Product Data Sheet

S-HU2PX10.8P-V1-2C

X Pol Panel TD Antenna 2300-2690MHz 65° 15.5dBi 2° -12° Replaceable RET

XX Pol Panel Antenna 2×698-960MHz 65° 15dBi 2° -12° Replaceable RET

General Electrical Properties		
General Parameters	Frequency Range (MHz) :	2300-2690(Y1)
	Polarization:	±45°
	Electrical Downtilt (°) :	2-12, continuously adjustable
	Lightning Grounding:	DC Grounded
	Connecter Type:	9×4.3-10 Female
Calibration and Electrical Parameters	Coupling Factor between calibration port and each antenna port (dB) :	-26±2
	Max Amp/Phase Deviation:	<1.2dB/12°
	VSWR:	<1.5
	Max. Power Per Port (W):	150
	Intraband Isolation (dB):	>20
	Interband Isolation (dB):	>20

Beamforming Electrical Properties				
Radiation Parameters	Frequency Range (MHz) :		2300-2690(Y1)	
			2300-2500	2500-2690
	Single Column	Horizontal 3dB Beamwidth (°):	90±15	85±15
		Vertical 3dB Beamwidth (°):	6.5±0.5	6±0.4
		Front to Back Ratio (dB):	23	24
		Gain (dBi):	15.1±0.8	15.5±0.9
		Cross Polar Ratio 0° (dB):	>15 (0°)	>15 (0°)
		Cross Polar Ratio ±60° (dB):	>4 (±60°)	>4 (±60°)
	Broadcast Beam	Gain (dBi):	16.5±0.5	16.9±0.5
		Front to Back Ratio (dB):	25	25
		Vertical 3dB Beamwidth (°):	6.5±0.5	6±0.4
		Cross Polar Ratio 0° (dB):	>15 (0°)	>15 (0°)
		First upper Side lobe suppression (dB):	>14	>14
	Service Beam @ 0deg	0° Gain (dBi):	20.1±0.5	20.5±0.5
		0° Horizontal 3dB Beamwidth (°):	23	23
		Cross polar ratio (0°) (dB):	18	18
		Front to Back Ratio (dB):	25	25

Frequency Range (MHz):	698-960(R1,R2)		
	698-790	790-862	880-960
Gain (dBi):	14.0±0.5	14.5±0.7	14.8±0.7
Return Loss (dB):	>14 (VSWR<1.5)		
Polarization:	±45°		
Horizontal 3dB Beamwidth (°):	67	62	59
Vertical 3dB Beamwidth (°):	10.3	9.3	8.6
Electrical Downtilt (°):	2-12 Independently Continuously Adjustable		
RET Type:	Cascade SRET, AISG 2.0, Upgradeable		
1st Upper Sidelobe Suppression (dB):	14.2	14.1	13.5
Intraband Isolation (dB):	>25		
Interband Isolation (dB):	>25		
Max. Power Per Port (W):	250		

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

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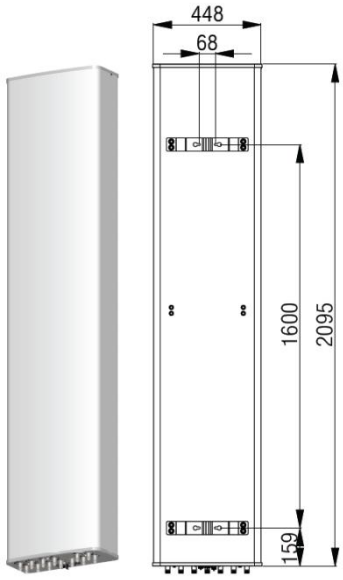
Intermodulation IM3 (dBc):	<-150(2×43 dBm)
Impedance (ohm):	50
Lightning Protection:	DC Grounded
Connector Type:	4×4.3-10 Female

BASTA Electrical Specifications

Frequency Range(MHz):	2300-2690(Y1)		698-960(R1,R2)		
	2300-2500	2500-2690	698-790	790-862	880-960
Average Gain by all Beam Tilts (dBi):	15.1	15.6	14.1	14.6	14.9
Gain by all Beam Tilts Tolerance(dB):	±0.8	±0.9	±0.4	±0.5	±0.6
Average Gain by Beam Tilt (dBi):	2°|15.1	2°|15.7	2°|14.1	2°|14.7	2°|15.1
	7°|15.3	7°|16	7°|14.1	7°|14.7	7°|15.1
	12°|14.8	12°|15	12°|14.0	12°|14.4	12°|14.6
Horizontal Beamwidth Tolerance(°):	±10.6	±15.4	±8	±6.9	±11.3
Vertical Beamwidth Tolerance(°):	±0.5	±0.4	±0.8	±0.6	±0.6
1st Upper Sidelobe Suppression (dB) :	15.5	14	14.9	14.4	14.6
Front to back Total Power at 180° ± 30°(dB):	23	24	18.5	20.1	19.8
CPR at Boresight(dB):	18.1	16.8	17.8	23.1	20.2

Mechanical Data

Antenna Dimensions (mm):	2095×448x200
Packing Dimensions (mm):	2355×535×290
Antenna Net Weight/Bracket (kg):	31.5/5.9
Antenna Gross Weight (kg):	42.5
Radome Material:	Fiberglass
Pipe OD (mm):	50-115
Mounting Kits (Included):	BA.K.04.00069121, Adjustable Downtilt0°-14°



Environmental Ratings

Humidity:	95%RH@+30℃
Temperature (℃):	-40～+70
Wind Load @150 km/h (N):	Frontal/Lateral/Rearside: 1212/290/1310
Max.Wind velocity(km/h):	200

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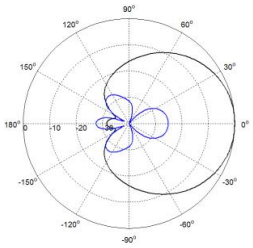
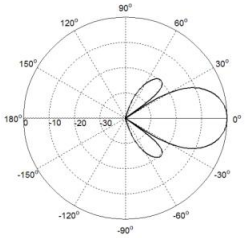
Internal RET Specifications

RET type:	Replaceable RET
RET protocol:	AISG2.0 /3GPP
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:	8pin 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)

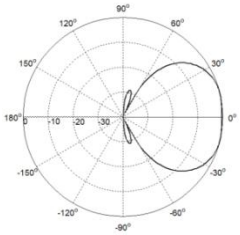
Typical Patterns



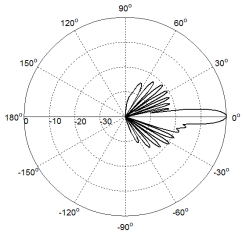
Single Column



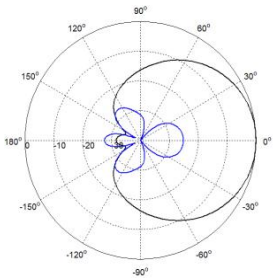
Service Beam @0deg



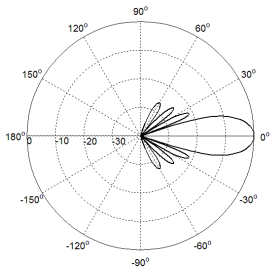
Broadcast Beam



Elevation

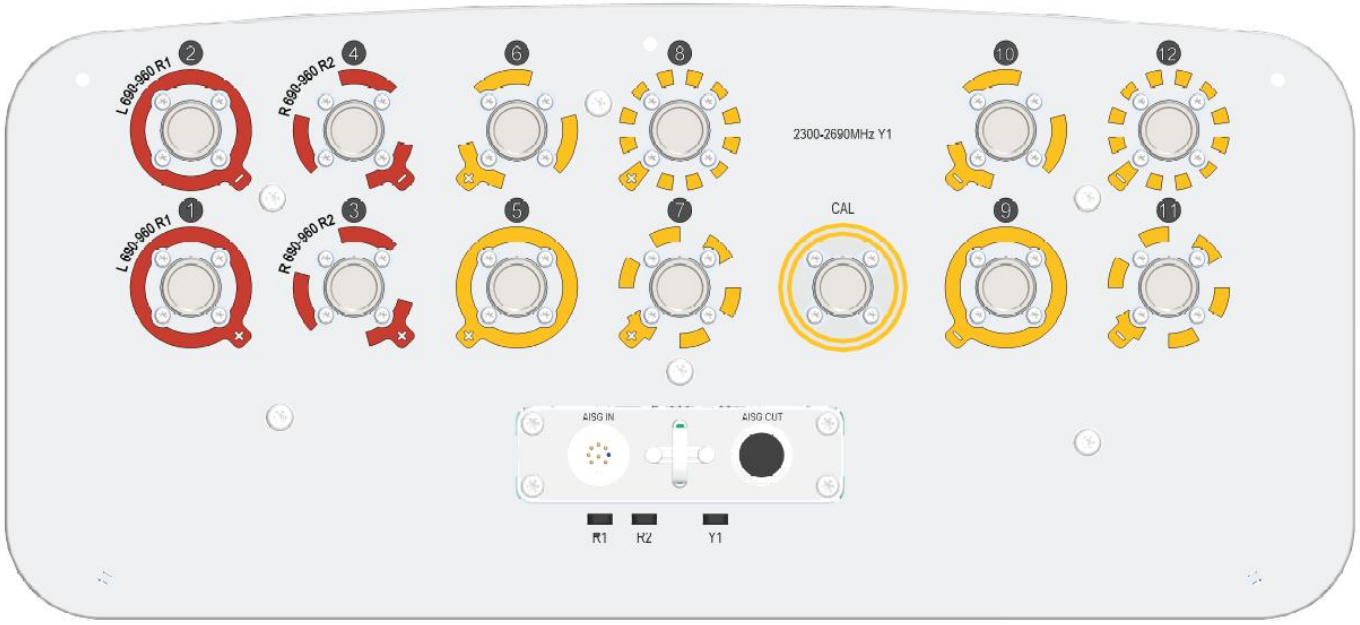


Azimuth(698-960MHz)



Elevation(690-960MHz)

Bottom View



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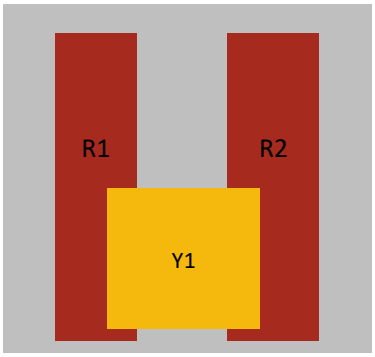
Correlation Table

Frequency range	Array	Connector
698–960 MHz	R1	1-2
698– 960 MHz	R2	3-4
2300–2690 MHz	Y1	5-12



Broadcast Beam Weight Value for Reference

		5/9	6/10	7/11	8/12
2C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
3C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
4C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
5C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
6C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
7C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
8C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
9C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
10C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
11C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105
12C(2300-2690MHz)	Amp[Ii]	1	1	1	1
	Phase	-105	-9	-9	-105