

RRZZ-65A-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-65A-R4N43 8-port sector antenna, 4 x 694–960, 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	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high 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	High band (2) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	1499 mm 59.016 in
Net Weight, without mounting kit	33 kg 72.752 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1427-2690	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1427-2690	7-8	4	CPxxxxxxxxxxxxxxxxY2

Left Bottom Right

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

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	2300–2500	2500–2690
Gain, dBi	13.6	13.9	13.9	15.4	16.8	17.1	17.4	17.2

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Beamwidth, Horizontal, degrees	68	68	62	64	59	61	61	64
Beamwidth, Vertical, degrees	16.2	14.3	13	9.2	7.6	6.9	5.9	5.6
Beam Tilt, degrees	2-16	2-16	2-16	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	18	17	19	19	17	18	15
Front-to-Back Ratio at 180°, dB	31	31	32	34	35	36	34	33
Isolation, Cross Polarization, dB	28	28	28	26	28	28	28	28
Isolation, Inter-band, dB	28	28	28	27	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	-150	-150	-150	-150	-150	-150	-150	-150
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	13.1	13.4	13.6	15	16.4	16.7	17.1	16.8
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.6	±0.6	±0.7	±0.6	±0.4	±0.4	±0.7
Gain by Beam Tilt, average, dBi	2° 13.2 10° 13.1 18° 12.9	2° 13.4 10° 13.4 18° 13.1	2° 13.7 10° 13.7 18° 13.2	2° 15.0 7° 15.0 12° 14.7	2° 16.4 7° 16.5 12° 16.1	2° 16.6 7° 16.8 12° 16.4	2° 16.8 7° 17.2 12° 17.0	2° 16.4 7° 17.0 12° 16.5
Beamwidth, Horizontal Tolerance, degrees	±5.3	±5.6	±6	±5	±4.9	±3.2	±5.9	±6.4
Beamwidth, Vertical Tolerance, degrees	±1.5	±1.2	±1	±0.5	±0.6	±0.6	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB				16	17	16	15	14
Front-to-Back Total Power at 180° ± 30°, dB	20	20	22	24	29	28	27	26
CPR at Boresight, dB	23	21	22	17	19	20	18	17
CPR at Sector, dB	10	6	8	8	10	6	7	3

Mechanical Specifications

Wind Loading @ Velocity, frontal	549.0 N @ 150 km/h (123.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	183.0 N @ 150 km/h (41.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	712.0 N @ 150 km/h (160.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	452.0 N @ 150 km/h (101.6 lbf @ 150 km/h)

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Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

Width, packed 565 mm | 22.244 in

Depth, packed 368 mm | 14.488 in

Length, packed 1685 mm | 66.339 in

Weight, gross 46.2 kg | 101.853 lb

Regulatory Compliance/Certifications

Agency	Classification
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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance