

10-port sector/multi beam antenna, 2x 698-960 sector and 8x 1710-2690 multi beam, 65° sector and 33° 4x multi beam, 5x RET with tilt indicators

- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces
- Optimized radome design leading to market leading wind load performance
- Antenna with integrated pluggable RET and retractable tilt scale indicators

General Specifications

Antenna Type Multibeam

Band Multiband

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

bracket

Performance Note Outdoor usage

Radome Material Fiberglass, UV resistant

Radiator Material Copper | Low loss circuit board

Reflector Material Aluminum

RF Connector Interface 7-16 DIN Female

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, low band

2

RF Connector Quantity, total

10

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

Input Voltage 10-30 Vdc

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

Power Consumption, active state, maximum 10 W Power Consumption, idle state, maximum 2 W

Protocol 3GPP/AISG 2.0 (Single RET)

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Dimensions

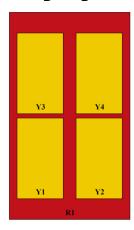
Width 350 mm | 13.78 in

Depth 208 mm | 8.189 in

Length 2100 mm | 82.677 in

Net Weight, without mounting kit 29.8 kg | 65.698 lb

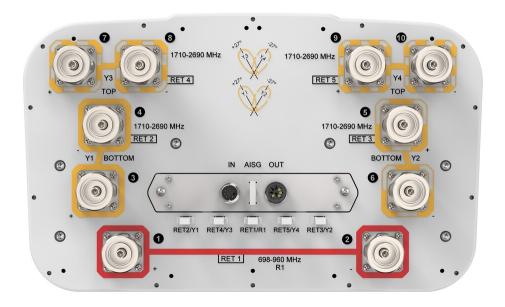
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	698-960	1 - 2	1	CPxxxxxxxxxxxxxR1
Y1	1710-2690	3 - 4	2	CPxxxxxxxxxxxxxY1
Y2	1710-2690	5 - 6	3	CPxxxxxxxxxxxxxY2
Y3	1710-2690	7 - 8	4	CPxxxxxxxxxxxxxY3
Y4	1710-2690	9 - 10	5	CPxxxxxxxxxxxxx4

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1710 – 2690 MHz | 698 – 960 MHz

Polarization ±45°

Total Input Power, maximum 1,000 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	698-803	824-880	880-960	1710-1880	1920-2170	2300-2400	2490-2690
Gain, dBi	15	15	15.2	17	18.2	18.5	18.4
Beam Centers, Horizontal, degrees				±27	±27	±27	±27
Beamwidth, Horizontal, degrees	71	70	73	34	31	27	25
Beamwidth, Vertical, degrees	11	9.8	9.2	8.7	7.8	7	6.5
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	20	22	18	16	17	19	17
Front-to-Back Ratio at 180°, dB	38	32	28	35	34	34	32

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Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	698-803	824-880	880-960	1710-1880	1920-2170	2300-2400	2490-2690
Gain by all Beam Tilts, average, dBi	14.7	14.9	14.9	16.4	17.7	17.9	17.9
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.2	±0.5	±1	±0.8	±1.3	±1
Beamwidth, Horizontal Tolerance, degrees	±2.8	±1.7	±3.4	±2	±2	±1.6	±1
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.3	±0.4	±0.7	±0.6	±0.6	±0.8
USLS, beampeak to 20° above beampeak, dB	19	18	16	14	15	14	13
Front-to-Back Total Power at 180° ± 30°, dB	27	25	24	26	27	26	26
CPR at Boresight, dB	15	16	16	18	21	14	16
CPR at Sector, dB	11	12	11				

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 300.0 N @ 150 km/h (67.4 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 752.0 N @ 150 km/h (169.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 376.0 N @ 150 km/h (84.5 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 460 mm | 18.11 in

 Depth, packed
 350 mm | 13.78 in

 Length, packed
 2240 mm | 88.189 in

 Weight, gross
 43.8 kg | 96.562 lb

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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

