

20-port sector antenna, $4x694-960\ 4x1427-2690\ and\ 12\ x\ 1695-2690\ MHz$, 65° HPBW, 10xRET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

General Specifications

Antenna Type Sector

Band Multiband

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

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector LocationBottom

RF Connector Quantity, high band 0
RF Connector Quantity, mid band 16
RF Connector Quantity, low band 4
RF Connector Quantity, total 20

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v2

RET Interface AISG1 8-pin DIN Female | AISG1 8-pin DIN Male

RET Interface, quantity 2 female | 2 male

Input Voltage 10-30 Vdc

Internal RET Low band (2) | Mid band (8)

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

Protocol 3GPP/AISG 2.0 (Single RET)



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Dimensions

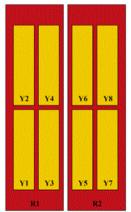
Width 498 mm | 19.606 in

Depth 197 mm | 7.756 in

Length 2100 mm | 82.677 in

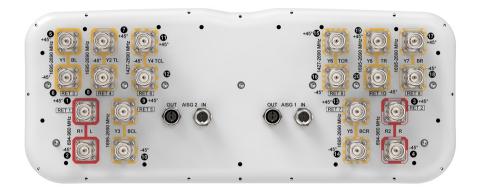
Net Weight, antenna only 45.7 kg | 100.751 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	CPxxxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	5	CPxxxxxxxxxxxxxxXY3
Y4	1427-2690	11 - 12	6	CPxxxxxxxxxxxxxxY4
Y5	1695-2690	13 - 14	7	CPxxxxxxxxxxxxxxY5
Y6	1427-2690	15 - 16	8	CPxxxxxxxxxxxxxY6
Y7	1695-2690	17 - 18	9	CPxxxxxxxxxxxxxxY7
Y8	1695-2690	19 - 20	10	CPxxxxxxxxxxxxxxXX

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1427 – 2690 MHz | 1695 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

Total Input Power, maximum 900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	698-806	790-896	890-960	1695-1990	1920-2300	2300-2500	2490-2690
Gain at Mid Tilt, dBi	14.8	15.3	15.4	15.4	16.3	16.7	16.8
Beamwidth, Horizontal, degrees	67	63	61	69	62	59	60
Beamwidth, Vertical, degrees	11.3	10.1	9.4	9.7	8.8	7.9	7.5
Beam Tilt, degrees	2-14	2-14	2-14	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	20	20	16	16	17	17
Front-to-Back Ratio at 180°, dB	32	29	28	31	31	32	31
Front-to-Back Total Power at 180° ± 30°, dB	21	21	22	25	25	26	25
CPR at Boresight, dB	20	20	19	19	20	21	20
CPR at Sector, dB	11	8	12	8	7	8	7
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25
Isolation, Inter-band, dB	28	28	28	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	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	200

Electrical Specifications

Frequency Band, MHz	1427-1518	1695-1990	1920-2300	2300-2500	2490-2690
Gain at Mid Tilt, dBi	14.5	15.7	16.6	17.2	17
Beamwidth, Horizontal, degrees	72	66	60	58	59
Beamwidth, Vertical, degrees	10.2	8.4	7.6	6.7	6.3
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	15	16	18	16



Front-to-Back Ratio at 180°, dB	34	33	37	31	30
Front-to-Back Total Power at 180° ± 30°, dB	24	27	28	26	26
CPR at Boresight, dB	19	20	20	25	25
CPR at Sector, dB	9	9	6	4	2
Isolation, Cross Polarization, dB	25	25	25	25	25
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200

Mechanical Specifications

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	60.1 kg 132.498 lb

Regulatory Compliance/Certifications

Agency	Classification
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
GO	



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

