

14 Port Sector Antenna, 2x698-896 MHz, 4x1695-2200 MHz 65° HPBW, and 8x3700-4000 MHz Beamformer, 3XRET

General Specifications

Antenna Type Sector- and beamforming

Band Multiband

Calibration Connector Interface 4.3-10 Female

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

RF Connector Location Bottom

RF Connector Quantity, high band 8
RF Connector Quantity, mid band 4
RF Connector Quantity, low band 2
RF Connector Quantity, total 14

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v2

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

RET Interface, quantity 3 female | 3 male

Input Voltage 10–30 Vdc

Internal Bias Tee Cal Port | Port 1 | Port 3

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

Protocol 3GPP/AISG 2.0 (Single RET)

COMMSCOPE®

Dimensions

 Width
 350 mm | 13.78 in

 Depth
 208 mm | 8.189 in

 Length
 1413 mm | 55.63 in

 Net Weight, antenna only
 23 kg | 50.706 lb

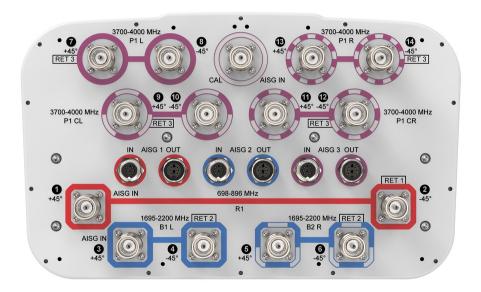
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	698-896	1 - 2	1	CPxxxxxxxxxxxxxR1
В1	1695-2200	3 - 4		CD
B2	1695-2200	5 - 6	2	CPxxxxxxxxxxxxxxB1
P1	3700-4000	7 - 14	3	CPxxxxxxxxxxxxxxP1

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2200 MHz | 3700 – 4000 MHz | 698 – 896 MHz

Polarization ±45°

Total Input Power, maximum 1,040 W @ 50 °C

Electrical Specifications

	R1	R1	B1,B2	B1,B2	B1,B2	P1
Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200	3700-4000
RF Port	1,2	1,2	3-6	3-6	3-6	7-14
Gain, dBi	13.9	14.2	16.7	17.1	17.1	16.4
Beamwidth, Horizontal, degrees	69	67	67	65	67	80
Beamwidth, Vertical, degrees	16.9	15.1	6.6	6.1	5.8	5.7
Beam Tilt, degrees	0-18	0-18	0-10	0-10	0-10	0-10
USLS (First Lobe), dB	20	20	15	16	17	13
Front-to-Back Ratio at 180°, dB	39	35	32	40	37	30

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Coupling level, Amp, Antenna port to Cal port, dB						26
Coupling level, max Amp Δ, Antenna port to Cal port, dB						±2
Coupler, max Amp Δ , Antenna port to Cal port, dB						0.5
Coupler, max Phase Δ, Antenna port to Cal port, degrees						5
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
Isolation, Co-polarization, dB						19
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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-145
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	75
Electrical Specifications, BASTA						
Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200	3700-4000
Gain by all Beam Tilts, average, dBi	13.7	13.9	16.3	16.7	16.8	15.6
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±0.7	±0.3	±0.4	±1.1
Beamwidth, Horizontal Tolerance, degrees	±3	±2	±7	±5	±4	±22
Beamwidth, Vertical Tolerance, degrees	±1	±0.8	±0.3	±0.3	±0.3	±0.5
Front-to-Back Total Power at 180° ± 30°, dB	26	25	25	28	29	23
CPR at Boresight, dB	23	23	21	23	23	14
CPR at Sector, dB	12	7	11	12	9	4
Electrical Specifications, Broadcast 65°						
Frequency Band, MHz						3700-4000
Gain, dBi						16.9
Beamwidth, Horizontal, degrees						65
Beamwidth, Vertical, degrees						5.7
beamwidth, vertical, degrees						5.7

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Tolerance, degrees		
Front-to-Back Total Power at		25
180° ± 30°, dB		1.4
USLS (First Lobe), dB		14
Electrical Specifications, En	velope Pattern	
Frequency Band, MHz		3700-4000
Gain, dBi		20.7
Electrical Specifications, Se	rvice Beam	
Frequency Band, MHz		3700-4000
Steered 0° Gain, dBi		20.7
Steered 0° Gain Tolerance, dBi		±0.6
Steered 0° Beamwidth, Horizontal, degrees		22
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB		29
Steered 0° Horizontal Sidelobe, dB		13
Steered 30° Gain, dBi		19.7
Steered 30° Gain Tolerance, dBi		±0.8
Steered 30° Beamwidth, Horizontal, degrees		28
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB		27
Electrical Specifications, So	ft Split	
Frequency Band, MHz		3700-4000
Gain, dBi		19.1
Beamwidth, Horizontal, degrees		32
Front-to-Back Total Power at 180° ± 30°, dB		26
Horizontal Sidelobe, dB		16
Mechanical Specifications		
Wind Loading @ Velocity, frontal		
Wind Loading @ Velocity, lateral		

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Wind Loading @ Velocity, maximum 474.0 N @ 150 km/h (106.6 lbf @ 150 km/h)

Wind Loading @ Velocity, rear 237.0 N @ 150 km/h (53.3 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 448 mm | 17.638 in

 Depth, packed
 355 mm | 13.976 in

 Length, packed
 1557 mm | 61.299 in

 Weight, gross
 33.4 kg | 73.634 lb

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



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.

* Footnotes

Performance Note Severe 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

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 1

Weight, gross 6.4 kg | 14.11 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	$\label{thm:constraint} \mbox{Designed, manufactured and/or distributed under this quality management system}$
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant





