

16-port sector/multibeam antenna 4x 694–960 MHz, 4x 1427-2690 MHz 65° HPBW and 8x 1710–2690 MHz 2x 2-Beam 33°HPBW, 8x RET

- GREEN and High Capacity Antenna Solution
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces
- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- "Green" packaging of reduced size and gross weight that uses less material and reduces shipping pollution

General Specifications

Antenna Type DualPol® multibeam

Band Multiband

Color Light Gray (RAL 7035)

Grounding TypeRF 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 12

RF Connector Quantity, low band 4

RF Connector Quantity, total 16

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 (6) | Low band (2)

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 2100 mm | 82.677 in

Net Weight, antenna only 46 kg | 101.413 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	3	CPxxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	4	CPxxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	5	CPxxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	6	CPxxxxxxxxxxxx4
Y5	1710-2690	13 - 14	7	CPxxxxxxxxxxxxxY5
Y6	1427-2690	15 - 16	8	CPxxxxxxxxxxxxY6

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1427 – 2690 MHz | 1710 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

Total Input Power, maximum 1,700 W @ 50 °C

Electrical Specifications

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	R1,R2	R1,R2	R1,R2	Y1,Y6	Y1,Y6	Y1,Y6	Y1,Y6	Y1,Y6	
Frequency Band, MHz	694-806	790-896	890-960	1427-1518	1695-199	01920-230	002300-250	02490-2690	
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	5,6,15,16	5,6,15,16	5,6,15,16	5,6,15,16	5,6,15,16	
Beam Centers, Horizontal, degrees	±0	±0	±0	±0	±0	±0	±0	±0	
Beamwidth, Horizontal, degrees	73	66	66	78	76	68	58	56	
Beamwidth, Vertical, degrees	10.9	9.7	9.1	7.9	6.6	5.9	5.2	4.9	

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Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	17	17	19	18	19	21	21
Front-to- Back Ratio at 180°, dB	27	30	29	33	33	31	34	34
Front-to- Back Total Power at 180° ± 30°, dB	22	22	20	22	24	24	26	24
CPR at Boresight, dB	20	19	18	21	18	19	22	22
CPR at Sector, dB	12	9	9	6	9	4	10	9
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25
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	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	694-806	790-896	890-960	1427-1518	1695-199	01920-230	02300-250	02490-2690
Gain by all Beam Tilts, average, dBi	14.2	14.5	14.6	14.3	15.8	16.8	17.8	17.8
Gain by all Beam Tilts	±0.5	±0.6	±0.6	±0.3	±0.6	±0.9	±0.5	±0.6

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Tolerance, dB								
Beamwidth, Horizontal Tolerance, degrees	±8	±6	±6	±9	±6	±8	±4	±4
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.6	±0.7	±0.4	±0.6	±0.5	±0.4	±0.4
USLS, beampeak to 20° above beampeak, dB	17	16	16	14	16	17	18	17

Electrical Specifications

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	Y2-Y5	Y2-Y5	Y2-Y5	Y2-Y5
Frequency Band, MHz	1710-1990	1920-2300	2300-2500	2490-2690
RF Port	7,8,9,10,11,12,13,14	47,8,9,10,11,12,13,1	47,8,9,10,11,12,13,1	47,8,9,10,11,12,13,14
Beam Centers, Horizontal, degrees	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	34	32	28	26
Beamwidth, Vertical, degrees	8.3	7.5	6.7	6.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	17	19	18
Front-to- Back Ratio at 180°, dB	36	36	34	33
Front-to- Back Total Power at 180° ± 30°, dB	30	29	28	27
CPR at	17	21	18	19
dB	17	21	18	19

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Boresight, dB				
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
Isolation, Beam to Beam, dB	17	17	17	17
VSWR Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	1710-1990	1920-2300	2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	16.7	17.9	18.2	18.4
Gain by all Beam Tilts Tolerance, dB	±1.1	±1	±1.1	±0.6
Beamwidth, Horizontal Tolerance, degrees	±3	±3	±3	±2
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.6	±0.4	±0.5
USLS, beampeak to 20° above	15	17	15	14

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beampeak,

dΒ

CPR at 10 7 10 10 11

dΒ

Horizontal Boomwidth

Beamwidth,

dΒ

Mechanical Specifications

Effective Projective Area (EPA), frontal 0.68 m² | 7.319 ft² Effective Projective Area (EPA), lateral 0.21 m² | 2.26 ft²

 Wind Loading @ Velocity, frontal
 714.0 N @ 150 km/h (160.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 187.0 N @ 150 km/h (42.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 949.0 N @ 150 km/h (213.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 491.0 N @ 150 km/h (110.4 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
 60.4 kg | 133.159 lb

Regulatory Compliance/Certifications

Agency Classification

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

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

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