RRZZ-65D-R4N43

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

- Antenna includes 2x Single Column X-Pol Arrays for 694-960MHz and 2x Single Column X-Pol Arrays for 1427-2690MHz, suitable for 4x MIMO applications
- Excellent wind loading characteristics
- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Antenna shape optimized for wind load reduction

This product will be discontinued on: November 30, 2024

Replaced By:

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

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
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

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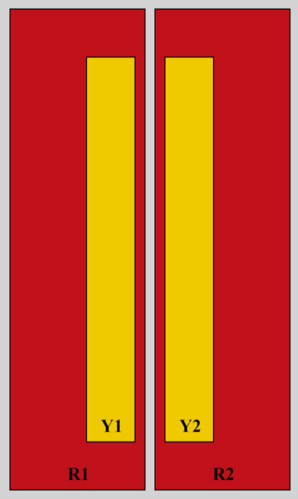
RET Interface, quantity	2 female | 2 male
Input Voltage	10–30 Vdc
Internal RET	High band (2) | Low band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	430 mm | 16.929 in
Depth	197 mm | 7.756 in
Length	2769 mm | 109.016 in
Net Weight, without mounting kit	43 kg | 94.799 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	3	CPxxxxxxxxxxxxxxxY1
Y2	1427-2690	7 - 8	4	CPxxxxxxxxxxxxxxxY2

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

Port Configuration

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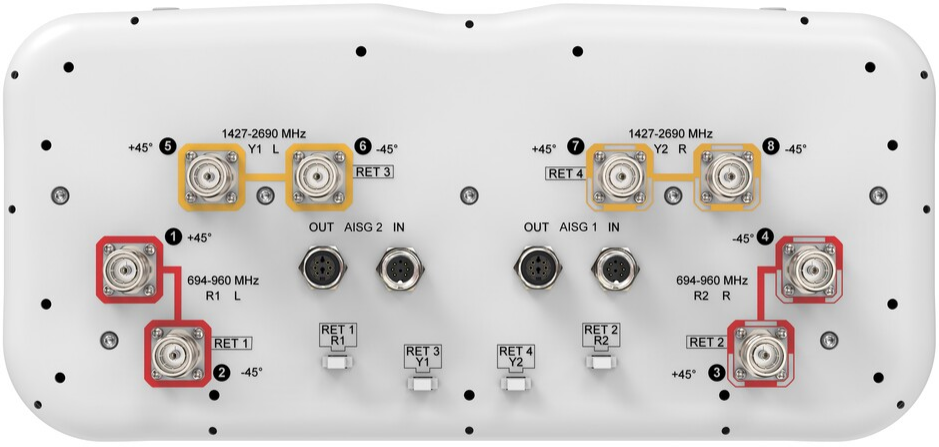

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**694–790**	**790–890**	**890–960**	**1427–1518**	**1695–2180**	**2300–2690**
Gain, dBi	15.8	16.5	16.9	15.7	17.4	18
Beamwidth, Horizontal, degrees	61	54	51	66	61	63
Beamwidth, Vertical, degrees	7.6	6.8	6.3	6.9	5.4	4.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	16	17	18	17	19
Front-to-Back Ratio at 180°, dB	35	33	30	33	29	31
Isolation, Cross Polarization, dB	27	27	27	26	26	26
Isolation, Inter-band, dB	27	27	27	27	27	27
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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153

Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	150

Electrical Specifications, BASTA

Frequency Band, MHz	**694–790**	**790–890**	**890–960**	**1427–1518**	**1695–2180**	**2300–2690**
Gain by all Beam Tilts, average, dBi	15.4	16.1	16.5	15.5	16.8	17.6
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.4	±0.5	±0.3	±0.7	±0.4
Beamwidth, Horizontal Tolerance, degrees	±6.5	±5.5	±4	±5.5	±12	±5.5
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.4	±0.3	±0.6	±0.3
USLS, beampeak to 20° above beampeak, dB	14	15	16	17	16	18
Front-to-Back Total Power at 180° ± 30°, dB	23	23	22	26	24	25
CPR at Boresight, dB	24	24	23	19	19	15
CPR at Sector, dB	10	9	7	5	6	2

Mechanical Specifications

Wind Loading @ Velocity, frontal	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,023.0 N @ 150 km/h (230.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	530 mm | 20.866 in
Depth, packed	349 mm | 13.74 in
Length, packed	2953 mm | 116.26 in
Weight, gross	63.6 kg | 140.214 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

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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.
BSAMNT-M4	–	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance