RV4PX310R-V2

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

This product will be discontinued on: November 30, 2024

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 | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN 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)

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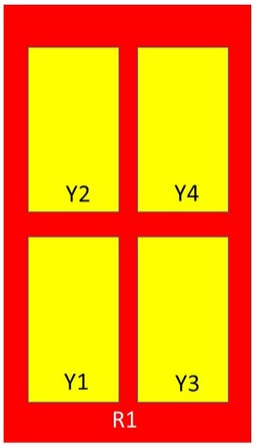
Dimensions

Width	350 mm | 13.78 in
Depth	208 mm | 8.189 in
Length	2533 mm | 99.724 in
Net Weight, without mounting kit	39 kg | 85.98 lb

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)

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
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

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.42 m² | 4.521 ft²
Effective Projective Area (EPA), lateral	0.36 m² | 3.875 ft²
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)

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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	56 kg | 123.459 lb

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

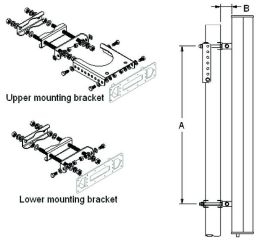
Included Products

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

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.

Product Classification

Product Type	Adjustable tilt mounting kit

General Specifications

Application	Outdoor
Color	Silver

Dimensions

Compatible Length, maximum	2850 mm | 112.205 in
Compatible Length, minimum	1500 mm | 59.055 in
Compatible Diameter, maximum	115 mm | 4.528 in
Compatible Diameter, minimum	60 mm | 2.362 in
Antenna-to-Pipe Distance	85 mm | 3.346 in
Bracket-to-Bracket Distance	1400 mm | 55.118 in
Weight, net	6 kg | 13.228 lb

Material Specifications

Material Type	Galvanized steel

Mechanical Specifications

Mechanical Tilt	0°–8°

Packaging and Weights

Included	Brackets | Hardware
Packaging quantity	1

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives

CHINA-ROHS	Below 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
UK-ROHS	Compliant