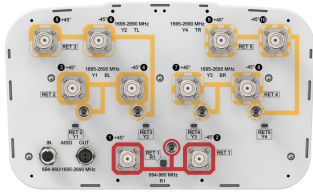


RV4PX310R-V2H



10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° 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

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

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

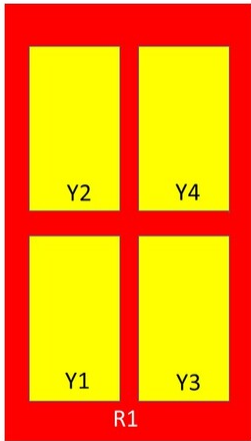
Dimensions

Width	350 mm 13.78 in
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RV4PX310R-V2H

Depth 208 mm | 8.189 in
Length 2533 mm | 99.724 in

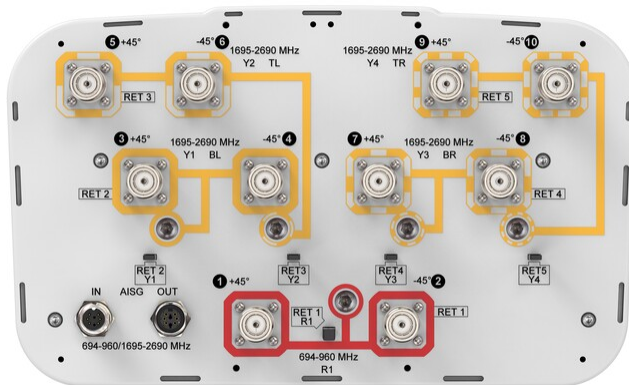
Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ARxxxxxxxxxxxxxxxxx1
Y1	1695-2690	3-4	2	ARxxxxxxxxxxxxxxxxx2
Y2	1695-2690	5-6	3	ARxxxxxxxxxxxxxxxxx3
Y3	1695-2690	7-8	4	ARxxxxxxxxxxxxxxxxx4
Y4	1695-2690	9-10	5	ARxxxxxxxxxxxxxxxxx5

Left Right
Bottom (Sizes of colored boxes are not true depictions of array sizes)

Port Configuration



Electrical Specifications

Impedance 50 ohm
Operating Frequency Band 1695 – 2690 MHz | 694 – 960 MHz
Polarization ±45°
Total Input Power, maximum 1,000 W @ 50 °C

RV4PX310R-V2H

Electrical Specifications

Frequency Band, MHz	694–798	790–894	890–960	1695–1880	1850–1990	1920–2200	2300–2690
Gain, dBi	16	16.6	16.9	16.8	16.9	17.2	18
Beamwidth, Horizontal, degrees	69	68	66	63	62	63	61
Beamwidth, Vertical, degrees	9.9	8.7	8.1	8.3	7.7	7.1	6
Beam Tilt, degrees	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
Null Fill, dB	-22	-22	-22	-22	-22	-22	-22
Front-to-Back Ratio at 180°, dB	31	34	33	32	39	37	38
Isolation, Cross Polarization, dB	28	28	28	30	30	30	30
Isolation, Inter-band, dB	30	30	30	30	30	30	30
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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	200	200	200	175	175	175	175

Electrical Specifications, BASTA

Frequency Band, MHz	694–798	790–894	890–960	1695–1880	1850–1990	1920–2200	2300–2690
Gain by all Beam Tilts, average, dBi	15.8	16.4	16.8	16.3	16.6	16.9	17.6
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.2	±0.5	±0.4	±0.4	±0.5
Gain by Beam Tilt, average, dBi	0° 15.9 5° 15.8 10° 15.8	0° 16.4 5° 16.4 10° 16.4	0° 16.7 5° 16.7 10° 16.8	0° 16.3 5° 16.3 10° 16.4	0° 16.6 5° 16.6 10° 16.7	0° 16.9 5° 17.0 10° 16.9	0° 17.6 5° 17.6 10° 17.4
Beamwidth, Horizontal Tolerance, degrees	±1.3	±0.7	±1.4	±2.3	±1.8	±2.7	±5.2
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.5	±0.3	±0.5	±0.3	±0.5	±0.4
USLS, beampeak to 20° above beampeak, dB	18	18	18	18	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	26	27	27	26	29	27	29
CPR at Boresight, dB	16	18	17	17	21	19	18
CPR at Sector, dB	12	13	16	13	12	12	10

RV4PX310R-V2H

Mechanical Specifications

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

Packaging and Weights

Width, packed	456 mm 17.953 in
Depth, packed	357 mm 14.055 in
Length, packed	2834 mm 111.575 in
Weight, gross	55.3 kg 121.915 lb
Weight, net	38.3 kg 84.437 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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