

S-HPX0411P-2Q

X Pol Panel TD Antenna 2300-2690MHz 90° 16dBi 2°-12° Replaceable RET

General Electrical Properties			
General Parameters	Frequency Range (MHz)	2300-2400(Y1)	2500-2690(Y1)
	Polarization	±45	
	Electrical Downtilt (°)	2-12 , continuously adjustable	
	Grounding	DC Grounded	
Calibration and Electrical Parameters	Coupling Factor between calibration port and each antenna port (dB)	-26±2	
	Max Amp/Phase Deviation:	≤0.8/ 7°	
	VSWR:	≤1.5	
	Co-polarization isolation between ports (dB):	≥20	
	Cross-polarization isolation between ports (dB) :	≥25	
	Avg. power per input(W)	≥50	

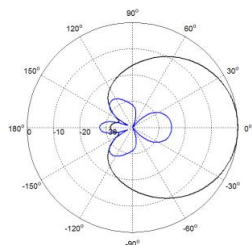
Beamforming Electrical Properties				
Radiation parameters	Frequency Range (MHz)		2300-2400(Y1)	2500-2690(Y1)
	Single Column	Horizontal 3dB Beamwidth (°):	80±20	72±15
		Gain(dBi):	15.2±1.0	15.4±1.0
		Vertical 3dB Beamwidth (°):	5.9	5.2
		Cross Polar Ratio 0° (dB):	≥17	≥17
		Front to Back Ratio (dB):	≥22	≥22
		First upper Side lobe suppression (dB)	≥14	≥14
	Broadcast Beam	Gain(dBi):	20.8±0.8	21.0±0.8
		Horizontal 3dB Beamwidth (°):	65±15	65±15
		Vertical 3dB Beamwidth (°):	5.9	5.3
		Front to Back Ratio (dB):	≥26	≥26
		First upper Side lobe suppression (dB)	≥15	≥15
	Service Beam @ 0deg	Gain(dBi):	20.8±1.0	21.0±1.0
		Horizontal 3dB Beamwidth (°):	22	20
		Horizontal sidelobe level (°):	≤-11	≤-11
		Cross Polar Ratio 0° (dB):	≥20	≥20
		Front to Back Ratio (dB):	≥25	≥25
	Service Beam@ ±60deg	Gain(dBi):	16.8±0.5	17.5±0.5
		Horizontal 3dB Beamwidth (°):	26	24
		Horizontal sidelobe level (°):	≤0	≤0

Mechanical Data

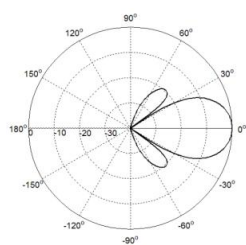
Antenna Dimensions (mm):	1500×320×140
Packing Dimensions (mm):	1760×405×230
Antenna Net Weight /Bracket (kg):	19 / 5.9
Antenna Gross Weight (kg):	29
Connector Type:	1×MQ4, 1×MQ5
Radome Material:	Fiberglass
Pipe OD (mm):	50-115
Mounting Kits (Included):	BA.K.04.00069351, Adjustable Downtilt 0°-16°
Humidity:	95%RH@+30℃
Temperature (℃):	-40~+70
Wind Load @150 km/h (N):	Frontal/Lateral/Rear side: 549/146/747
Max. Wind velocity (km/h)	200

**Internal RET Specifications**

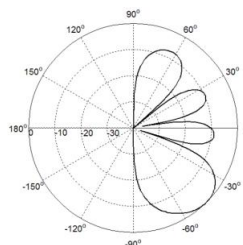
RET Type:	Replaceable RET
RET protocol:	AISG 2.0 /3 GPP
Input voltage range(V):	10-30 DC
Power consumption(W):	< 5 (motor activated ,single RET) < 1 (stand by, single RET), < 1.5 (stand by, 12V)
Adjustment time (full range) (s):	< 120 (typically, depending on antenna type)
RET connector:	1 pair of AISG 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

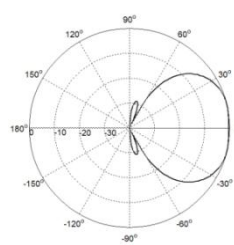
Single Column



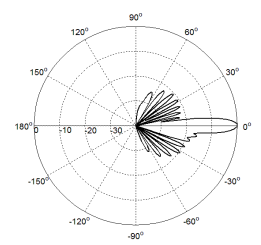
Service Beam @0deg



Service Beam @60deg



Broadcast Beam



Elevation

Correlation Table

Frequency Range	Array	Connector
2300-2690MHz	Y1	1×MQ4, 1×MQ5

