

RRZZ-65B-R4



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

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

This product will be discontinued on: November 30, 2024

Replaced By:

RRZZ-65B-R4N43V2 8-port sector antenna, 4 x 694–960 and 4 x 1427–2690 MHz, 65° HPBW, 4x RET

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Aluminum Low loss circuit board
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	2 female 2 male
Input Voltage	10–30 Vdc

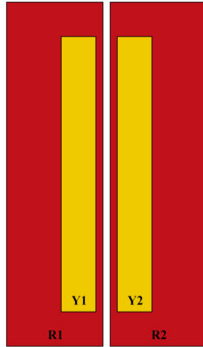
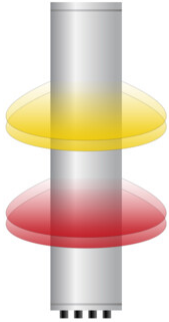
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Internal RET	Low band (2) Mid band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	1828 mm 71.969 in
Net Weight, antenna only	30.8 kg 67.902 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxY2

(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 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–1920	1920–2180	2300–2500	2500–2690
RF Port	1-4	1-4	1-4	5-8	5-8	5-8	5-8	5-8
Gain, dBi	14.4	14.7	15.1	15.4	17.4	17.7	18.1	17.6
Beamwidth, Horizontal, degrees	68	64	59	68	58	60	60	68
Beamwidth, Vertical, degrees	11.8	10.6	9.7	8.7	7.3	6.4	5.5	5.1
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	18	18	17	17	17	18	18
Front-to-Back Ratio at 180°, dB	33	32	31	30	39	38	32	29
Front-to-Back Total Power at 180° ± 30°, dB	20	21	22	25	31	27	26	26

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Isolation, Cross Polarization, dB	28	28	28	28	28	28	28	28
Isolation, Inter-band, dB	28	28	28	28	28	28	28	28
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	694–790	790–890	890–960	1427–1518	1695–1920	1920–2180	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	14.1	14.4	14.9	15.1	16.9	17.4	17.7	17.1
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±0.4	±0.5	±0.8	±0.5	±0.5	±0.7
Beamwidth, Horizontal Tolerance, degrees	±4	±4	±5	±5	±6	±3	±9	±8
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.8	±0.7	±0.4	±0.8	±0.6	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	16	18	17	14	16	15	16	14
CPR at Boresight, dB	20	21	24	17	18	20	18	19
CPR at Sector, dB	9	6	8	6	8	5	7	7

Mechanical Specifications

Wind Loading @ Velocity, frontal	685.0 N @ 150 km/h (154.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	232.0 N @ 150 km/h (52.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	889.0 N @ 150 km/h (199.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	564.0 N @ 150 km/h (126.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2015 mm 79.331 in
Weight, gross	44.3 kg 97.665 lb

Regulatory Compliance/Certifications

Agency	Classification
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CE	Compliant with the relevant CE product directives
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



Included Products

BSAMNT-3	–	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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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