

RPX310B-V1



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: **March 31, 2021**

Replaced By:

RPX310B-T2

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

General Specifications

Antenna Type	Sector
Band	Single band
Grounding Type	RF connector body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	ASA, UV stabilized
Radiator Material	Aluminum
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN 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

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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)

Dimensions

Width	353 mm 13.898 in
Depth	209 mm 8.228 in
Length	2533 mm 99.724 in
Net Weight, without mounting kit	26 kg 57.32 lb

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	694 – 960 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960
Gain, dBi	16.3	16.8	17.1
Beamwidth, Horizontal, degrees	67	64	61
Beamwidth, Vertical, degrees	10	8.8	8.1
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	30	28	27
CPR at Boresight, dB	20	18	15
CPR at Sector, dB	14	13	12
Isolation, Cross Polarization, dB	28	28	28
VSWR Return loss, dB	1.43 15.0	1.43 15.0	1.43 15.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960
Gain by all Beam Tilts, average, dBi	15.9	16.5	16.9

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Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.2
Gain by Beam Tilt, average, dBi	0° 15.9 5° 16.0 10° 15.9	0° 16.5 5° 16.5 10° 16.5	0° 16.9 5° 16.9 10° 16.8
Beamwidth, Horizontal Tolerance, degrees	±1.7	±1.5	±1.2
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.4	±0.3
USLS, beampeak to 20° above beampeak, dB	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	26	26	25
CPR at Boresight, dB	21	19	16
CPR at Sector, dB	14	13	13

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,194.0 N @ 150 km/h (268.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	449.0 N @ 150 km/h (100.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,227.0 N @ 150 km/h (275.8 lbf @ 150 km/h)
Wind Speed, maximum	250 km/h (155 mph)

Packaging and Weights

Width, packed	428 mm 16.85 in
Depth, packed	326 mm 12.835 in
Length, packed	2728 mm 107.402 in
Weight, gross	46 kg 101.413 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
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