

RV4PX308R



Multiband Antenna, 698–960 and 4x 1710–2690 MHz, 65° horizontal beamwidth, internal electrical tilt with manual override. Bands cascaded SRET.

OBSOLETE

This product was discontinued on: December 31, 2016

Replaced By

RV4PX308R-V2 10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 5x RET with manual override. Bands cascaded SRET.

Electrical Specifications

Frequency Band, MHz	698–790	790–890	890–960	1710–1920	1920–2180	2300–2690
Gain, dBi	15.2	15.4	15.8	15.8	16.5	17.2
Beamwidth, Horizontal, degrees	68	69	63	62	62	61
Beamwidth, Vertical, degrees	12.4	11.1	10.1	10.3	9.2	7.5
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
Front-to-Back Ratio at 180°, dB	25	23	23	28	28	28
CPR at Boresight, dB	18	13	12	17	16	14
CPR at Sector, dB	9	9	7	5	3	2
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
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	698–790	790–890	890–960	1710–1920	1920–2180	2300–2690
Gain by all Beam Tilts, average, dBi	14.9	15.2	15.6	15.7	16.2	16.9
Gain by all Beam Tilts Tolerance, dB	±0.2	±0.1	±0.4	±0.5	±0.4	±0.5
Gain by Beam Tilt, average, dBi	0 ° 15.0 5 ° 15.0 10 ° 14.9	0 ° 15.2 5 ° 15.2 10 ° 15.1	0 ° 15.6 5 ° 15.6 10 ° 15.5	0 ° 15.7 5 ° 15.7 10 ° 15.6	0 ° 16.2 5 ° 16.2 10 ° 16.2	0 ° 17.1 5 ° 16.9 10 ° 16.6
Beamwidth, Horizontal Tolerance, degrees	±1.2	±0.9	±1.9	±2.9	±4	±6
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.6	±0.3	±0.7	±0.6	±0.7
USLS, beampeak to 20° above beampeak, dB	18	18	18	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	25	24	23	23	25	25

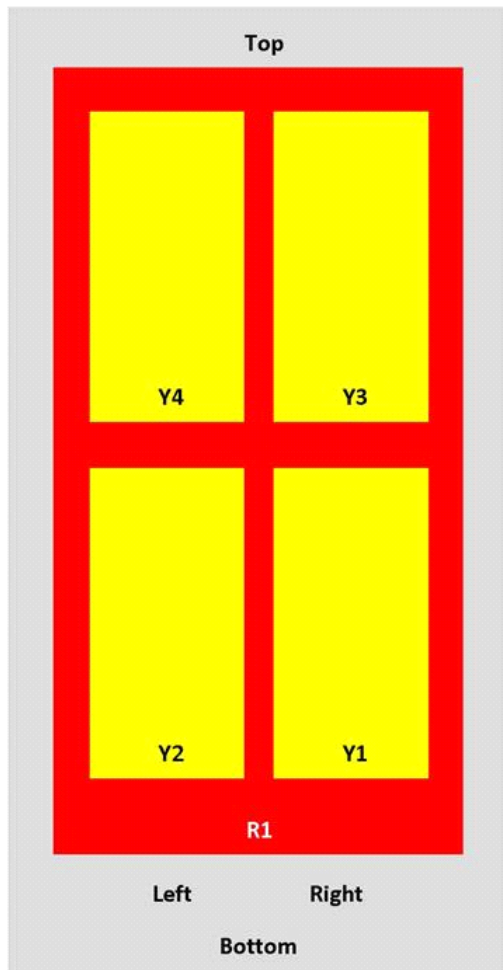
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CPR at Boresight, dB	17	14	13	19	17	16
CPR at Sector, dB	11	11	9	7	5	4

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

Array Layout

RV4PX



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-960	1-2	1	ARXXXXXXXXXXXXXXXXX1
Y1	1710-2690	3-4	2	ARXXXXXXXXXXXXXXXXX2
Y2	1710-2690	5-6	3	ARXXXXXXXXXXXXXXXXX3
Y3	1710-2690	7-8	4	ARXXXXXXXXXXXXXXXXX4
Y4	1710-2690	9-10	5	ARXXXXXXXXXXXXXXXXX5

View from the front of the antenna

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

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General Specifications

Operating Frequency Band	1710 – 2690 MHz 698 – 960 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	10
RF Connector Quantity, low band	2
RF Connector Quantity, high band	8
RF Connector Interface	7-16 DIN Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Brass Low loss circuit board
Radome Material	ABS, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	927.0 N @ 150 km/h 208.4 lbf @ 150 km/h
Wind Loading, lateral	356.0 N @ 150 km/h 80.0 lbf @ 150 km/h
Wind Speed, maximum	250 km/h 155 mph

Dimensions

Length	2066.0 mm 81.3 in
Width	353.0 mm 13.9 in
Depth	209.0 mm 8.2 in
Net Weight, without mounting kit	30.0 kg 66.1 lb

Remote Electrical Tilt (RET) Information

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)
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

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Packed Dimensions

Length	2261.0 mm 89.0 in
Width	428.0 mm 16.9 in
Depth	329.0 mm 13.0 in
Shipping Weight	49.0 kg 108.0 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



Included Products

T-029-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