

# RVVPX310.11B-T2



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

- Internal RET actuators are connected in SRET configuration, with dedicated AISG ports for each band
- Each port has an integrated bias tee, and each band has its own smart switch that automatically selects between bias tee or AISG inputs according to a predetermined priority table

## OBSOLETE

This product was discontinued on: November 30, 2023

### Replaced By:

RVVPX310.11B-T2H      6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 3x RET with manual override and internal Bias-Tee's.

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector 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>	7-16 DIN 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   3 male

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<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1   Port 2   Port 3   Port 4   Port 5   Port 6
<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)

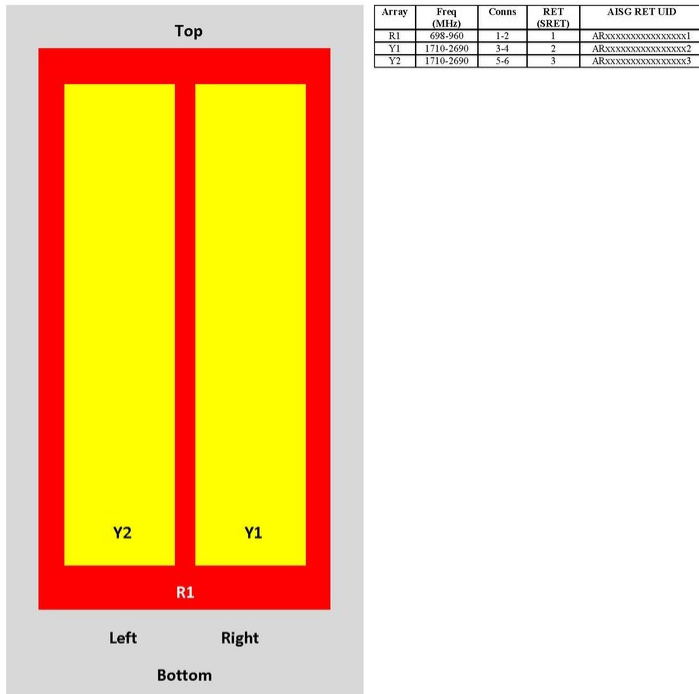
## Dimensions

<b>Width</b>	350 mm   13.78 in
<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2533 mm   99.724 in
<b>Net Weight, without mounting kit</b>	33.2 kg   73.193 lb

## Array Layout

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RVVPX



View from the front of the antenna  
(Sizes of colored boxes are not true depictions of array sizes)

## 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>	1,000 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>	16.3	16.7	16.9	17.5	17.9	18.1	18.6
<b>Beamwidth, Horizontal, degrees</b>	69	67	64	62	60	62	61
<b>Beamwidth, Vertical, degrees</b>	10.1	8.9	8.2	7.6	7.1	6.6	5.5

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<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>	29	32	31	33	42	38	39
<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
<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>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	200	200	200	175	175	175	175

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694-790</b>	<b>790-890</b>	<b>890-960</b>	<b>1695-1880</b>	<b>1850-1990</b>	<b>1920-2180</b>	<b>2300-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	16	16.5	16.8	17.1	17.6	17.8	18.2
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.2	±0.1	±0.4	±0.4	±0.3	±0.5
<b>Gain by Beam Tilt, average, dBi</b>	0° 16.0 5° 16.0 10° 15.9	0° 16.5 5° 16.5 10° 16.5	0° 16.9 5° 16.9 10° 16.8	0° 17.0 5° 17.1 10° 17.2	0° 17.6 5° 17.6 10° 17.6	0° 17.8 5° 17.8 10° 17.8	0° 18.3 5° 18.3 10° 18.1
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±1	±1.1	±1.8	±2.5	±1.4	±2.5	±5.6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±0.4	±0.3	±0.4	±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	25	27	29	27	29
<b>CPR at Boresight, dB</b>	15	16	16	19	20	21	20
<b>CPR at Sector, dB</b>	12	12	14	13	12	12	11

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	445.0 N @ 150 km/h (100.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	379.0 N @ 150 km/h (85.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	942.0 N @ 150 km/h (211.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	472.0 N @ 150 km/h (106.1 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

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## Packaging and Weights

<b>Width, packed</b>	456 mm   17.953 in
<b>Depth, packed</b>	357 mm   14.055 in
<b>Length, packed</b>	2834 mm   111.575 in
<b>Weight, gross</b>	50 kg   110.231 lb

## 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

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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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