

RVVPX310R-V



6-port sector antenna, 2x 698–960 and 4x 1710–2690 MHz, 65° HPBW, 3x 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

OBSOLETE

This product was discontinued on: March 27, 2020

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	ASA, UV stabilized
Radiator Material	Aluminum Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (2) Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W

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Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

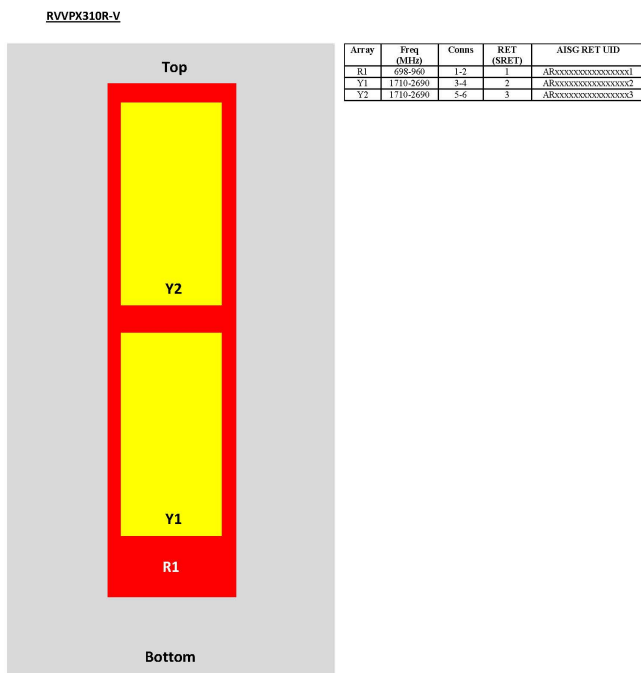
Width 296 mm | 11.654 in

Depth 244 mm | 9.606 in

Length 2490 mm | 98.032 in

Net Weight, without mounting kit 29 kg | 63.934 lb

Array Layout



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

Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1710 – 2690 MHz | 698 – 960 MHz

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Polarization $\pm 45^\circ$

Electrical Specifications

Frequency Band, MHz	698–790	790–890	890–960	1710–1920	1920–2170	2300–2690
Gain, dBi	15.2	16	16.5	16	17	17.4
Beamwidth, Horizontal, degrees	70.8	67.6	62.2	67	60.8	59.1
Beamwidth, Vertical, degrees	9.9	8.8	7.8	8.5	7.4	6
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	16	16	18	18	18
Null Fill, dB	-22	-22	-22	-22	-22	-22
Front-to-Back Ratio at 180°, dB	35	35	31	31	34	34
CPR at Boresight, dB	14	17	16	17	20	13
CPR at Sector, dB	10	14	10	15	10	1
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	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	15.1	15.8	16.1	15.8	16.9	17.2
Gain by all Beam Tilts Tolerance, dB	± 0.7	± 0.5	± 0.4	± 0.8	± 0.8	± 0.9
Gain by Beam Tilt, average, dBi	0° 14.9 5° 15.2 10° 15.3	0° 15.6 5° 15.9 10° 15.9	0° 16.0 5° 16.2 10° 16.2	0° 15.9 5° 15.8 10° 15.8	0° 17.0 5° 16.9 10° 16.7	0° 17.3 5° 17.3 10° 17.1
Beamwidth, Horizontal Tolerance, degrees	± 1.3	± 2.4	± 2.4	± 3.9	± 4.1	± 5.5
Beamwidth, Vertical Tolerance, degrees	± 0.7	± 0.5	± 0.2	± 0.8	± 0.6	± 0.6
USLS, beampeak to 20° above beampeak, dB	18	17	17	18	18	18
Front-to-Back Total Power at	27	27	22	30	31	33

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180° ± 30°, dB

CPR at Boresight, dB	15	18	16	17	20	14
CPR at Sector, dB	10	14	9	15	11	1

Mechanical Specifications

Wind Loading @ Velocity, frontal	844.0 N @ 150 km/h (189.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	605.0 N @ 150 km/h (136.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	937.0 N @ 150 km/h (210.6 lbf @ 150 km/h)
Wind Speed, maximum	250 km/h (155 mph)

Packaging and Weights

Width, packed	374 mm 14.724 in
Depth, packed	363 mm 14.291 in
Length, packed	2677 mm 105.394 in
Weight, gross	54 kg 119.049 lb

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
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

Performance Note	Severe environmental conditions may degrade optimum performance
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