Product Data Sheet

S-HU2L2PX10.10.12P-DH2-2C

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

XXXXXX Pol Panel Antenna 2×698-960/2×1710-2170/2×2490-2690MHz 65°/65°/65° 16/16/16.5dBi 2°-12°/2°-12°/2°-12° Replaceable RET

General Electrical Properties		
General Parameters	Frequency Range (MHz)	2300-2690(Y3)
	Polarization	±45°
	Electrical Downtilt (°)	2-12, continuously adjustable
	Lightning Grounding	DC Grounded
Calibration and Electrical Parameters	Coupling Factor between calibration port and each antenna port	-26±2
	Max Amp/Phase Deviation:	≤1.0/ 10°
	VSWR:	≤1.5
	Co- polarization Isolation between ports (dB):	≥20
	Cross-polarization Isolation Between Ports (dB)	≥20
	Avg. power per input(W)	≥150
	Connecter Type:	1xMQ5,1xMQ4

Beamforming Electrical Properties			
Radiation parameters	Frequency Range (MHz)		2300-2690(Y3)
	Single Column	Horizontal 3dB Beamwidth (°):	75±15
		Vertical 3dB Beamwidth (°):	6
		Front to Back Ratio (dB):	23
		Gain (dBi):	15.3±1
		Cross polar ratio (dB):	>13 (0°)/ >5 (±60°)
	Broadcast Beam	Horizontal 3dB Beamwidth (°):	65±10
		Gain (dBi):	16.2±0.5
		Front to Back Ratio (dB):	23
		Vertical 3dB Beamwidth (°):	6
		Cross polar ratio (dB):	>13 (0°)/ >5 (±60°)
		1st Upper Sidelobe Suppression (dB):	>13
	Service Beam @ 0deg	Gain (dBi):	20.8±0.5
		Horizontal 3dB Beamwidth (°):	20
		Cross polar ratio (0°) (dB):	18
		Front to Back Ratio (dB):	25

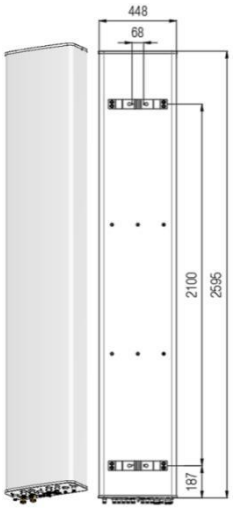
Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations.

Product Data Sheet

S-HU2L2PX10.10.12P-DH2-2C

Frequency Range (MHz):	698-960(R1,R2)			1710-2170(B1,B2)			2490-2690
	698-790	790-862	880-960	1710-1880	1880-2025	2025-2170	(Y1,Y2)
Gain (dBi):	15.0±0.8	15.3±0.5	15.8±0.7	15.8±0.5	16.0±0.5	16.0±0.5	16.2±0.5
Return Loss (dB):	>14 (VSWR<1.5)						
Polarization:	±45°						
Horizontal 3dB Beamwidth (°):	66	65	63	65	67	65	59
Vertical 3dB Beamwidth (°):	9	8	7	7	6.5	5.5	4.5
Electrical Downtilt (°):	2-12 Independently Continuously Adjustable						
1st Upper Sidelobe Suppression(dB):	13	13	14	13	14	14	14
Front to Back Ratio (dB):	22	22	22	23	23	25	25
Cross Polar Ratio 0° (dB):	15	15	15	13	13	13	13
Intraband Isolation (dB):	>25						
Interband Isolation (dB):	>25						
Intermodulation IM3 (dBc):	250			200			
Impedance (ohm):	<-150						
Lightning Protection:	50						
Connector Type:	DC Grounded						
Intermodulation IM3 (dBc):	12×4.3-10 Female						

Mechanical Data	
Antenna Dimensions (mm):	2595×448×200
Packing Dimensions (mm):	2855×535×295
Antenna Net Weight/Bracket (kg):	46.5/5.9
Antenna Gross Weight (kg):	59
Radome Material:	FRP
Pipe OD (mm):	50-115
Mounting Kits (Included):	BA.K.04.00069091, Adjustable Downtilt 0°-10°
Humidity:	95%RH@+30℃
Temperature (℃):	-40～+70
Wind Load @150 km/h (N):	Frontal/Lateral/Rearside: 1515 /373/ 1638
Max. Wind velocity(km/h):	200



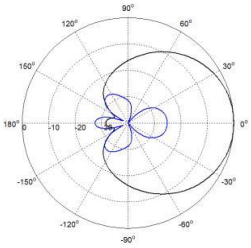
Internal RET Specifications

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:	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)

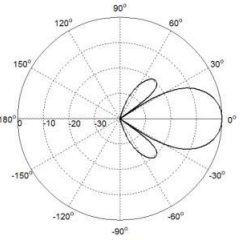
Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations.

S-HU2L2PX10.10.12P-DH2-2C

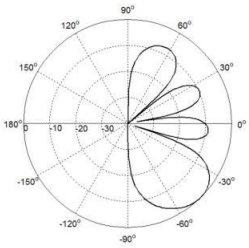
Typical Patterns



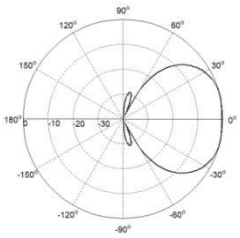
Single Column



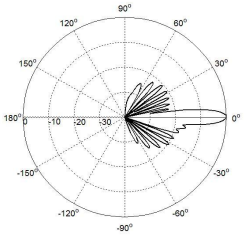
Service Beam @0deg



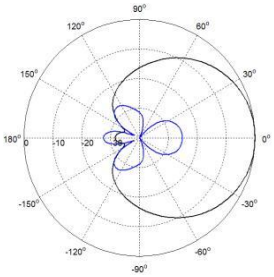
Service Beam @60deg



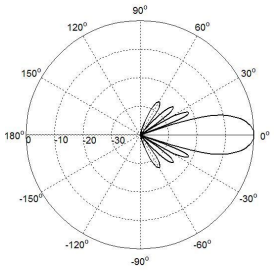
Broadcast Beam



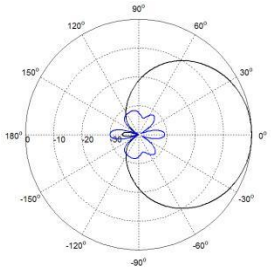
Elevation



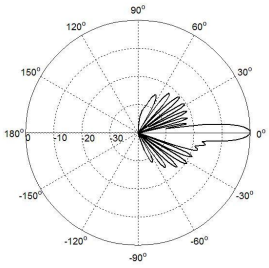
Azimuth(698-960MHz)



Elevation(698-960MHz)

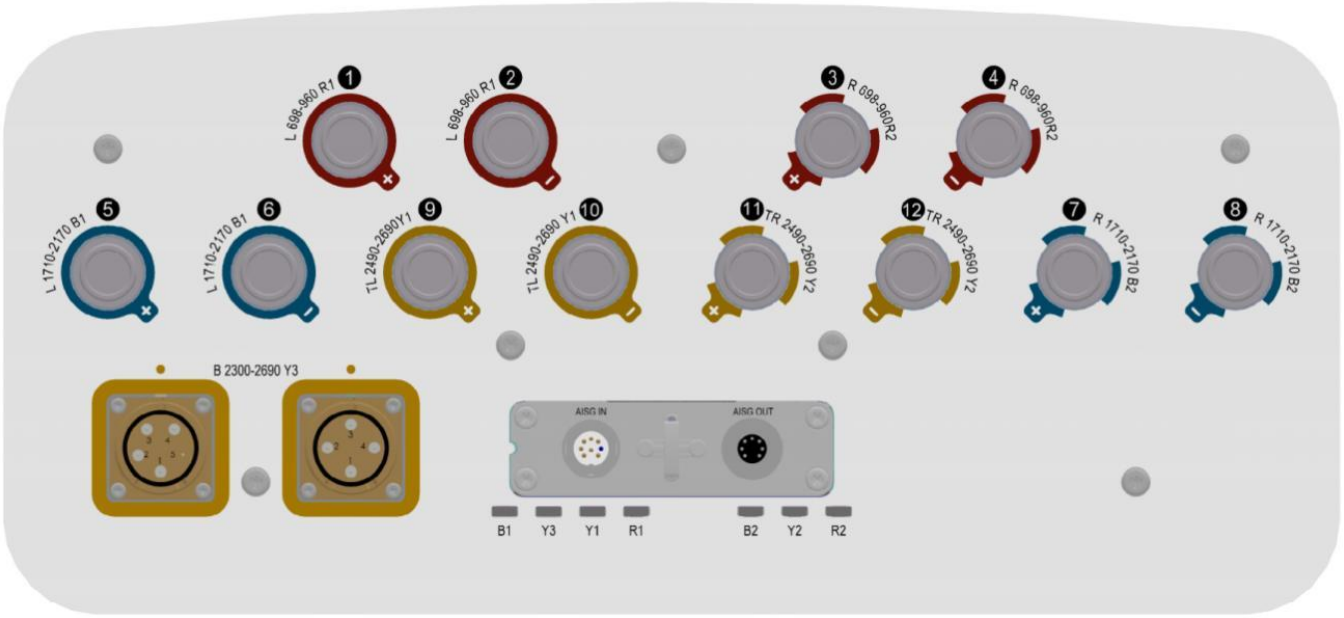


Azimuth(1710-2690MHz)



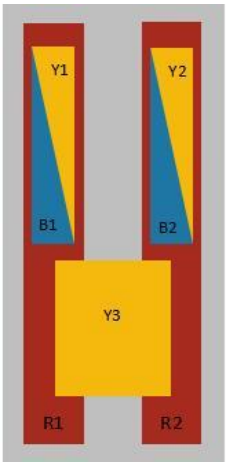
Elevation(1710-2690MHz)

Bottom View



Correlation Table

Frequency range	Array	Connector	RET S/N
698–960 MHz	R1	1-2	BRxxx·····1R1
698–960 MHz	R2	3-4	BRxxx·····2R2
1710–2170 MHz	B1	5-6	BRxxx·····3B1
1710–2170 MHz	B2	7-8	BRxxx·····4B2
2490–2690 MHz	Y1	9-10	BRxxx·····5Y1
2490–2690 MHz	Y2	11-12	BRxxx·····6Y2
2300–2690 MHz	Y3	1xMQ5,1xMQ4	BRxxx·····7Y3



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