

# RVVPX308.11R-V3



6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 3x RET with manual override.

- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- 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

## 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   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<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>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	6

## Remote Electrical Tilt (RET) Information

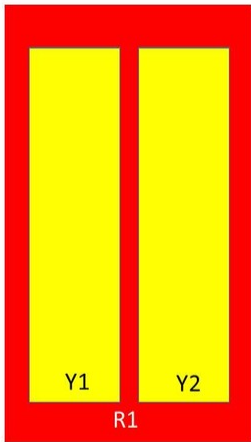
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (2)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

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## Dimensions

<b>Width</b>	350 mm   13.78 in
<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2065 mm   81.299 in
<b>Net Weight, without mounting kit</b>	28.5 kg   62.832 lb

## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ARxxxxxxxxxxxxxxxxx1
Y1	1695-2690	3-4	2	ARxxxxxxxxxxxxxxxxx2
Y2	1695-2690	5-6	3	ARxxxxxxxxxxxxxxxxx3

Left                  Right  
Bottom

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

## Port Configuration

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	800 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1695–1880	1850–1990	1920–2180	2300–2690
<b>Gain, dBi</b>	15.6	16	16.2	17.3	17.7	18	18.7
<b>Beamwidth, Horizontal, degrees</b>	69	67	65	62	61	63	61
<b>Beamwidth, Vertical, degrees</b>	12.5	11	10.1	7.6	7	6.6	5.5
<b>Beam Tilt, degrees</b>	0–10	0–10	0–10	0–10	0–10	0–10	0–10
<b>USLS (First Lobe), dB</b>	18	18	18	18	18	18	18
<b>Null Fill, dB</b>	-22	-22	-22	-22	-22	-22	-22
<b>Front-to-Back Ratio at 180°, dB</b>	30	33	34	33	38	36	37
<b>Isolation, Cross Polarization, dB</b>	28	28	28	30	30	30	30
<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30	30

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<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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	175	175	175	175	175	175	175

## Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1695–1880	1850–1990	1920–2180	2300–2690
<b>Gain by all Beam Tilts, average, dBi</b>	15.3	15.9	16.1	17	17.5	17.8	18.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.2	±0.1	±0.4	±0.4	±0.3	±0.4
<b>Gain by Beam Tilt, average, dBi</b>	0° 15.3 5° 15.3 10° 15.2	0° 15.8 5° 15.9 10° 15.8	0° 16.1 5° 16.1 10° 16.1	0° 16.9 5° 17.0 10° 17.1	0° 17.4 5° 17.5 10° 17.5	0° 17.7 5° 17.8 10° 17.8	0° 18.3 5° 18.4 10° 18.3
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±0.9	±0.9	±1.6	±2.3	±1.5	±2.5	±5.5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±0.6	±0.4	±0.5	±0.3	±0.5	±0.4
<b>USLS, beampeak to 20° above beampeak, dB</b>	18	18	18	18	18	18	18
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	26	26	27	26	26	26	30
<b>CPR at Boresight, dB</b>	17	17	16	17	19	19	19
<b>CPR at Sector, dB</b>	13	13	14	13	13	12	10

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	348.0 N @ 150 km/h (78.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	294.0 N @ 150 km/h (66.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	737.0 N @ 150 km/h (165.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	369.0 N @ 150 km/h (83.0 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	436 mm   17.165 in
<b>Depth, packed</b>	320 mm   12.598 in
<b>Length, packed</b>	2252 mm   88.661 in
<b>Weight, gross</b>	49 kg   108.026 lb

## Regulatory Compliance/Certifications

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Agency	Classification
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
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## Included Products

- T-029-GL-E – Adjustable Tilt Pipe Mounting Kit for 2.362"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

## \* Footnotes

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