

# 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

## Electrical Specifications

	LB	LB	LB	HB	HB	HB	HB-Dual-Beam2	HB-Dual-Beam2
Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690	1695–1920	1920–2180
Gain, dBi	16.2	16.5	16.7	17.5	18.2	18.8	17.2	18.8
Beam Centers, Horizontal, degrees							±31	±28
Beamwidth, Horizontal, degrees	69	68	68	62	62	61	36	32
Beamwidth, Vertical, degrees	10.1	8.9	8.3	7.5	6.7	5.5	7.7	6.9
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	18	18	18	18	18	18
Null Fill, dB	-22	-22	-22	-22	-22	-22	-22	-22
Front-to-Back Ratio at 180°, dB	31	33	34	35	38	38	28	33
Front-to-Back Total Power at 180° ± 30°, dB	27	27	27	27	27	29	24	27
Isolation, Cross Polarization, dB	28	28	28	30	30	30	25	25
Isolation, Beam to Beam, dB							18	18
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	1.43   15.0	1.43   15.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300	250	250	250	250	250
Polarization	±45°	±45°	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

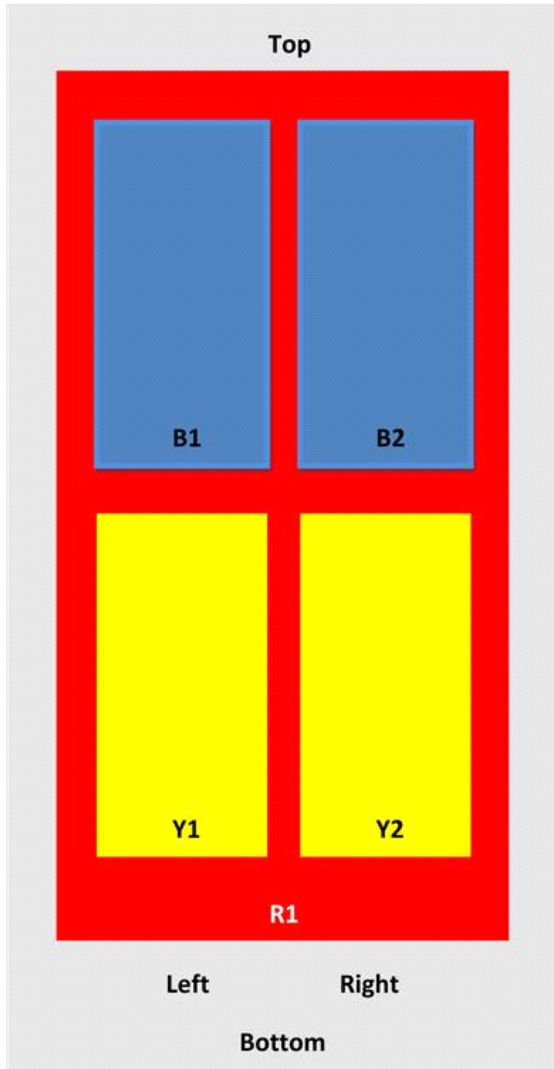
## Electrical Specifications, BASTA\*

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

\* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

## Array Layout

### RVV2NPX310.211R



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ARXXXXXXXXXXXXXXXXX1
B1	1695-2180	3-4	2	ARXXXXXXXXXXXXXXXXX2
B2	1695-2180	5-6	3	ARXXXXXXXXXXXXXXXXX3
Y1	1695-2690	7-8	4	ARXXXXXXXXXXXXXXXXX4
Y2	1695-2690	9-10	5	ARXXXXXXXXXXXXXXXXX5

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

## General Specifications

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<b>Operating Frequency Band</b>	1695 – 2180 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Performance Note</b>	Outdoor usage

## Mechanical Specifications

<b>RF Connector Quantity, total</b>	10
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Interface</b>	7-16 DIN Female
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Radiator Material</b>	Low loss circuit board
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Location</b>	Bottom
<b>Wind Loading, frontal</b>	493.0 N @ 150 km/h 110.8 lbf @ 150 km/h
<b>Wind Loading, lateral</b>	423.0 N @ 150 km/h 95.1 lbf @ 150 km/h
<b>Wind Loading, maximum</b>	1044.0 N @ 150 km/h 234.7 lbf @ 150 km/h
<b>Wind Speed, maximum</b>	241 km/h   150 mph

## Dimensions

<b>Length</b>	2763.5 mm   108.8 in
<b>Width</b>	350.0 mm   13.8 in
<b>Depth</b>	208.0 mm   8.2 in
<b>Net Weight, without mounting kit</b>	46.1 kg   101.6 lb

## Remote Electrical Tilt (RET) Information

<b>Input Voltage</b>	10–30 Vdc
<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)
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male

## Packed Dimensions

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<b>Length</b>	2985.0 mm   117.5 in
<b>Width</b>	436.0 mm   17.2 in
<b>Depth</b>	320.0 mm   12.6 in
<b>Shipping Weight</b>	68.5 kg   151.0 lb

## Regulatory Compliance/Certifications

### Agency

RoHS 2011/65/EU  
ISO 9001:2015  
China RoHS SJ/T 11364-2014  
CE

### Classification

Compliant by Exemption  
Designed, manufactured and/or distributed under this quality management system  
Above Maximum Concentration Value (MCV)  
Compliant with the relevant CE product directives



## Included Products

T-029-GL-E — Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (50-115mm) OD round members for panel antennas. Includes 2 clamp sets.

## \* Footnotes

### Performance Note

Severe environmental conditions may degrade optimum performance