

22-port sector antenna, 2x 694-862 (R1), 2x 880-960 (R2), 2x 1427-2690 (Y2), 4x 1695-2180 (B1-B2), 4x 2490-2690 (Y1 & Y3) MHz, 65° 8x 3300-3800 (P1) HPBW, 7X RET. Y1 & Y3 share common RET.

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Retractable tilt indicator rods
- Two cluster connectors for the S4 beam-forming array, including 2 MQ connectors MQ4/MQ5

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

Radome MaterialFiberglass, UV resistantRadiator MaterialLow 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 10
RF Connector Quantity, low band 4
RF Connector Quantity, total 22

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 (1) | Low band (2) | Mid band (4)

Power Consumption, active state, maximum 8 W
Power Consumption, idle state, maximum 1 W

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Power Consumption, normal conditions, maximum 8 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

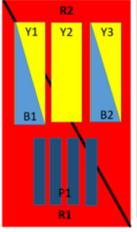
 Width
 395 mm | 15.551 in

 Depth
 228 mm | 8.976 in

 Length
 2100 mm | 82.677 in

 Net Weight, without mounting kit
 42.9 kg | 94.578 lb

Array Layout



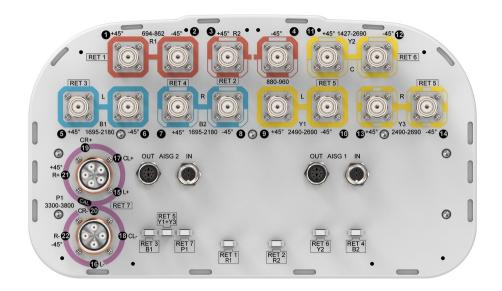
	Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
	R1	694-862	1-2	1	CPxxxxxxxxxxxxxxR1
	R2	880-960	3-4	2	CPxxxxxxxxxxxxxxxR2
	B1	1695-2180	5-6	3	CPxxxxxxxxxxxxxB1
	B2	1695-2180	7-8	4	CPxxxxxxxxxxxxxB2
	Y1	2490-2690	9-10	5	CD
I	Y3	2490-2690	13-14	5	CPxxxxxxxxxxxxxY1
	Y2	1427-2690	11-12	6	CPxxxxxxxxxxxxxY2
	P1	3300-3800	15-22	7	CPxxxxxxxxxxxxxP1

Left Right Bottom

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

Port Configuration





Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1427 – 2690 MHz | 1695 – 2180 MHz | 2490 – 2690 MHz | 3300

- 3800 MHz | 694 - 862 MHz | 880 - 960 MHz

Polarization ±45°

Total Input Power, maximum 900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694-862	880-960	1695-218	0 2490-269	0 1427-151	8 1695–220	0 2300-269	0 3300-3800
Gain, dBi	14.7	15	16.5	16.7	14.6	16.3	17	15.1
Beamwidth, Horizontal, degrees	65	64	66	60	70	63	56	91
Beamwidth, Vertical, degrees	10.5	8.9	7.1	5.6	9.3	7.5	5.8	7.1
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	22	21	18	19	16	21	15
Front-to-Back Ratio at 180°, dB	35	33	32	30	32	32	34	27
Coupling level, Amp, Antenna port to Cal port, dB								26
Coupling level, max Amp Δ ,								±2

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Antenna port to Cal port, dB								
Coupler, max Amp Δ , Antenna port to Cal port, dB								0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees								7
Isolation, Cross Polarization, dB	28	28	28	28	28	27	27	25
Isolation, Inter-band, dB	28	28	28	28	28	28	28	19
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	-150	-150	-150	-150	-150	-150	-150	-145
Input Power per Port at 50°C, maximum, watts	300	300	250	200	200	250	250	75
Electrical Specifications, BASTA								
Frequency Band, MHz	694-862	880-960	1695-218	80 2490-269	0 1427-151	8 1695-220	00 2300-269	90 3300-3800
Gain by all Beam Tilts, average, dBi	14.5	14.7	16	16.1	14.4	15.4	16.6	14.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.4	±0.8	±0.7	±0.4	±1.3	±0.7	±0.6
Beamwidth, Horizontal Tolerance, degrees	±2.5	±1.9	±5.4	±5.8	±4.2	±5.9	±5.9	±14.5
Beamwidth, Vertical Tolerance, degrees	±1.1	±0.5	±0.7	±0.2	±0.5	±1	±0.6	±0.6
USLS, beampeak to 20° above beampeak, dB	17	18	15	14	15	15	16	15
Front-to-Back Total Power at 180° ± 30°, dB	26	24	24	24	26	28	29	21
CPR at Boresight, dB	19	16	17	18	14	22	24	15
CPR at Sector, dB	12	8	7	10	8	8	6	9
Electrical Specifications, Broadcast 65°								
Frequency Band, MHz								3300-3800
Gain, dBi								16.2
Beamwidth, Horizontal, degrees								60
Beamwidth, Vertical, degrees								7.1
USLS (First Lobe), dB								16

Electrical Specifications, Service Beam



Frequency Band, MHz		3300-3800
Steered 0° Gain, dBi		19.8
Steered 0° Beamwidth, Horizontal, degrees		25
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB		28
Steered 0° Horizontal Sidelobe, dB		12
Steered 30° Gain, dBi		19.4
Steered 30° Beamwidth, Horizontal, degrees		25
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB		27
Steered 30° Horizontal Sidelobe, dB		10
Electrical Specifications, Soft Split		
Frequency Band, MHz		3300-3800
Gain, dBi		19.2
Beamwidth, Horizontal, degrees		29
CPR at Beampeak, dB		17
Front-to-Back Total Power at 180° ± 30°, dB		27
Horizontal Sidelobe, dB		17
Mechanical Specifications		
Wind Loading @ Velocity, frontal	427.0 N @ 150 km/h (96.0 lbf @ 150 km/h)	
Wind Loading @ Velocity, lateral	312.0 N @ 150 km/h (70.1 lbf @ 150 km/h)	
Wind Loading @ Velocity, maximum	730.0 N @ 150 km/h (164.1 lbf @ 150 km/h)	
Wind Loading @ Velocity, rear	439.0 N @ 150 km/h (98.7 lbf @ 150 km/h)	
Wind Speed, maximum	241 km/h (150 mph)	
Packaging and Weights		
Width, packed	505 mm 19.882 in	
Depth, packed	386 mm 15.197 in	
	•	
Length, packed	2233 mm 87.913 in	

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Weight, net 42.9 kg | 94.578 lb

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/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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

