

# ULL2WPX306.206P2-2C

XXXXX Pol Panel Hybrid Antenna 698-960/2×1710-2690/2×1710-2170MHz 65° /65° /32°  
14.5/16/17.5dBi 2° -12° Replaceable RET

## Electrical Specifications

Frequency Range (MHz):	698-960(R1)			1710-2690(Y1,Y2)			1710-2170(B1,B2)(Dual beam)		
	698 -806	806 -880	880 -960	1710 -1880	1880 -2170	2300 -2690	1710 -1880	1880 -2025	2025 -2170
Gain (dBi):	13.5 ±0.5	13.8 ±0.5	14.1 ±0.5	14.8 ±0.5	15.0 ±0.5	16.0 ±0.5	16.0 ±0.5	16.3 ±0.5	17.1 ±0.5
Return Loss (dB):	>14 (VSWR<1.5)								
Polarization:	±45°								
Horizontal Beam Pointing (°):	/						±29	±27	±24
Horizontal 3dB Beamwidth (°):	73	69	68	58	60	62	35	33	31
Vertical 3dB Beamwidth (°):	16.5	14.7	13.5	14.2	13.1	9.9	12.7	11.8	11.1
Electrical Downtilt (°):	2-12 Independently Continuously Adjustable								
1st Upper Sidelobe Suppression (dB):	15	15	15	15	15	14	15	15	15
Front to Back Ratio (dB):	23	24	24	25	25	25	25	25	25
Polarization Isolation (dB):	>25								
Interband Isolation (dB):	>25(R1//Y1//Y2//B1,B2)								
Beam Isolation(dB):	/			/			>16		
Max. Power Per Port (W):	250			200					
Intermodulation IM3 (dBc):	<-150 (2×43 dBm)								
Impedance (ohm):	50								
Lightning Protection:	DC Grounded								
Connector Type:	10×4.3-10Female								

## BASTA Electrical Specifications

Frequency Range(MHz):	698-960(R1)		
	698-806	806-880	880-960
Average Gain by Beam Tilts (dBi):	13.5	13.7	13.9
Gain by all Beam Tilts Tolerance(dB):	±0.6	±0.3	±0.4
Average Gain by Beam Tilts (dBi):	2° 13.5	2° 13.8	2° 14.1
	7° 13.5	7° 13.7	7° 14.0
	12° 13.5	12° 13.7	12° 13.8
Horizontal Beamwidth Tolerance(°):	±3.0	±3.0	±2.0
Vertical Beamwidth Tolerance(°):	±1.2	±0.8	±1.0
Upper Side Lobe Suppression, Peak to 20°(dB):	16.5	16.0	15.0
Front to back Total Power at 180° ± 30°(dB)	21.3	23.6	21.9
CPR at Boresight(dB):	20.0	20.0	20.0

## BASTA Electrical Specifications

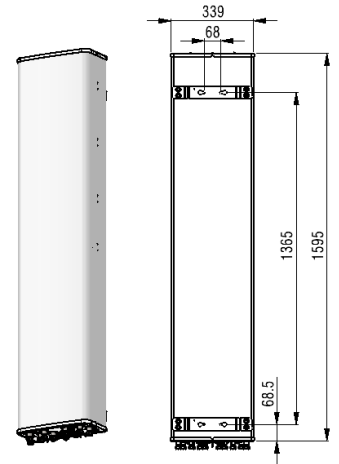
Frequency Range(MHz):	1710-2690(Y1,Y2)			1710-2170(B1,B2)		
	1710-1880	1880-2170	2300-2690	1710-1880	1880-2025	2025-2170
Average Gain by Beam Tilts (dBi):	14.8	14.9	15.8	15.9	16.2	16.9
Gain by all Beam Tilts Tolerance(dB):	±0.6	±0.4	±0.6	±0.6	±0.8	±0.5
Average Gain by Beam Tilts (dBi):	2° 14.8	2° 15.0	2° 16.0	2° 15.9	2° 16.3	2° 17.1
	7° 14.7	7° 14.9	7° 15.9	7° 16.0	7° 16.3	7° 17.0
	12° 14.5	12° 14.8	12° 15.5	12° 15.7	12° 16.0	12° 16.7
Horizontal Beamwidth Tolerance(°):	±8.0	±8.0	±8.0	±3.0	±3.0	±3.0
Vertical Beamwidth Tolerance(°):	±1.4	±1.6	±0.9	±1.4	±0.8	±0.7

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Upper Side Lobe Suppression, Peak to 20°(dB):	14.0	14.2	13.5	15.1	14.4	14.4
Front to back Total Power at 180° ± 30°(dB)	23.2	22.4	21.5	28.0	28.5	29.0
CPR at Boresight(dB):	16.5	18.2	18.5	18.6	18.5	19.5

## Mechanical Data

Antenna Dimensions (mm):	1595×339×169
Packing Dimensions (mm):	1855×420×255
Antenna Net Weight/Bracket (kg):	22.5/5.9
Antenna Gross Weight (kg):	32.5
Radome Material:	Fiberglass
Pipe OD (mm):	50-115
Mounting Kits (Included):	BA.K.04.00069111,Adjustable Downtilt 0°-13°



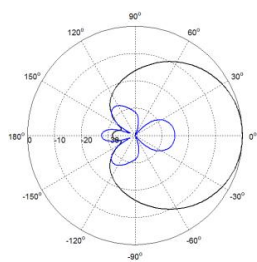
## Environmental Ratings

Humidity:	95%RH@+30°C
Temperature (°C):	-40~+70
Wind Load @150 km/h (N):	Frontal/Lateral/Rearside: 689/230/840
Max. Wind velocity(km/h) :	200

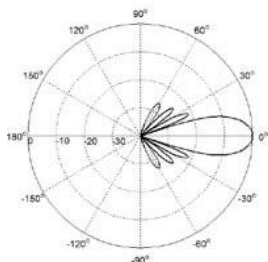
## Internal RET Specifications

RET type:	Replaceable RET
RET protocol:	AISG 2.0 /3 GPP
Input voltage range (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):	< 120 (typically, depending on antenna type)
RET connector:	2 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)

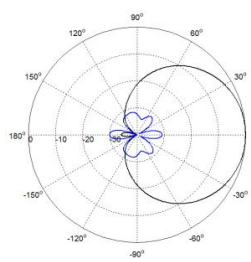
## Typical Patterns



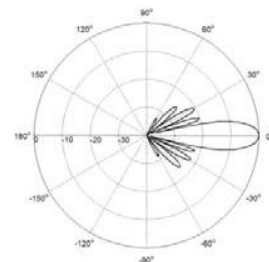
Azimuth(Low band)



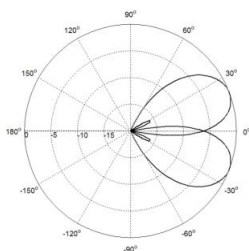
Elevation(Low band)



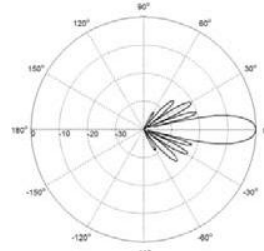
Azimuth(High band)



Elevation(High band)

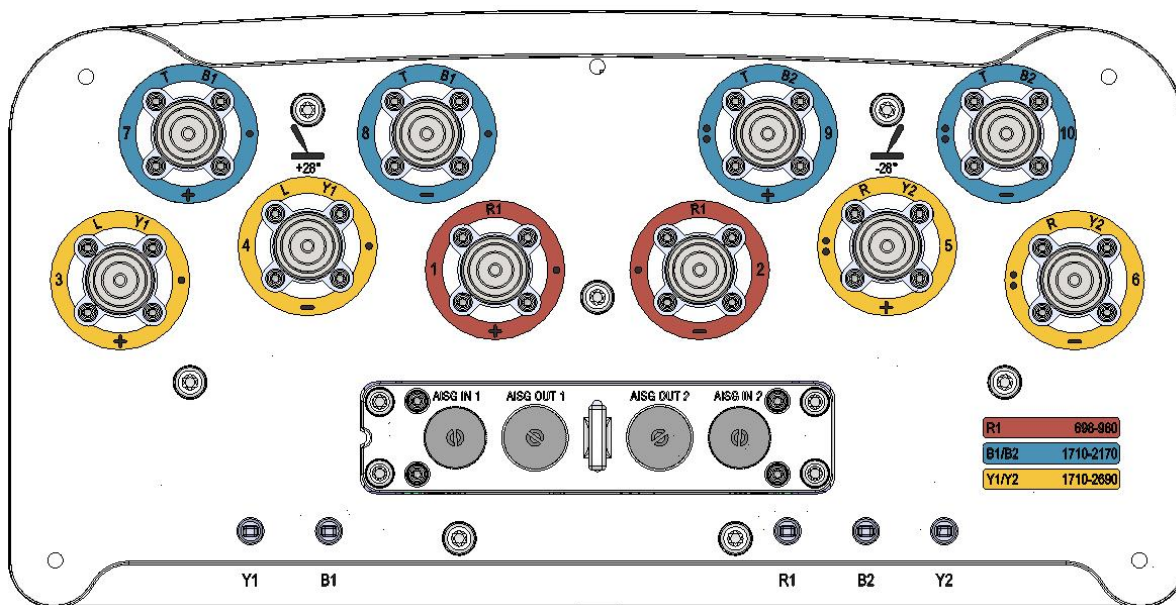


Azimuth(Dual Beam)



Elevation(Dual Beam)

## Bottom View



## Correlation Table

Frequency range	Array	Connector	RET S/N
790-960 MHz	R1	1-2	BRxxx.....1R1
1710-2690 MHz	Y1	3-4	BRxxx.....4Y1
1710-2690 MHz	Y2	5-6	BRxxx.....5Y2
1710-2170 MHz	B1	7-8	BRxxx.....2B1
1710-2170 MHz	B2	9-10	BRxxx.....3B2

