

## TF-A2JZ22-F2A Data Sheet v0.1

FDD:XXX Pol,698-960/1710-2690/1710-2690MHz

TDD:XXXX Pol,3300-3800MHz

FDD:65/65/65 Horizontal beamwidth,14.0/18.0/18.0dBi TDD:90/16dBi

E-Tilt,FDD: 2-12/2-12/2-12;TDD: 2-12

1.5m 15-Port 1L2M+TDD Antenna with Integrated RCU

## Electrical Properties(BASTA 11.1)

General Parameter	Frequency Band(MHz)	3300-3800(P1)		
		3300-3600	3600-3800	
	Polarization(°)	±45		
	Electrical Downtilt (°)	2~12		
	Impedance (Ω)	50		
Calibration and Electrical Parameters	Amplitude Coupling (dB)	-26±2		
	Coupled Amplitude Variation (dB)	0.9		
	Coupled Phase Variation (°)	8		
	VSWR	< 1.5		
	Intraband Isolation (dB)	≥20(2-4°);≥25(5-12°)		
	Cross polar Isolation (dB)	≥22		
	Input Power, Average (W)	80		
Radiation parameters	Single column Beam	Gain (dBi)	14.0±0.5	14.6±0.6
		Horizontal 3dB Beamwidth (°)	87±15	83±15
		Vertical 3dB Beam Width(°)	5.5±0.5	5.0±0.5
		Cross Polar Ratio at 0° (dB)	15	15
		Cross Polar Ratio Sector ±60° (dB)	8	8
		Front to Back Ratio at 180±30° (dB)	25	25
	Broadcast Beam	±32.5°Sector Power Ratio(%)	72±7	72±7
		±60°Sector Power Ratio(%)	> 90	> 90
		Gain (dBi)	15.5±0.5	16.2±0.6
		Vertical 3dB Beamwidth (°)	5.5±0.5	5.0±0.5
		Front to Back Ratio at 180±30°(dB)	25	25
		Upper Sidelobe Suppression (dB)	14	14
	Service Beam	0° Service Beam Gain Over All Tilts(dBi)	19.5±0.5	19.6±0.6
		0° Service Beam Horizontal 3dB Beamwidth(°)	24±2	22±2
		0° Service Beam Sidelobe Suppression(dB)	12	12
		0° Service Beam Cross Polar Ratio at 0°(dB)	18	18
		0° Service Beam Front to Back Ratio at 180±30°(dB)	27	27
		±60° Service Beam Gain(dBi)	18.0±0.5	18.6±0.5

## Electrical Properties(BASTA 11.1)

Frequency Band(MHz)	698-960(R1)			1710-2690(Y1,Y2)			
	698-803	790-894	880-960	1710-1990	1920-2200	2300-2400	2490-2690
Polarization	±45°						
Gain(dBi)	13.7±0.5	14.0±0.5	14.2±0.5	16.2±0.5	16.5±0.5	16.8±0.5	17.3±0.5
Horizontal 3dB Beam Width(°)	68±6	67±6	67±6	71±6	69±6	68±6	61±5
Vertical 3dB Beam Width(°)	14.5±1.5	13.5±1.2	13.0±1.0	7.5±0.6	6.9±0.6	6.0±0.3	5.5±0.3
Front to Back Ratio at 180±30°(dB)	23			25			
Cross Polar Ratio at 0°(dB)	20			20			
Cross Polar Ratio Sector ±60°(dB)	8			8			
1st Upper Sidelobe Suppression(dB)	15			15			
Electrical Downtilt(°)	2~12			2~12			
VSWR	< 1.5						
Cross-polar Isolation(dB)	> 25			> 25			
Interband Isolation(dB)	R1//Y1,Y2 > 28						
3rd Order PIM(dBc) @2 x 43 dBm	< -150						
Impedance(Ω)	50						
Power Handling(W)	300			200			

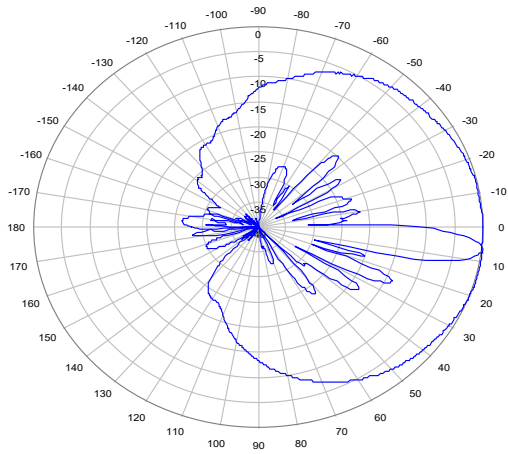
## Mechanical Specifications

Antenna Dimensions (HxWxD) (mm)	1495 x 350 x 200
Packing Dimensions (HxWxD) (mm)	1710 x 420 x 280
Antenna Weight (kg)	20
Packed Weight (kg)	32
Connector	6 x 4.3-10 Female + MQ4 + MQ5
Radome Material	Fiberglass
Wind Load at 150 km/h(N) (Front /Rear/Side)	681/660/220
Maximum Wind Speed(km/h)	241
Diameter of Installation Pole(mm)	Φ50-Φ114
Operating Temperature Range(°C)	-40+65
Lightning Protection	DC Ground
RET Type	Integrated RCU
RET Protocols	AISG 2.0/3GPP

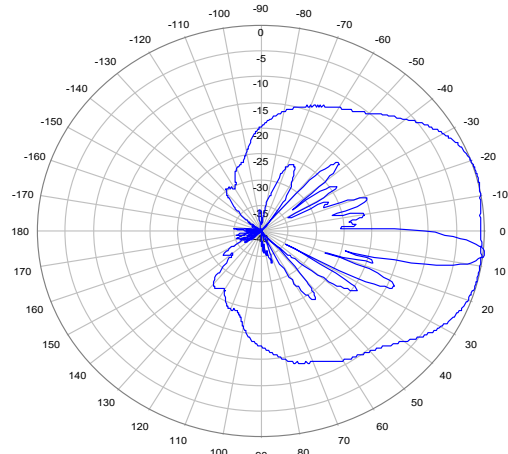


Pattern sample for reference

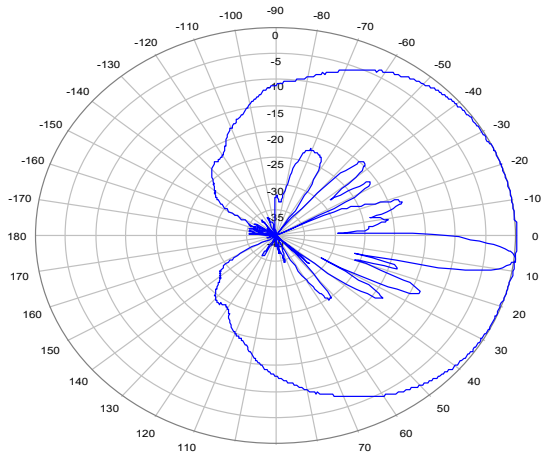
698-960MHz



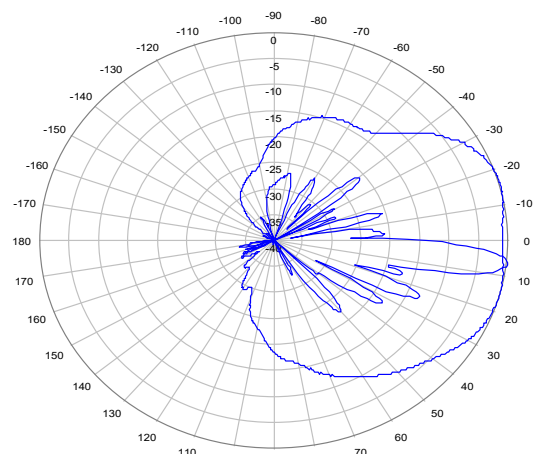
1710-2690MHz



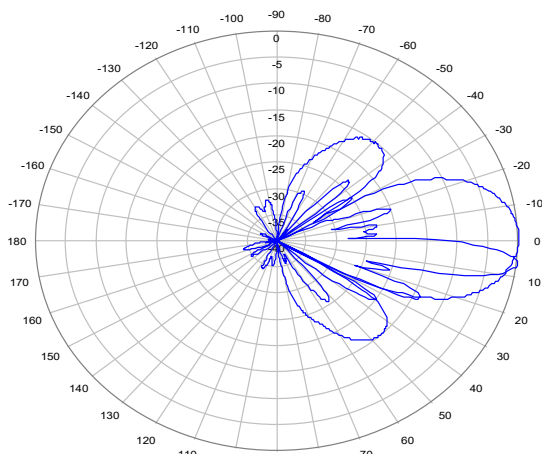
3300-3800Mhz Single Column Beam



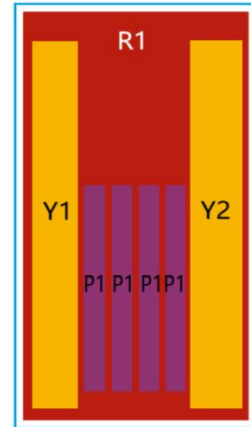
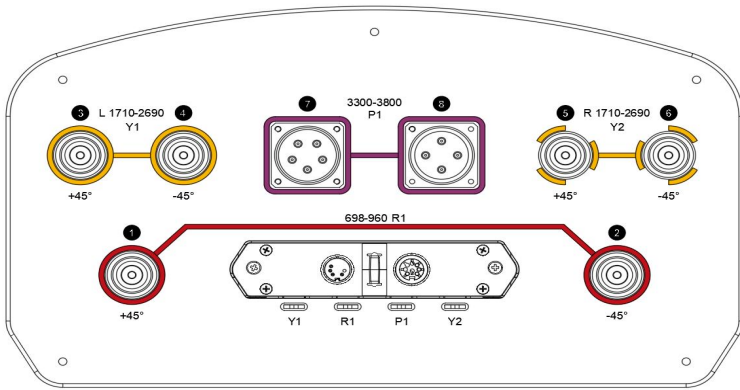
3300-3800Mhz BroadCast Beam



3300-3800Mhz 0° Sercice Beam



Layout of interface



Array ID	RF Connector	RET (S RET)	Frequency (MHz)	AISG RET UID
R1	1-2	1	698-960	MKxxxxxxxxxxxxxxxxR1
Y1	3-4	2	1710-2690	MKxxxxxxxxxxxxxxxxY1
Y2	5-6	3	1710-2690	MKxxxxxxxxxxxxxxxxY2
P1	7-8	4	3300-3800	MKxxxxxxxxxxxxxxxxP1

\* For more information, please refer to the specification of RET.

Accessories

Item	Item	Weight	Mechanical Tilt Range	Quantity
Mounting Kit	MJM-022-1101A	5.5kg	0-10°	1