

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

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

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 2
Internal RET	High band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	350 mm 13.78 in
--------------	-------------------

RPX310B-T2H

Depth	208 mm 8.189 in
Length	2533 mm 99.724 in
Net Weight, without mounting kit	26.8 kg 59.084 lb

Electrical Specifications

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

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	8.8	8.2
Beam Tilt, degrees	0–10	0–10	0–10
USLS (First Lobe), dB	19	20	21
Null Fill, dB	-20	-20	-21
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

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960
Gain by all Beam Tilts, average, dBi	16	16.7	17
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	19	20	20
Front-to-Back Total Power at 180° ± 30°, dB	25	24	24
CPR at Boresight, dB	14	16	16

RPX310B-T2H

CPR at Sector, dB	12	11	10
--------------------------	----	----	----

Mechanical Specifications

Mechanical Tilt Range	0°–8°
Wind Loading @ Velocity, frontal	445.0 N @ 150 km/h (100.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	379.0 N @ 150 km/h (85.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	942.0 N @ 150 km/h (211.8 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	472.0 N @ 150 km/h (106.1 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h (124 mph)

Packaging and Weights

Width, packed	456 mm 17.953 in
Depth, packed	357 mm 14.055 in
Length, packed	2834 mm 111.575 in
Weight, gross	42.4 kg 93.476 lb

Regulatory Compliance/Certifications

Agency	Classification
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

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