RRZZ-33D-R4

8-port multiband sector antenna, 4x 694-960 and 4 x 1427-2690 MHz, 33° HPBW, 4x RET

- Retractable tilt indicator rods
- Antenna shape optimized for wind load reduction

General Specifications

Antenna Type	Sector
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
Reflector Material	Aluminum
RF Connector Interface	4.3-10 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	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) | Mid band (2)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	749 mm | 29.488 in

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Depth	197 mm	7.756 in
Length	2688 mm	105.827 in
Net Weight, without mounting kit	67 kg	147.71 lb

Array Layout
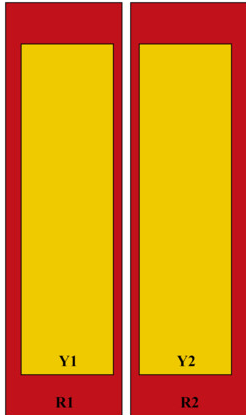
Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY2

(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
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–1920	1920–2180	2300–2490	2490–2690
Gain, dBi	17.4	18.2	18.7	19.2	20.6	21.7	22.3	22

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Beamwidth, Horizontal, degrees	36	32	30	36	29	26	24	21
Beamwidth, Vertical, degrees	8	7.2	6.6	7.1	5.9	5.3	4.7	4.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	17	17	19	18	20	21	19
Front-to-Back Ratio at 180°, dB	30	35	36	37	39	40	37	35
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	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–1920	1920–2180	2300–2490	2490–2690
Gain by all Beam Tilts, average, dBi	17	17.9	18.5	18.9	20.3	21.3	21.9	21.4
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.4	±0.4	±0.6	±0.6	±0.6	±0.5	±0.6
Beamwidth, Horizontal Tolerance, degrees	±3.4	±1.7	±1.6	±1.6	±2	±2.1	±0.9	±1.8
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.2	±0.3	±0.4	±0.3	±0.2	±0.3
USLS, beampeak to 20° above beampeak, dB	14	15	16	16	18	20	20	18
Front-to-Back Total Power at 180° ± 30°, dB	22	27	27	31	34	32	32	30
CPR at Boresight, dB	21	21	24	18	20	19	18	18
CPR at 10 dB Horizontal Beamwidth, dB	8	13	10	8	12	10	11	8

Mechanical Specifications

Wind Loading @ Velocity, frontal	2,675.0 N @ 150 km/h (601.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	304.0 N @ 150 km/h (68.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	2,675.0 N @ 150 km/h (601.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	2,675.0 N @ 150 km/h (601.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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Packaging and Weights

Width, packed	910 mm | 35.827 in
Depth, packed	368 mm | 14.488 in
Length, packed	2921 mm | 115 in
Weight, gross	93.6 kg | 206.352 lb
Weight, net	67 kg | 147.71 lb

Regulatory Compliance/Certifications

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

Included Products

BSAMNT-4-F3	–	Wide Profile Antenna Fixed Tilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

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