

# RV4PX310BT-Q2



10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 5x RET with manual override. Internal Bias-T on low band Port 1.

- 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
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- AISG 2.0 interfaces are via integrated internal smart bias tee on low band (694–960 MHz) RF Port 1 and a single pair of AISG 8-pin DIN input (male) and output (female) connectors

**OBSOLETE**

This product was discontinued on: March 31, 2021

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Grounding Type</b>	RF connector body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom   Top
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, per location as listed</b>	4   6
<b>RF Connector Quantity, total</b>	10

## Remote Electrical Tilt (RET) Information

<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc

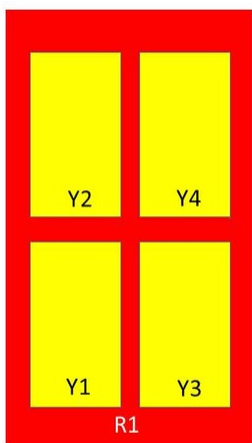
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<b>Internal Bias Tee</b>	Port 1
<b>Internal RET</b>	High band (4)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

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

## 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)

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690
<b>Gain, dBi</b>	16	16.5	16.8	16.9	17.4	18.1

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<b>Beamwidth, Horizontal, degrees</b>	69	68	66	62	62	61
<b>Beamwidth, Vertical, degrees</b>	10	8.8	8.1	8.1	7.2	5.9
<b>Beam Tilt, degrees</b>	0–10	0–10	0–10	0–10	0–10	0–10
<b>USLS (First Lobe), dB</b>	18	18	18	18	18	18
<b>Null Fill, dB</b>	-22	-22	-22	-22	-22	-22
<b>Front-to-Back Ratio at 180°, dB</b>	31	32	33	34	37	39
<b>Isolation, Cross Polarization, dB</b>	28	28	28	30	30	30
<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150
<b>Input Power per Port, maximum, watts</b>	300	300	300	250	250	250

## Mechanical Specifications

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

## Packaging and Weights

<b>Width, packed</b>	436 mm   17.165 in
<b>Depth, packed</b>	320 mm   12.598 in
<b>Length, packed</b>	2720 mm   107.087 in
<b>Weight, gross</b>	61 kg   134.482 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

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## Included Products

- T-125-GL – Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (50-115mm) OD round members for panel antennas.

## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance