

XXXXX Pol Panel Hybrid Antenna 698-960/1710-2690/1710-2690/1710-2690/1710-2690MHz 65°/65°/65°/32°/32° 16/17/17/19/19dBi 2°-12°/2°-10° Replaceable RET

**Electrical Specifications**

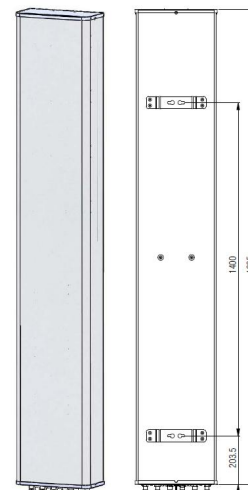
Frequency Range (MHz):	698-960(R1)			1710-2690(Y1,Y2)			1710-2690(Y3,Y4) (Dual beam)		
	698-806	806-880	880-960	1710-1880	1880-2170	2300-2690	1710-1880	1880-2170	2300-2690
Gain (dBi):	15.5 ±0.5	15.7 ±0.5	16.0 ±0.5	15.6 ±0.5	16.3 ±0.5	16.8 ±0.5	16.8 ±0.5	18.0 ±0.5	18.7 ±0.5
Return Loss (dB):	>14 (VSWR<1.5)								
Polarization:	±45°								
Horizontal Beam Pointing (°):							±29	±25	±23
Horizontal 3dB Beamwidth (°):	70	66	64	62	65	73	35	30	25
Vertical 3dB Beamwidth (°):	12.5	10.5	9.5	10.5	8.9	7.1	12.0	10.0	7.5
Electrical Downtilt (°):	2-12 Independently Continuously Adjustable						2-10 Independently Continuously Adjustable		
1 <sup>st</sup> Upper Sidelobe Suppression(dB) :	20	21	20	16	17	16	16	17	16
Front to Back Ratio (dB):	27	29	28	25	27	28	25	26	29
Polarization Isolation (dB):	>25								
Interband Isolation (dB):	>25(R1//Y1,Y2//Y3,Y4)								
Max. Power Per Port (W):	250			200					
Intermodulation IM3 (dBc):	<-150 (2x43dBm)								
Impedance (ohm):	50								
Lightning Protection:	DC Grounded								
Connector Type:	10x4.3-10 Female								

**BASTA Electrical Specification**

Frequency Range(MHz):	698-960(R1)			1710-2690(Y1,Y2)			1710-2690(Y3,Y4) (Dual beam)		
	698-806	806-880	880-960	1710-1880	1880-2170	2300-2690	1710-1880	1880-2170	2300-2690
Average Gain by all Beam Tilts(dBi):	15.3	15.5	15.7	15.3	16.1	16.4	16.5	17.7	18.4
Gain by all Beam Tilts Tolerance(dB):	±0.9	±0.4	±0.6	±0.9	±1.0	±1.2	±0.6	±1.2	±0.9
Average Gain by Beam Tilt (dBi):	2° 15.4 7° 15.3 12° 15.2	2° 15.6 7° 15.5 12° 15.3	2° 15.8 7° 15.7 12° 15.6	2° 15.5 7° 15.3 12° 14.8	2° 16.2 7° 16.1 12° 15.7	2° 16.6 7° 16.4 12° 15.8	2° 16.6 7° 16.5 12° 16.3	2° 17.9 7° 17.7 12° 17.5	2° 18.6 7° 18.4 12° 18.3
3dB Horizontal Beamwidth Tolerance(°):	±4.1	±3.6	±3.7	±9.5	±7.5	±6.6	±1.9	±3.1	±1.8
3dB Vertical Beamwidth Tolerance(°):	±1.6	±1.3	±1.5	±1.3	±1.6	±1.1	±1.3	±1.0	±1.0
Upper Side Lobe Suppression, Peak to 20°(dB):	18	19	18	15	15	15	15	16	15
Front to back Total Power at 180° ±30°(dB):	26	27	28	25	26	26	25	25	27
CPR at Boresight(dB):	16	15	15	17	15	15	13	16	13
CPR at Sector(dB):	13	5	8	7	7	5			

## Mechanical Data

Antenna Dimensions (mm):	1995×339×169
Packing Dimensions (mm):	2315×405×240
Antenna Net Weight/Bracket (kg):	30.5/5.7
Antenna Gross Weight (kg):	41
Radome Material:	Fiberglass
Pipe OD (mm):	70-114
Mounting Kits (Included):	BA.K.04.00011, Adjustable Downtilt 0°-12°



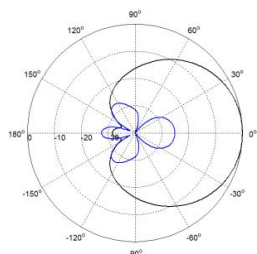
## Environmental Ratings

Humidity:	95%RH@+30°C
Temperature (°C):	-55~+70
Wind Load @150 km/h (N):	Frontal/Lateral/Rearside: 1206/358/1408
Max. Wind velocity (km/h):	200

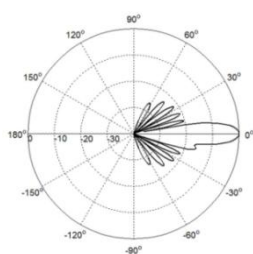
## Internal RET Specifications

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) (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)

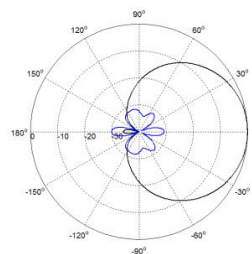
## Typical Patterns



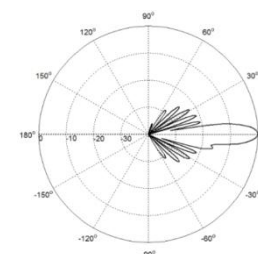
Azimuth(Low band)



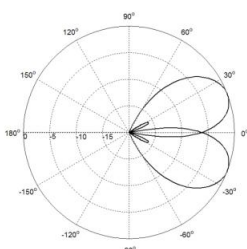
Elevation(Low band)



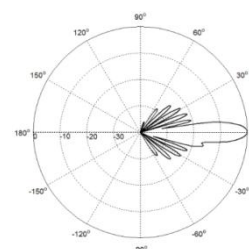
Azimuth(High band)



Elevation(High band)

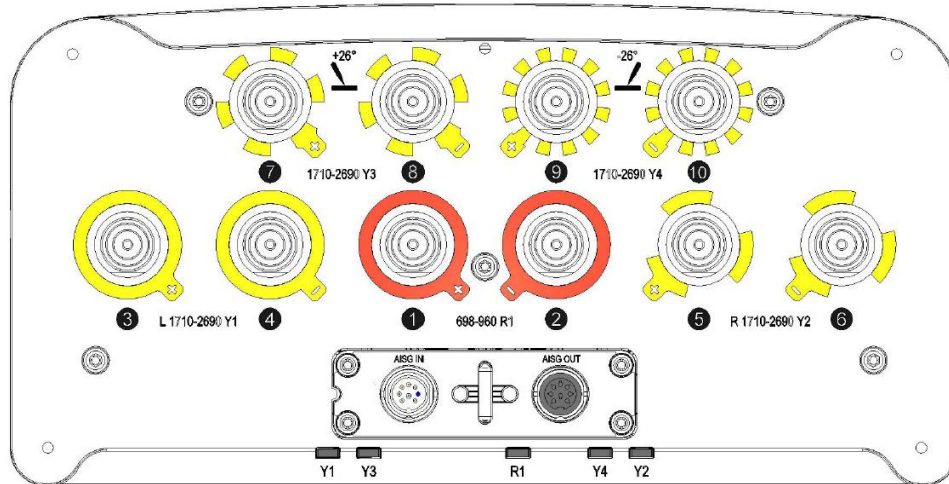


Azimuth(Dual Beam)



Elevation(Dual Beam)

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
1710-2690 MHz	Y3	7-8	BRxxx.....4Y3
1710-2690 MHz	Y4	9-10	BRxxx.....5Y4

