

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

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

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

Mechanical Specifications

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

Dimensions

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

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1
Internal RET	Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

RPX310B-B2

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

Packed Dimensions

Length 2720.0 mm | 107.1 in
Width 436.0 mm | 17.2 in
Depth 320.0 mm | 12.6 in
Shipping Weight 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

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

General Specifications

Application	Outdoor
Includes	Brackets Hardware U-bolts
Package Quantity	1

Mechanical Specifications

Color	Silver
Material Type	Galvanized steel
Mechanical Tilt	0°-8°

Dimensions

Antenna-to-Pipe Distance	85.0 mm 3.3 in
Bracket-to-Bracket Distance	1400.0 mm 55.1 in
Compatible Diameter, maximum	115.0 mm 4.5 in
Compatible Diameter, minimum	75.0 mm 3.0 in
Compatible Diameter, U-bolt, maximum	90.0 mm 3.5 in
Compatible Diameter, U-bolt, minimum	88.0 mm 3.5 in
Compatible Length, maximum	2850.0 mm 112.2 in
Compatible Length, minimum	1575.0 mm 62.0 in
Net Weight	7.0 kg 15.4 lb

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)

