

16-port sector/multibeam antenna 4x 694–960 MHz, 4x 1695-2690 MHz 65° HPBW and 8x 1710–2690 MHz 2x 2-Beam 33°HPBW, 8x RET

• All Internal RET actuators are connected in "Cascaded SRET" configuration

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

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

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

COMMSC PE°

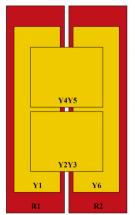
Width 498 mm | 19.606 in

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 No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxx4
Y5	1710-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxY5
Y6	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxY6

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

Port Configuration



Electrical Specifications



Impedance 50 ohm

Operating Frequency Band 1695 – 2690 MHz | 1710 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

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

Electrical Specifications

Frequency Band, MHz	694-790	790-890	890-960	1695-2180	2300-2690	1710-2180	2300-2690
Gain, dBi	14.6	14.9	15.2	16.9	18.6	18.2	19
Beam Centers, Horizontal, degrees						±27	±23
Beamwidth, Horizontal, degrees	75	66	65	72	56	34	27
Beamwidth, Vertical, degrees	11.4	10.1	9.4	6.3	5.1	8	6.3
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	16	15	21	21	16	18
Front-to-Back Ratio at 180°, dB	30	30	29	34	34	37	32
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
Isolation, Beam to Beam, dB						17	17
VSWR Return loss, dB	1.5 14.5	1.5 14.5	1.5 14.5	1.5 14.5	1.5 14.5	1.5 14.5	1.5 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	250	200	150	200	150

Electrical Specifications, BASTA

Frequency Band, MHz	694-790	790-890	890-960	1695-2180	2300-2690	1710-2180	2300-2690
Gain by all Beam Tilts, average, dBi	14.2	14.7	14.9	16.5	18.1	17.4	18.5
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.5	±0.5	±0.7	±0.7	±1.4	±1
Beamwidth, Horizontal Tolerance, degrees	±7.2	±6.3	±3.9	±6.7	±4.2	±3.7	±3.1
Beamwidth, Vertical Tolerance, degrees	±1.1	±1	±1.1	±0.5	±0.5	±0.9	±0.7
USLS, beampeak to 20° above beampeak, dB	16	16	15	19	16	14	15

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Front-to-Back Total Power at 180° ± 30°, dB	21	22	21	25	26	30	27
CPR at Boresight, dB	21	21	19	21	22	18	20
CPR at Sector, dB	14	9	10	9	5		
CPR at 10 dB Horizontal Beamwidth, dB						8	11

Mechanical Specifications

Effective Projective Area (EPA), frontal $0.68 \text{ m}^2 \mid 7.319 \text{ ft}^2$ Effective Projective Area (EPA), lateral $0.21 \text{ m}^2 \mid 2.26 \text{ ft}^2$

 Wind Loading @ Velocity, frontal
 728.0 N @ 150 km/h (163.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 223.0 N @ 150 km/h (50.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 873.0 N @ 150 km/h (196.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 501.0 N @ 150 km/h (112.6 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
 61.4 kg | 135.364 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

