

MB12P4L8M6533B6-V2



12-port sector/multibeam antenna, 4x 698–960 MHz 65° HPBW and 8x 1710–2690 MHz 33°HPBW, 6x RET

- Antenna with tilt scale indicators and integrated pluggable RET
- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

General Specifications

Antenna Type	Multibeam
Band	Multiband
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	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

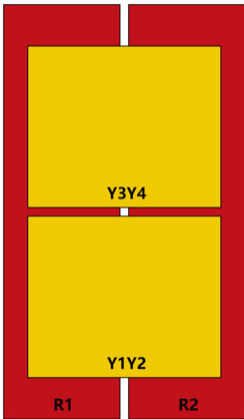
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) Mid band (4)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

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Dimensions

Width	499 mm 19.646 in
Depth	199 mm 7.835 in
Length	2090 mm 82.284 in
Net Weight, antenna only	28.3 kg 62.391 lb

Array Layout

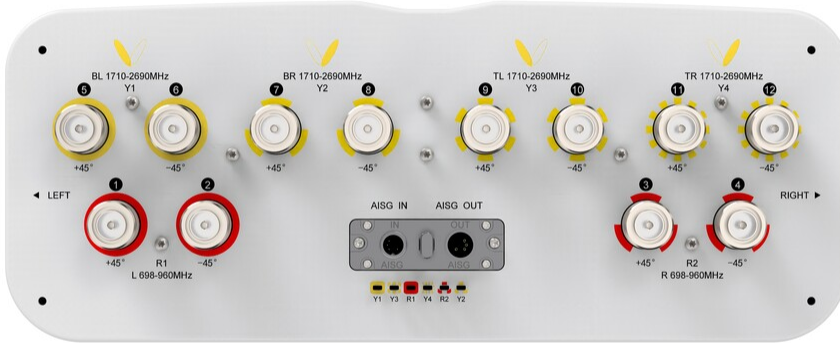


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	698-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	698-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1710-2690	5 - 6	33°	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxxxxxxY4

(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	1710 – 2690 MHz 698 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	698–806	790–894	880–960	1710–1880	1850–1990	1920–2170	2300–2500	2500–2690
RF Port	1-4	1-4	1-4	5-12	5-12	5-12	5-12	5-12
Gain, dBi	15	15.6	16.1	17.7	18.5	18.9	18.2	18.7
Beam Centers, Horizontal, degrees				±27	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	67	60	55	34	31	29	27	25
Beamwidth, Vertical, degrees	10.9	9.6	9	9.8	9.3	9	8	7.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	16	17	16	18	19	22	22

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Front-to-Back Ratio, Copolarization 180° ± 30°, dB	27	25	25	31	33	35	31	30
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25
Isolation, Beam to Beam, dB				15	15	15	15	15
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	-150
Input Power per Port, maximum, watts	300	300	300	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	790–894	880–960	1710–1880	1850–1990	1920–2170	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	14.6	15.2	15.6	17.2	17.9	18.3	17.8	18.1
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.5	±0.6	±0.6	±1	±0.7	±0.7	±0.8
Beamwidth, Horizontal Tolerance, degrees	±7	±8	±8	±3	±4	±2	±3	±2
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.8	±0.5	±0.5	±0.3	±0.5	±0.5	±0.4
CPR at Boresight, dB	20	20	23	19	20	19	18	20

Mechanical Specifications

Wind Loading @ Velocity, frontal	568.0 N @ 150 km/h (127.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	273.0 N @ 150 km/h (61.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	657.0 N @ 150 km/h (147.7 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h (124 mph)

Packaging and Weights

Width, packed	593 mm 23.346 in
Depth, packed	317 mm 12.48 in
Length, packed	2290 mm 90.158 in
Weight, gross	39.8 kg 87.744 lb

Regulatory Compliance/Certifications

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

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UK-ROHS

Compliant

Included Products

- BSAMNT-B95-04 – 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