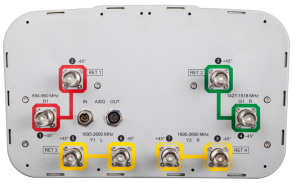
RYVV-65A-R4



8-port sector antenna, 2x 694–960, 2x 1427-1518 and 4x 1695–2690 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
- Includes 2-Ports which support operation over 1427-1518 MHz (including 1400 MHz “L-Band” applications in Europe)

OBSOLETE

This product was discontinued on: March 31, 2023

Replaced By:

RZVV-65A-R4	8-port sector antenna, 2x 694–960, 2x 1427-2690 and 4x 1695–2690 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
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	6
RF Connector Quantity, low band	2
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v1
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc

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Internal RET	High band (3) | Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	350 mm | 13.78 in
Depth	208 mm | 8.189 in
Length	1499 mm | 59.016 in
Net Weight, without mounting kit	21.2 kg | 46.738 lb

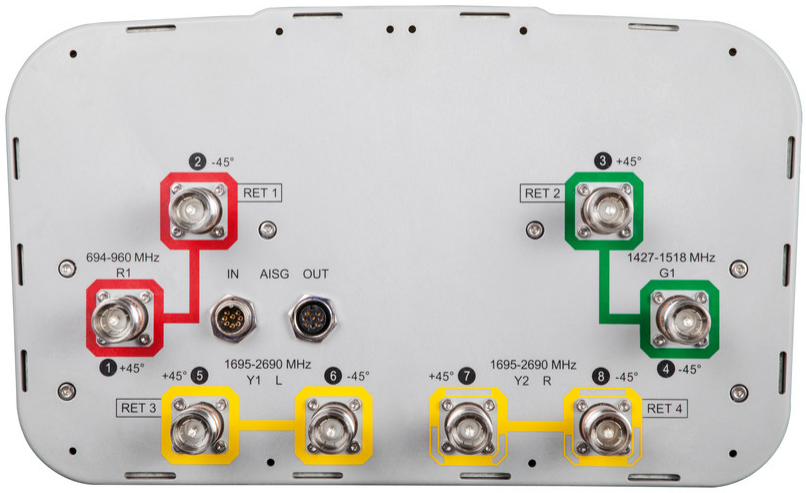
Array Layout

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxR1
G1	1427-1518	3-4	2	CPxxxxxxxxxxxxxxxG1
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxY1
Y2	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxY2

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

Port Configuration

RYVV-65A-R4



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 1518 MHz | 1695 – 2690 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	800 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	14.2	14.6	14.6	15.7	16.8	17.2	17.4	16.7
Beamwidth, Horizontal, degrees	68	66	65	62	60	60	62	63
Beamwidth, Vertical, degrees	15.7	14.3	13.5	8.8	7.1	6.5	5.7	5.5
Beam Tilt, degrees	2–17	2–17	2–17	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	19	17	18	17	19	19	18
Front-to-Back Ratio at 180°, dB	29	31	31	33	35	37	34	29
Isolation, Cross Polarization, dB	28	28	28	28	28	28	28	28
Isolation, Inter-band, dB	30	30	30	30	30	30	30	30
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	14	14.4	14.3	15.5	16.4	17	17	16.3
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.6	±0.4	±0.7	±0.4	±0.6	±0.5
Gain by Beam Tilt, average, dBi	2 ° | 14.0 9 ° | 14.1 17 ° | 13.8	2 ° | 14.4 9 ° | 14.5 17 ° | 14.2	2 ° | 14.5 9 ° | 14.3 17 ° | 14.0	2 ° | 15.2 7 ° | 15.5 12 ° | 15.5	2 ° | 16.1 7 ° | 16.4 12 ° | 16.4	2 ° | 16.7 7 ° | 17.1 12 ° | 16.9	2 ° | 16.6 7 ° | 17.2 12 ° | 16.8	2 ° | 16.0 7 ° | 16.5 12 ° | 16.1
Beamwidth, Horizontal Tolerance, degrees	±1.7	±1.7	±1.6	±4.9	±3.5	±2.8	±5.8	±6.2
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.8	±1	±0.4	±0.4	±0.4	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	19	19	17	16	15	16	16	14
Front-to-Back Total Power at 180° ± 30°, dB	24	23	23	25	28	28	27	25
CPR at Boresight, dB	16	16	18	13	19	22	20	17
CPR at Sector, dB	10	10	10	9	9	8	8	2

Mechanical Specifications

Wind Loading @ Velocity, frontal	239.0 N @ 150 km/h (53.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	201.0 N @ 150 km/h (45.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	507.0 N @ 150 km/h (114.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	254.0 N @ 150 km/h (57.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	456 mm | 17.953 in
Depth, packed	357 mm | 14.055 in
Length, packed	1643 mm | 64.685 in
Weight, gross	33.9 kg | 74.737 lb

Regulatory Compliance/Certifications

Agency	**Classification**

RYVV-65A-R4

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