

8-port sector antenna, 4x 694-960, 4x 1427-2690 MHz 65° HPBW, 4x RET

- Antenna includes 2x Single Column X-Pol Arrays for 694-960MHz and 2x Single Column X-Pol Arrays for 1427-2690MHz, suitable for 4x MIMO applications
- Excellent wind loading characteristics
- 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
- Antenna design optimized to offer high gain performances

General Specifications

Antenna Type Sector

Band Multiband

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

bracket

Performance NoteOutdoor usageRF Connector Interface4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, mid band 4
RF Connector Quantity, low band 4
RF Connector Quantity, total 8

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 Low band (2) | Mid 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

Width 430 mm | 16.929 in

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Depth 197 mm | 7.756 in

Length 2688 mm | 105.827 in

Net Weight, antenna only 36.6 kg | 80.689 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	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxY1
Y2	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxY2

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

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

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Polarization ±45°

Total Input Power, maximum 900 W @ 50 $^{\circ}$ C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	698-806	790-894	890-960	1427-151	8 1695–199	5 1920-230	0 2300–250	0 2490-2690
RF Port	1-4	1-4	1-4	5-8	5-8	5-8	5-8	5-8
Gain at Mid Tilt, dBi	15.7	16.3	16.6	17.1	18.3	19	19.5	19.1
Beamwidth, Horizontal, degrees	72	60	61	68	63	59	58	64
Beamwidth, Vertical, degrees	7.7	6.9	6.4	7.1	5.8	5.1	4.4	4.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	17	16	23	20	20	19	18
Front-to-Back Ratio at 180°, dB	32	30	30	34	32	34	38	36
Front-to-Back Total Power at 180° ± 30°, dB	22	21	21	22	29	30	31	31
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	250	250	250	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	698-806	790-894	890-960	1427-151	8 1695–199	5 1920-230	0 2300-250	0 2490-2690
Gain by all Beam Tilts, average, dBi	15.7	16.2	16.4	17	18.2	18.8	19.3	18.9
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.5	±0.5	±0.7	±0.5	±0.5	±0.5
Beamwidth, Horizontal Tolerance, degrees	±8	±10	±8	±5	±6	±4	±6	±6
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.5	±0.3	±0.3	±0.4	±0.5	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	14	13	14	16	17	17	17	15
CPR at Boresight, dB	22	21	16	16	19	16	20	19

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CPR at Sector, dB 12 8 7 9 11 4 7 3

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 632.0 N @ 150 km/h (142.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 341.0 N @ 150 km/h (76.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 998.0 N @ 150 km/h (224.4 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 408.0 N @ 150 km/h (91.7 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 529 mm | 20.827 in

 Depth, packed
 356 mm | 14.016 in

 Length, packed
 2816 mm | 110.866 in

 Weight, gross
 56.4 kg | 124.341 lb

Regulatory Compliance/Certifications

Agency Classification

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

UK-ROHS Compliant/Exempted



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.

BSAMNT-M4 – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round

members. Kit contains one scissor bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

