

# RPX310B-B2



2-port sector antenna, 2x 694–960 MHz, 65° HPBW, 1x RET with manual override. Internal Bias-Tee on +45° port.

- AISG 2.0 interfaces are via integrated internal smart bias tees 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: December 31, 2018

### Replaced By

RPX310B-V1

2-port sector antenna, 2x 694–960 MHz, 65° HPBW, 1x RET with manual override. Internal Bias-Tee on +45° port.

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960
Gain, dBi	16.3	16.8	17.1
Beamwidth, Horizontal, degrees	69	66	62
Beamwidth, Vertical, degrees	10.0	8.8	8.2
Beam Tilt, degrees	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	18
Null Fill, dB	-22	-22	-22
Front-to-Back Ratio at 180°, dB	29	28	29
Isolation, Cross Polarization, dB	28	28	28
VSWR   Return Loss, dB	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	200	200	200
Polarization	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm

## Electrical Specifications, BASTA\*

Frequency Band, MHz	694–790	790–890	890–960
Gain by all Beam Tilts, average, dBi	16.0	16.7	17.0
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.1	±0.2
Gain by Beam Tilt, average, dBi	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
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.6	±1.8
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.3
USLS, beampeak to 20° above beampeak, dB	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	25	24	24

# RPX310B-B2

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CPR at Boresight, dB	14	15	16
CPR at Sector, dB	12	11	10

\* 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](#).

## General Specifications

<b>Operating Frequency Band</b>	694 – 960 MHz
<b>Antenna Type</b>	Sector
<b>Band</b>	Single band
<b>Performance Note</b>	Outdoor usage
<b>Total Input Power, maximum</b>	400 W @ 50 °C

## Mechanical Specifications

<b>RF Connector Quantity, total</b>	2
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Interface</b>	4.3-10 Female
<b>Grounding Type</b>	RF connector body grounded to reflector and mounting bracket
<b>Radiator Material</b>	Low loss circuit board
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Location</b>	Bottom
<b>Wind Loading, frontal</b>	100.0 lbf @ 150 km/h   445.0 N @ 150 km/h
<b>Wind Loading, lateral</b>	379.0 N @ 150 km/h   85.2 lbf @ 150 km/h
<b>Wind Loading, maximum</b>	942.0 N @ 150 km/h 211.8 lbf @ 150 km/h
<b>Wind Speed, maximum</b>	241 km/h   150 mph

## Dimensions

<b>Length</b>	2533.0 mm   99.7 in
<b>Width</b>	350.0 mm   13.8 in
<b>Depth</b>	208.0 mm   8.2 in
<b>Net Weight, without mounting kit</b>	27.0 kg   59.5 lb

## Remote Electrical Tilt (RET) Information

<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1
<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

# RPX310B-B2

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<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male

## Packed Dimensions

<b>Length</b>	2720.0 mm   107.1 in
<b>Width</b>	436.0 mm   17.2 in
<b>Depth</b>	320.0 mm   12.6 in
<b>Shipping Weight</b>	47.0 kg   103.6 lb

## Regulatory Compliance/Certifications

### Agency

RoHS 2011/65/EU  
ISO 9001:2015  
China RoHS SJ/T 11364-2014

### Classification

Compliant by Exemption  
Designed, manufactured and/or distributed under this quality management system  
Above Maximum Concentration Value (MCV)



## Included Products

T-125-GL — Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (50-115mm) OD round members for panel antennas. Includes 2 clamp sets.;  
Adjustable Tilt Pipe Mounting Kit for 3.0" (75mm) OD round members for panel antennas. Includes 2 clamp sets.; Omni Antenna Steering Pole

## \* Footnotes

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