

18-port sector antenna, 2x 694-862 (R1), 2x 880-960 (R2), 2x 694- 960 (R3), 2x 1427-2690 (Y2) & 2x 1695-2690 (Y1) MHz, 65° HPBW and 8x 3300-3800 (P1) MHz, 90° HPBW, 6x RET.

- Includes 1x 4-Column Array for 3300-3800MHz and calibration port. Column spacing optimized to support Soft Split Beamforming
- Retractable tilt indicator rods
- S4 array uses MQ cluster connectors
- Includes six internal RET's
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Antenna shape optimized for wind load reduction

General Specifications

Antenna Type	Sector
Band	Multiband
Calibration Connector Interface	MQ5
Calibration Connector Quantity	1
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female MQ4 MQ5
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	6
RF Connector Quantity, total	18

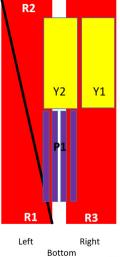
Remote Electrical Tilt (RET) Information

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 Bias Tee	Cal Port
Internal RET	High band (1) Low band (3) Mid band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0
Dimensions	
Width	430 mm 16.929 in
Depth	197 mm 7.756 in
Length	2769 mm 109.016 in
Net Weight, without mounting kit	53.3 kg 117.506 lb
TDD Column Spacing	42 mm 1.654 in

Array Layout



	Array	Freq (MHz)	Conns	RET(SRET)	AISG RET UID
	R1	694-862	1-2	1	CPxxxxxxxxxxxxxxR1
	R2	880-960	3-4	2	CPxxxxxxxxxxxxR2
	R3	694-960	5-6	3	CPxxxxxxxxxxxxxR3
	Y1	1695-2690	7-8	4	CPxxxxxxxxxxxxXXXXXY1
1	Y2	1427-2690	9-10	5	CPxxxxxxxxxxxxXXXXXY2
	P1	3300-3800	11-18	6	CPxxxxxxxxxxxxxXP1

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

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz 1695 – 2690 MHz 3300 – 3800 MHz 694 – 862 MHz 694 – 960 MHz 880 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694-862	880-960	694-960	1427-151	81695-218	02300-269	01695-220	02300-269	03300-3800
Gain, dBi	15.5	16.3	16.3	16.3	17.3	17.6	17.4	18.1	15.9
Beamwidth, Horizontal, degrees	60	53	58	55	58	66	57	55	91
Beamwidth, Vertical, degrees	7.5	6.4	7	7.2	5.6	4.4	6.1	5	6.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	16	17	20	20	20	15	17	16
Front-to-Back Ratio at 180°, dB	31	30	30	32	30	32	30	32	30
Coupling level, Amp, Antenna port to Cal port, dB									26
Coupling level, max Amp Δ , Antenna port to Cal port, dB									±2
Coupler, max Amp ∆, Antenna port to Cal port, dB									0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees									7

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Isolation, Cross Polarization, dB	27	27	27	26	26	26	27	27	25
Isolation, Inter-band, dB	27	27	27	27	27	27	27	27	25
Isolation, Co-polarization, dB									20
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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153	-130
Input Power per Port at 50° C, maximum, watts	250	250	250	200	200	150	200	150	75

Electrical Specifications, BASTA

Frequency Band, MHz	694-862	880-960	694-960	1427-151	81695-218	02300-269	01695-220	02300-269	03300-3800
Gain by all Beam Tilts, average, dBi	15.2	15.9	15.8	15.9	16.9	17.3	16.8	17.8	15.2
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.8	±0.4	±0.5	±0.5	±1	±0.4	±0.9
Beamwidth, Horizontal Tolerance, degrees	±7.5	±2.4	±6.4	±12.7	±8.3	±5	±7.1	±4.8	±20.5
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.3	±0.9	±0.3	±0.7	±0.3	±0.6	±0.3	±0.6
USLS, beampeak to 20° above beampeak, dB	15	16	15	15	18	16	14	15	14
Front-to-Back Total Power at 180° ± 30°, dB	23	23	24	24	27	26	24	26	22
CPR at Boresight, dB	25	28	24	21	18	17	17	18	15

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300-3800
Gain, dBi	17.7
Beamwidth, Horizontal, degrees	29
Beamwidth, Vertical, degrees	6.1
Front-to-Back Total Power at 180° ± 30°, dB	26
USLS (First Lobe), dB	20

Electrical Specifications, Service Beam

Frequency Band, MHz	3300-3800
Steered 0° Gain, dBi	20.7

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Steered 0° Beamwidth, Horizontal, degrees	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	29
Steered 0° Horizontal Sidelobe, dB	14
Steered 30° Gain, dBi	19.4
Steered 30° Beamwidth, Horizontal, degrees	30
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	27
Steered 30° Horizontal Sidelobe, dB	9

Electrical Specifications, Soft Split

Frequency Band, MHz	3300-3800
Gain, dBi	19.6
Beamwidth, Horizontal, degrees	31
Horizontal Sidelobe, dB	19

Mechanical Specifications

Wind Loading @ Velocity, frontal	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	530 mm 20.866 in
Depth, packed	356 mm 14.016 in
Length, packed	2897 mm 114.055 in
Weight, gross	73.7 kg 162.48 lb

Regulatory Compliance/Certifications

Classification

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CHINA-ROHS

ROHS

Above maximum concentration value Compliant/Exempted Compliant/Exempted

UK-ROHS

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

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