

S-HU2L4PX10.8.8P-2Q

X Pol Panel TD Antenna 2300-2690MHz 90° 15dBi 2°-12° Replaceable RET

XXXXXX Pol 2×698-960/4×1710-2690MHz 65°/65° 15/16.5dBi 2°-12°/2°-12° Replaceable RET

Electrical Specifications (2300-2690MHz)			
General parameters	Frequency range (MHz):		2300-2690(Y5)
	Polarization:		±45
	Electrical downtilt (°):		2-12, continuously adjustable
	Grounding:		DC Grounded
	Connector Type:		1xMQ5,1xMQ4
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):		50
	Isolation (dB):		>20
Radiation parameters	Single Column	Horizontal 3dB Beamwidth (°):	85±20
		Vertical 3dB Beamwidth (°):	6.5
		Front to Back Ratio (dB):	>25
		Gain (dBi):	15.0±0.8
		Cross polar ratio (dB):	>13 (0°)
	Broadcast Beam	Horizontal 3dB Beamwidth (°):	65±10
		Gain (dBi):	16.5±0.5
		Front to Back Ratio (dB):	25
		Vertical 3dB Beamwidth (°):	6.5
		Cross polar ratio (dB):	>15 (0°)
		1 st Upper Sidelobe Suppression (dB):	>13
	Service Beam @ 0deg	Gain (dBi):	20.5±0.5
		Horizontal 3dB Beamwidth (°):	25
		Cross polar ratio (0°) (dB):	18
		Front to Back Ratio (dB):	25

S-HU2L4PX10.8.8P-2Q**Electrical Specifications (698-960/1710-2690 MHz)**

Frequency Range (MHz):	698-960(R1,R2)			1710-2690(Y1,Y3)			1710-2690(Y2,Y4)		
	698-806	806-880	880-960	1710 -2170	2300 -2490	2490 -2690	1710 -2170	2300 -2490	2490 -2690
Gain (dBi):	14.0 ±0.5	14.5 ±0.7	14.8 ±0.7	16.0 ±0.8	16.2 ±0.5	16.5 ±0.8	16.0 ±0.8	16.2 ±0.5	16.5 ±0.8
Return Loss (dB):	>14 (VSWR<1.5)								
Polarization:	±45°								
Horizontal 3dB Beamwidth (°):	67	62	59	68	65	62	68	65	62
Vertical 3dB Beamwidth (°):	10.3	9.3	8.6	9.5	7.0	6.0	9.5	7.0	6.0
Electrical Downtilt (°):	2-12 Independently Continuously Adjustable								
Front to Back Ratio @180±30° (dB):	25	25	25	25	25	25	25	25	25
1 st Upper Sidelobe Suppression (dB):	15	15	15	15	15	15	15	15	15
Cross Polar Ratio 0° (dB):	15	15	15	15	15	15	15	15	15
Intraband Isolation (dB):	>25								
Interband Isolation (dB):	>25								
Max. Power Per Port (W):	250			200					
Intermodulation IM3 (dBc):	<-153 (2×43dBm)								
Impedance (ohm):	50								
Lightning Protection:	DC Grounded								
Connector Type:	12x4.3-10 Female								

Mechanical Data

Antenna Dimensions (mm):	2195×498×197
Packing Dimensions (mm):	2455×580×285
Antenna Net Weight/Bracket (kg):	40/5.9
Antenna Gross Weight (kg):	52
Radome Material:	Fiberglass
Pipe OD (mm):	50-115
Mounting Kits (Included):	BA.K.04.00069341, Adjustable Downtilt 0°-14°

Environmental Ratings

Humidity:	95%RH@+30°C
Temperature (°C):	-40~+70
Wind Load @150 km/h (N):	Frontal/Lateral/Rearside:1423/255/1444
Max. Wind velocity (km/h) :	200

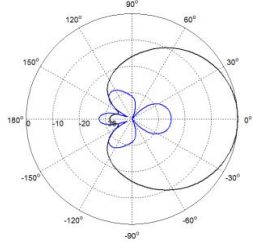
Internal RET Specifications

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)

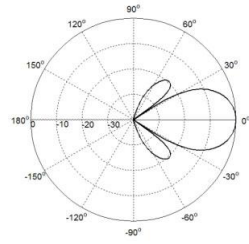


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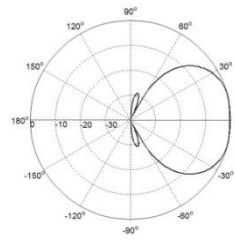
Typical Patterns



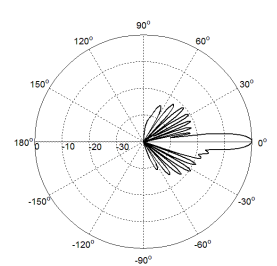
Single Column



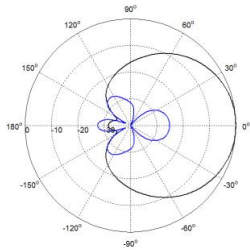
Service Beam @0deg



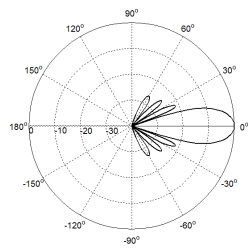
Broadcast Beam



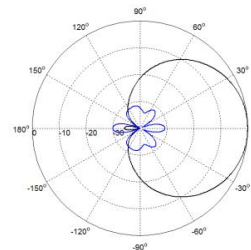
Elevation



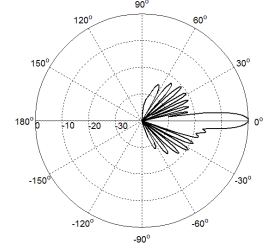
Azimuth(698-960MHz)



Elevation(698-960MHz)



Azimuth(1710-2690MHz)



Elevation(1710-2690MHz)

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
1710-2690 MHz	Y1	5-6	BRxxx.....3Y1
1710-2690 MHz	Y2	7-8	BRxxx.....4Y2
1710-2690 MHz	Y3	9-10	BRxxx.....5Y3
1710-2690 MHz	Y4	11-12	BRxxx.....6Y4
2300-2690 MHz	Y5	1xMQ5,1xMQ4	BRxxx.....7Y5

