

# RVVPX305.10R3

6-port sector antenna, 2x 698–960 and 4x 1710–2690 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

**OBSOLETE**

This product was discontinued on: **March 27, 2020**

## 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
<b>Radome Material</b>	ASA, UV stabilized
<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>	3 female   3 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)

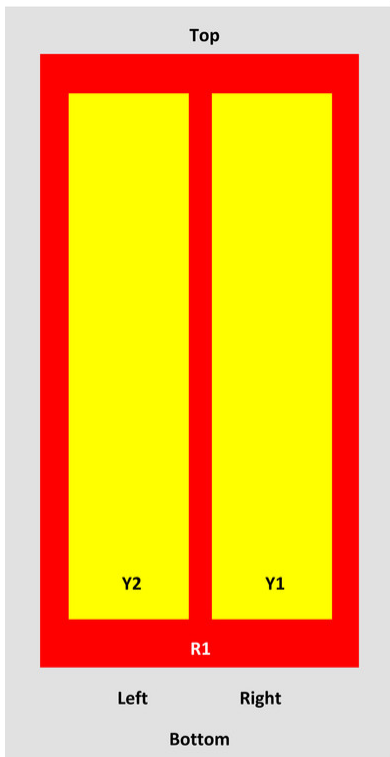
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## Dimensions

<b>Width</b>	353 mm   13.898 in
<b>Depth</b>	209 mm   8.228 in
<b>Length</b>	1380 mm   54.331 in
<b>Net Weight, without mounting kit</b>	20 kg   44.092 lb

## Array Layout

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Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-960	1-2	1	ARXXXXXXXXXXXXX1
Y1	1710-2690	3-4	2	ARXXXXXXXXXXXXX2
Y2	1710-2690	5-6	3	ARXXXXXXXXXXXXX3

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>	1710 – 2690 MHz   698 – 960 MHz
<b>Polarization</b>	±45°

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## Electrical Specifications

Frequency Band, MHz	698–790	790–890	890–960	1710–1920	1920–2170	2300–2690
Gain, dBi	13.4	13.7	14.2	16.6	17.1	17.8
Beamwidth, Horizontal, degrees	67.7	68.7	62.6	62	63.1	61
Beamwidth, Vertical, degrees	20.2	18.1	16.6	8.3	7.3	6
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	18	18	18	18
Null Fill, dB				-22	-22	-22
Front-to-Back Ratio at 180°, dB	25	23	23	28	32	30
CPR at Boresight, dB	17	13	13	19	17	16
CPR at Sector, dB	10	10	9	7	5	5
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	28	30	30	27	28	30
VSWR   Return loss, dB	1.43   15.0	1.43   15.0	1.43   15.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300	250	250	250

## Electrical Specifications, BASTA

Frequency Band, MHz	698–790	790–890	890–960	1710–1920	1920–2170	2300–2690
Gain by all Beam Tilts, average, dBi	13.2	13.5	14	16.3	16.8	17.4
Gain by all Beam Tilts Tolerance, dB	±0.2	±0.2	±0.3	±0.5	±0.4	±0.6
Gain by Beam Tilt, average, dBi	0°   13.3 5°   13.2 10°   13.2	0°   13.5 5°   13.5 10°   13.4	0°   14.0 5°   14.1 10°   14.0	0°   16.4 5°   16.3 10°   16.3	0°   16.8 5°   16.8 10°   16.9	0°   17.6 5°   17.5 10°   17.1
Beamwidth, Horizontal Tolerance, degrees	±1.6	±1.8	±2.1	±2.9	±5	±6.5
Beamwidth, Vertical Tolerance, degrees	±0.9	±1.1	±0.8	±0.6	±0.6	±0.5
USLS, beampeak to 20° above beampeak, dB	18	18	18	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	24	22	23	23	25	26
CPR at Boresight, dB	18	13	14	21	18	18

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CPR at Sector, dB                      11                      10                      8                      7                      5                      4

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	575.0 N @ 150 km/h (129.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	220.0 N @ 150 km/h (49.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	590.0 N @ 150 km/h (132.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	250 km/h (155 mph)

## Packaging and Weights

<b>Width, packed</b>	420 mm   16.535 in
<b>Depth, packed</b>	320 mm   12.598 in
<b>Length, packed</b>	1560 mm   61.417 in
<b>Weight, gross</b>	36 kg   79.366 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
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-041-GL-E – Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

## \* Footnotes

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