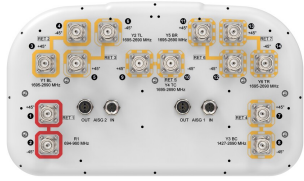


# RZV5-65D-R7



14-port sector antenna, 2x 694–960, 2x 1427–2690 and 10x 1695–2690 MHz, 65° HPBW, 7x 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
- Antenna shape optimized for wind load reduction

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	12
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	14

## Remote Electrical Tilt (RET) Information

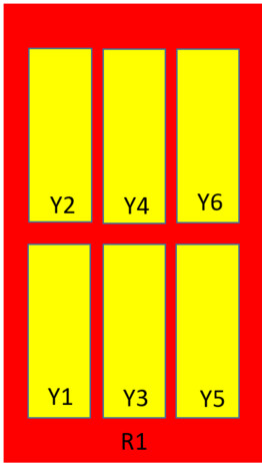
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (6)   Low band (1)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

# RZV5-65D-R7

## Dimensions

<b>Width</b>	395 mm   15.551 in
<b>Depth</b>	228 mm   8.976 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, without mounting kit</b>	38.7 kg   85.319 lb

## Array Layout

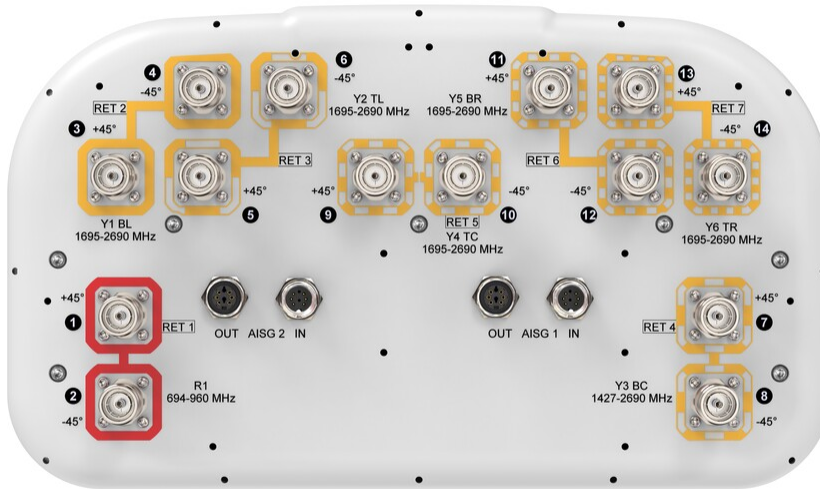


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxR1
Y1	1695-2690	3-4	2	CPxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxY2
Y3	1427-2690	7-8	4	CPxxxxxxxxxxxxY3
Y4	1695-2690	9-10	5	CPxxxxxxxxxxxxY4
Y5	1695-2690	11-12	6	CPxxxxxxxxxxxxY5
Y6	1695-2690	13-14	7	CPxxxxxxxxxxxxY6

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

## Port Configuration

# RZV5-65D-R7



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,000 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2200	2300–2500	2500–2690	1427–1518	1695–2690
<b>Gain, dBi</b>	16.4	17	17	16.8	17.7	17.9	17.8	15	17.6
<b>Beamwidth, Horizontal, degrees</b>	66	63	63	69	63	61	62	70	59
<b>Beamwidth, Vertical, degrees</b>	9	8	7.4	7.2	6.5	5.8	5.5	9.6	6.9
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	22	24	24	17	18	18	18	20	15
<b>Front-to-Back Ratio at 180°, dB</b>	41	35	33	34	37	35	32	32	39
<b>Isolation, Cross</b>	27	27	27	27	27	27	27	25	25

# RZV5-65D-R7

## Polarization, dB

<b>Isolation, Inter-band, dB</b>	28	28	28	25	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	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	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50° C, maximum, watts</b>	250	250	250	200	200	200	200	250	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694-790	790-890	890-960	1695-1920	1920-2200	2300-2500	2500-2690	1427-1518	1695-2690
<b>Gain by all Beam Tilts, average, dBi</b>	16	16.7	16.6	16.3	17.1	17.5	17.1	14.7	16.9
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.4	±0.4	±0.9	±0.8	±0.6	±0.9	±0.6	±1.3
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3.2	±1.7	±2.8	±3.1	±5.8	±5.1	±5.5	±7.2	±9.7
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.3	±0.3	±0.4	±0.5	±0.3	±0.3	±0.3	±1.4
<b>USLS, beampeak to 20° above beampeak, dB</b>	19	19	21	14	15	16	15	10	13
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	26	26	24	23	26	27	27	26	30
<b>CPR at Boresight, dB</b>	14	16	15	20	21	21	20	21	21
<b>CPR at Sector, dB</b>	9	9	7	8	6	7	6	6	4

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	430.0 N @ 150 km/h (96.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	390.0 N @ 150 km/h (87.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	864.0 N @ 150 km/h (194.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	492.0 N @ 150 km/h (110.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	505 mm   19.882 in
<b>Depth, packed</b>	386 mm   15.197 in
<b>Length, packed</b>	2831 mm   111.457 in
<b>Weight, gross</b>	58.9 kg   129.852 lb

# RZV5-65D-R7

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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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-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. |
|----------|---|--|

## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance