19.5	19.6		
Beamwidth, Horizontal, degrees	32	32		
Front-to-Back Total Power at 180° ± 30°, dB	33	28		
Horizontal Sidelobe, dB	18	16		

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 803.0 N @ 150 km/h (180.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 275.0 N @ 150 km/h (61.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,040.0 N @ 150 km/h (233.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 661.0 N @ 150 km/h (148.6 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
 2287 mm | 90.039 in

 Weight, gross
 62.1 kg | 136.907 lb

 Weight, net
 47.6 kg | 104.94 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.

* 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





