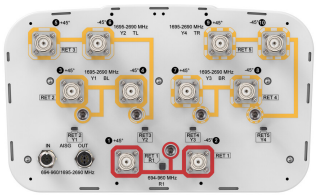
RV4PX310R-V2H



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, mid band	0
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

Remote Electrical Tilt (RET) Information

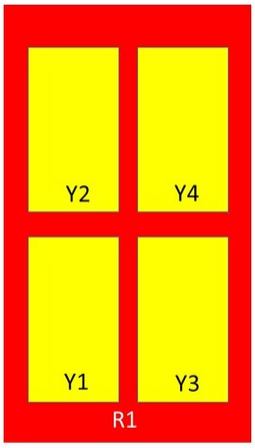
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) | Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

RV4PX310R-V2H

Width	350 mm | 13.78 in
Depth	208 mm | 8.189 in
Length	2533 mm | 99.724 in

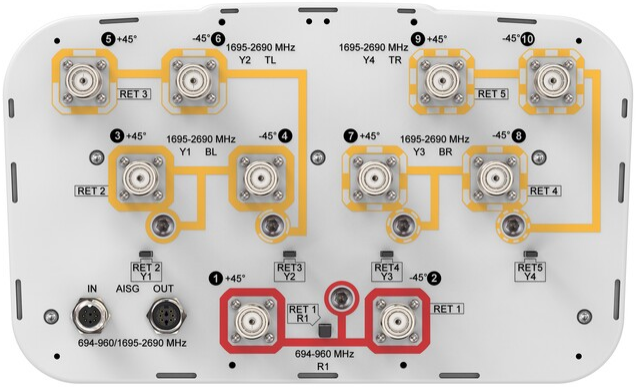
Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ARxxxxxxxxxxxxxxxx1
Y1	1695-2690	3-4	2	ARxxxxxxxxxxxxxxxx2
Y2	1695-2690	5-6	3	ARxxxxxxxxxxxxxxxx3
Y3	1695-2690	7-8	4	ARxxxxxxxxxxxxxxxx4
Y4	1695-2690	9-10	5	ARxxxxxxxxxxxxxxxx5

(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

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
CPR at Boresight, dB	16	18	17	17	21	19	18
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

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

RV4PX310R-V2H

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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance