Product Data Sheet

UL2PX309.12P-V1-C

BROADRADIO

XXX Pol Panel Antenna 698-960/2×1710-2690MHz 65°/65° 17/18dBi 0°-10°Replaceable RET

Electrical Specifications

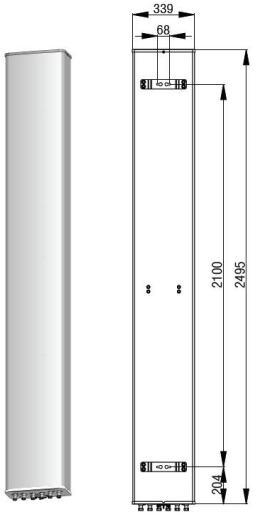
Frequency Range (MHz):	698-960(R1)			2×1710-2690 (Y1,Y2)		
	698-806	806-880	880-960	1710-2170	2300-2490	2490-2690
Gain (dBi):	15.7±0.5	16.2±0.5	16.5±0.5	16.8±0.5	17.5±0.5	17.8±0.5
Return Loss (dB):	>14 (VSWR<1.5)					
Polarization:	±45°					
Horizontal 3dB Beamwidth (°):	70±5	68±5	66±5	68±5	62±5	58±5
Vertical 3dB Beamwidth (°):	9.0	8.0	7.0	6.5	5.0	4.5
Electrical Downtilt (°):	0-10 Independently Continuously Adjustable			0-10 Independently Continuously Adjustable		
RET Type:	Cascade SRET, AISG 2.0, Upgradeable					
1st Upper Sidelobe Suppression (dB):	15	15	15	15	15	15
Front to Back Ratio (dB):	22	23	24	25	25	25
Cross Polar Ratio 0°(dB):	15	15	15	15	15	15
Intraband Isolation (dB):	>26			>28		
Interband Isolation (dB):	>28					
Max. Power Per Port (W):	250			200		
Intermodulation IM3 (dBc):	<-150(2×43 dBm)					
Impedance (ohm):	50					
Lightning Protection:	DC Grounded					
Connector Type:	6×4.3-10 Female					

BASTA Electrical Specification

Frequency Range(MHz):	698-960(R1)			1710-2690(Y1,Y2)		
	698-806	806-880	880-960	1710-2170	2300-2490	2490-2690
Average Gain by all Beam Tilts (dBi):	15.4	15.9	16.2	16.9	17.4	17.5
Gain by all Beam Tilts Tolerance(dB):	±0.6	±0.4	±0.4	±0.6	±0.6	±0.5
Average Gain by Beam Tilt (dBi):	0°|15.4 5°|15.5 10°|15.3	0°|15.9 5°|16.1 10°|15.6	0°|16.2 5°|16.5 10°|15.8	0°|16.9 5°|17.2 10°|16.7	0°|17.4 5°|17.6 10°|17.2	0°|17.6 5°|17.8 10°|17.3
Horizontal Beamwidth Tolerance(°):	±2.6	±1.6	±1.3	±6.1	±5.1	±5.3
Vertical Beamwidth Tolerance(°):	±0.7	±0.6	±0.5	±0.6	±0.5	±0.4
USLS to 20° above beampeak(dB):	15.8	15.2	15.9	16.4	16.2	15.3
Front to back Ratio at 180° ± 30°(dB)	24.4	25.6	25.3	26.4	26.3	26.3
CPR at Boresight(dB):	21.2	20.4	21.1	19.2	18.6	18.3

Mechanical Data

Antenna Dimensions (mm):	2495×339×169
Packing Dimensions (mm):	2755×420×255
Antenna Net Weight/Bracket (kg):	27.2/5.9
Antenna Gross Weight (kg):	38.5
Radome Material:	Fiberglass
Pipe OD (mm):	50-115
Mounting Kits (Included):	BA.K.04.00069091, Adjustable Downtilt 0°-10°



Environmental Ratings

Humidity:	95%RH@+30℃
Temperature (℃):	-40～+70
Wind Load @150 km/h (N):	Frontal/Lateral/: 1099/382/1338
Max. Wind velocity(km/h):	200

RoHS Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations.

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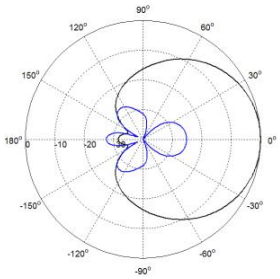
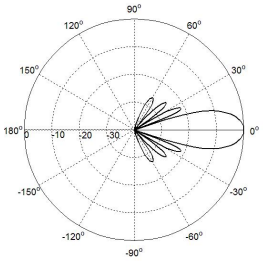
Internal RET Specifications

RET Type:	Replaceable RET
RET protocol:	AISG2.0 /3GPP
Input voltagerange(V):	10-30 DC
Power consumption(W):	< 5 (motor activated, single RET) < 1 (stand by, single RET), < 1.5 (stand by, 12V)
Adjustment time (full range) (s):	< 120 (typically, depending on antenna type)
RET connector:	1 pair of AISG 5 pin male & female
Pin assignment according AISG:	8 pin circular connector conforming to IEC 60130-9 - Ed. 3.0
Lightning protection (kA):	5 (8/20 µs Differential mode), 8 (8/20 µs Common mode)

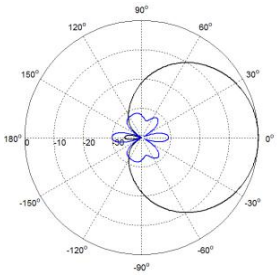
Typical Patterns



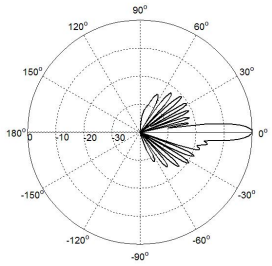
Azimuth(Low Band)



Elevation(Low Band)

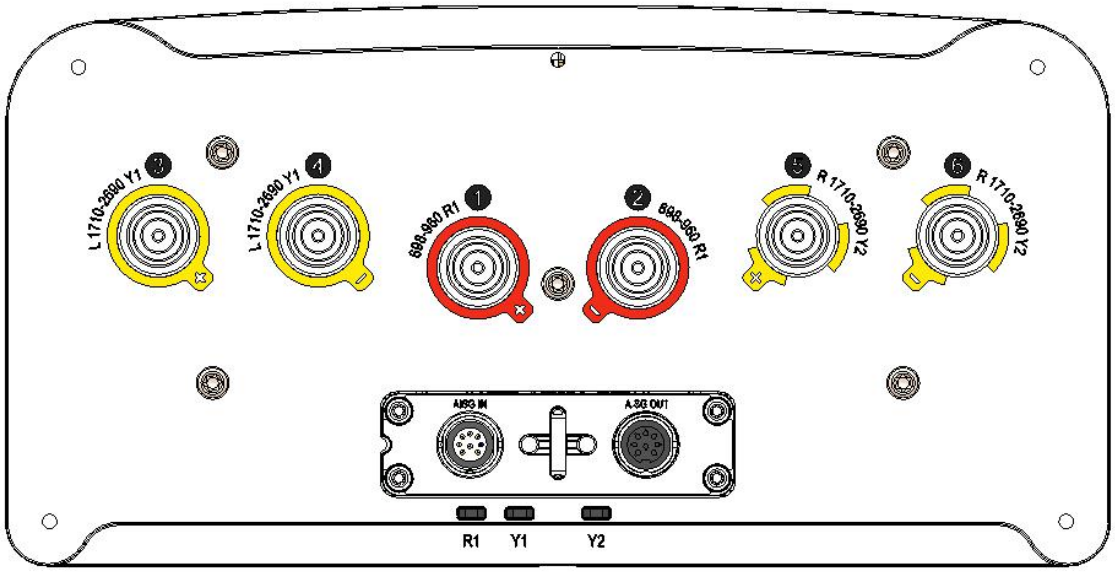


Azimuth(High Band)



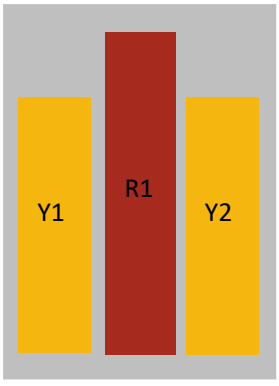
Elevation(High Band)

Bottom View



Correlation Table

Frequency range	Array	Connector	RET S/N
698– 960 MHz	R1	1-2	BRxxx……1R1
1710–2690 MHz	Y1	3-4	BRxxx……2Y1
1710–2690 MHz	Y2	5-6	BRxxx……3Y2



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