

# RPX310B-T2H



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
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector

## 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>           | 4.3-10 Female  |
| <b>RF Connector Location</b>            | Bottom   |
| <b>RF Connector Quantity, high band</b> | 0  |
| <b>RF Connector Quantity, mid band</b>  | 0  |
| <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                   |
| <b>Internal RET</b>                                  | High 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)        |

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## 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> | 26.8 kg   59.084 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>                        | 19             | 20             | 21             |
| <b>Null Fill, dB</b>                                | -20            | -20            | -21            |
| <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            |

## Mechanical Specifications

|   |   |
|---|---|
| <b>Mechanical Tilt Range</b>            | 0°–8°                                     |
| <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)                        |

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## Packaging and Weights

|                       |                      |
|-----------------------|----------------------|
| <b>Width, packed</b>  | 456 mm   17.953 in   |
| <b>Depth, packed</b>  | 357 mm   14.055 in   |
| <b>Length, packed</b> | 2834 mm   111.575 in |
| <b>Weight, gross</b>  | 42.4 kg   93.476 lb  |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| 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 2.362"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets. |
|------------|---|--|

## \* Footnotes

|                         |   |
|-------------------------|---|
| <b>Performance Note</b> | Severe environmental conditions may degrade optimum performance |
|-------------------------|---|