

# RPX310B-T2



2-port sector antenna, 2x 694–960 MHz, 65° HPBW, 1x RET with manual override. Internal Bias-Tee on both RF ports.

- Each port has an integrated bias tee, and a smart switch that automatically selects between bias tee and AISG ports according to a predetermined priority table

## OBSOLETE

This product was discontinued on: **March 31, 2023**

### Replaced By:

2P-2L-C1

2-port sector antenna, 2x 694–960 MHz, 65° HPBW, 1x RET

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Single band
<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>	7-16 DIN Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	2

## 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
<b>Internal Bias Tee</b>	Port 1   Port 2

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<b>Internal RET</b>	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>	27 kg   59.525 lb

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	400 W @ 50 °C

## Electrical Specifications

<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>890–960</b>
<b>Gain, dBi</b>	16.3	16.8	17.1
<b>Beamwidth, Horizontal, degrees</b>	69	66	62
<b>Beamwidth, Vertical, degrees</b>	10	8.8	8.2
<b>Beam Tilt, degrees</b>	0–10	0–10	0–10
<b>USLS (First Lobe), dB</b>	18	18	18
<b>Null Fill, dB</b>	-22	-22	-22
<b>Front-to-Back Ratio at 180°, dB</b>	29	28	29
<b>Isolation, Cross Polarization, dB</b>	28	28	28
<b>VSWR   Return loss, dB</b>	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
<b>Input Power per Port at 50°C, maximum, watts</b>	200	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>890–960</b>
<b>Gain by all Beam Tilts, average, dBi</b>	16	16.7	17

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<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.1	±0.2
<b>Gain by Beam Tilt, average, dBi</b>	0°   16.1 5°   16.1 10°   16.0	0°   16.6 5°   16.7 10°   16.6	0°   17.0 5°   17.0 10°   17.0
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±1.2	±1.6	±1.8
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.4	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	18	18	18
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	25	24	24
<b>CPR at Boresight, dB</b>	14	16	16
<b>CPR at Sector, dB</b>	12	11	10

## 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>	200 km/h (124 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>	50 kg   110.231 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



## 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