

# RVV2NPX310.211R



10-port sector antenna, 2x 694–960 MHz 65° HPBW, 4x 1695–2690 MHz 65° HPBW and 2x 1695–2180 MHz 2x 33° HPBW, 5x RET with manual override. Bands cascaded SRET

- 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

**This product will be discontinued on: November 30, 2024**

**Replaced By:**

RVV2H-6533D-R5      10-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz 65° HPBW and 4x 1695–2180 MHz 2x 33° HPBW, 5x RET.

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<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>	7-16 DIN Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	10

## 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

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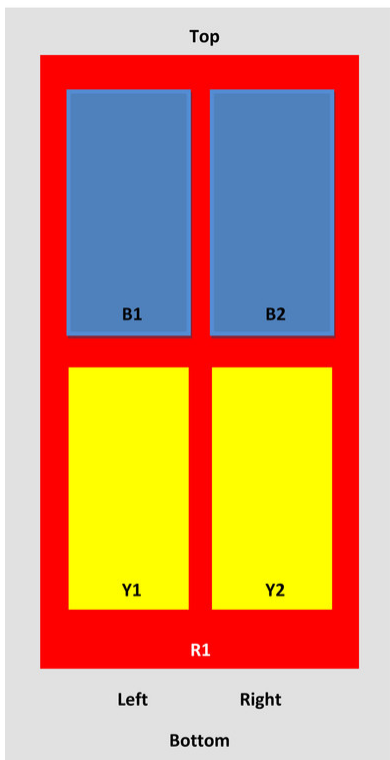
<b>Internal RET</b>	High band (4)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

<b>Width</b>	350 mm   13.78 in
<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2,763.5 mm   108.799 in
<b>Net Weight, without mounting kit</b>	46.1 kg   101.633 lb

## Array Layout

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Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ARXXXXXXXXXXXXX1
B1	1695-2180	3-4	2	ARXXXXXXXXXXXXX2
B2	1695-2180	5-6	3	ARXXXXXXXXXXXXX3
Y1	1695-2690	7-8	4	ARXXXXXXXXXXXXX4
Y2	1695-2690	9-10	5	ARXXXXXXXXXXXXX5

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

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## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2180 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

	LB	LB	LB	HB	HB	HB	HB-Dual-Beam2	HB-Dual-Beam2
<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>890–960</b>	<b>1695–1920</b>	<b>1920–2180</b>	<b>2300–2690</b>	<b>1695–1920</b>	<b>1920–2180</b>
<b>Gain, dBi</b>	16.2	16.5	16.7	17.5	18.2	18.8	17.2	18.8
<b>Beam Centers, Horizontal, degrees</b>							±31	±28
<b>Beamwidth, Horizontal, degrees</b>	69	68	68	62	62	61	36	32
<b>Beamwidth, Vertical, degrees</b>	10.1	8.9	8.3	7.5	6.7	5.5	7.7	6.9
<b>Beam Tilt, degrees</b>	0–10	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	18
<b>Null Fill, dB</b>	-22	-22	-22	-22	-22	-22	-22	-22
<b>Front-to-Back Ratio at</b>	31	33	34	35	38	38	28	33

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## 180°, dB

<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	27	27	27	27	27	29	24	27
<b>Isolation, Cross Polarization, dB</b>	28	28	28	30	30	30	25	25
<b>Isolation, Beam to Beam, dB</b>							18	18
<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	1.43 15.0	1.43 15.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port, maximum, watts</b>	300	300	300	250	250	250	250	250

## Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690	1695–1920	1920–2180
<b>Gain by all Beam Tilts, average, dBi</b>	15.9	16.4	16.6	17.1	17.9	18.3	16.4	18.4
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.2	±0.2	±0.6	±0.4	±0.6	±1.2	±0.6
<b>Gain by Beam Tilt, average, dBi</b>	0° 15.9 5° 15.9 10° 15.9	0° 16.4 5° 16.4 10° 16.5	0° 16.6 5° 16.7 10° 16.5	0° 17.1 5° 17.1 10° 17.2	0° 18.0 5° 18.0 10° 17.8	0° 18.3 5° 18.3 10° 18.2	0° 16.4 5° 16.3 10° 16.4	0° 18.4 5° 18.4 10° 18.3
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±0.8	±0.6	±1	±2.9	±2.8	±5.8	±2	±2.3
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.4	±0.3	±0.5	±0.5	±0.4	±0.4	±0.4
<b>USLS, beampeak to 20° above beampeak, dB</b>	18	18	18	18	18	18	18	18
<b>CPR at Boresight, dB</b>	15	16	16	20	20	20	12	10
<b>CPR at Sector, dB</b>	11	11	13	11	11	8	7	5

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	493.0 N @ 150 km/h (110.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	423.0 N @ 150 km/h (95.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,044.0 N @ 150 km/h (234.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	523.0 N @ 150 km/h (117.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

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<b>Width, packed</b>	436 mm   17.165 in
<b>Depth, packed</b>	320 mm   12.598 in
<b>Length, packed</b>	2985 mm   117.52 in
<b>Weight, gross</b>	68.5 kg   151.016 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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
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