

RV4PX310BT-Q2



10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 5x RET with manual override. Internal Bias-T on low band Port 1.

- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- AISG 2.0 interfaces are via integrated internal smart bias tee 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

General Specifications

Antenna Type	Sector
Band	Multiband
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 Top
RF Connector Quantity, high band	8
RF Connector Quantity, low band	2
RF Connector Quantity, per location as listed	4 6
RF Connector Quantity, total	10

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

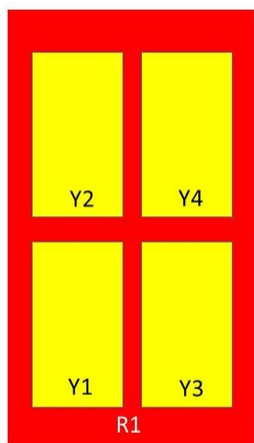
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Internal Bias Tee	Port 1
Internal RET	High band (4) Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	350 mm 13.78 in
Depth	208 mm 8.189 in
Length	2533 mm 99.724 in
Net Weight, without mounting kit	39 kg 85.98 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ARxxxxxxxxxxxxxxxxx1
Y1	1695-2690	3-4	2	ARxxxxxxxxxxxxxxxxx2
Y2	1695-2690	5-6	3	ARxxxxxxxxxxxxxxxxx3
Y3	1695-2690	7-8	4	ARxxxxxxxxxxxxxxxxx4
Y4	1695-2690	9-10	5	ARxxxxxxxxxxxxxxxxx5

Left Right
Bottom

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690
Gain, dBi	16	16.5	16.8	16.9	17.4	18.1

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Beamwidth, Horizontal, degrees	69	68	66	62	62	61
Beamwidth, Vertical, degrees	10	8.8	8.1	8.1	7.2	5.9
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	18	18	18	18
Null Fill, dB	-22	-22	-22	-22	-22	-22
Front-to-Back Ratio at 180°, dB	31	32	33	34	37	39
Isolation, Cross Polarization, dB	28	28	28	30	30	30
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690
Gain by all Beam Tilts, average, dBi	15.8	16.4	16.8	16.6	17.2	17.9
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.2	±0.1	±0.4	±0.4	±0.3
Gain by Beam Tilt, average, dBi	0° 15.8 5° 15.8 10° 15.7	0° 16.4 5° 16.4 10° 16.4	0° 16.8 5° 16.8 10° 16.8	0° 16.6 5° 16.6 10° 16.7	0° 17.2 5° 17.3 10° 17.2	0° 17.9 5° 17.9 10° 17.8
Beamwidth, Horizontal Tolerance, degrees	±1.1	±0.7	±1.5	±3.1	±2.4	±5.8
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.3	±0.6	±0.5	±0.4
USLS, beampeak to 20° above beampeak, dB	18	18	18	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	26	26	27	27	27	29
CPR at Boresight, dB	16	17	17	17	19	18
CPR at Sector, dB	12	13	15	12	12	9

Mechanical Specifications

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)

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Wind Loading @ Velocity, rear	472.0 N @ 150 km/h (106.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	436 mm 17.165 in
Depth, packed	320 mm 12.598 in
Length, packed	2720 mm 107.087 in
Weight, gross	61 kg 134.482 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



Included Products

T-125-GL	-	Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (50-115mm) OD round members for panel antennas.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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