

X Pol Panel TD Antenna 3300-3800MHz 65° 13.5dBi 2°-12° Replaceable RET

XXXXXX Pol 2×698-960/4×1710-2690MHz 65°/65° 12/13dBi 3°/3° FET

## Electrical Specifications (3300-3800MHz)

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General Parameters	Frequency range (MHz):	3300-3800(P1)	
	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):	40	
	Isolation (dB):	>20	
Radiation parameters	Single Column	Horizontal 3dB Beamwidth (°):	70±10
		Vertical 3dB Beamwidth (°):	9.5
		Front to Back Ratio (dB):	23
		Gain (dBi):	13.2±0.5
		Cross polar ratio (dB):	>15 (0°)/>8 (±60°)
	Broadcast Beam	Horizontal 3dB Beamwidth (°):	65±10
		Gain (dBi):	14.7±0.5
		Front to Back Ratio (dB):	25
		Vertical 3dB Beamwidth (°):	9.5
		Cross polar ratio (dB):	>15 (0°)/>8 (±60°)
	Service Beam @ 0deg	Gain (dBi):	18.2±0.5
		Horizontal 3dB Beamwidth (°):	20
		Horizontal Sidelobe Level (dB):	<-12
		Cross polar ratio (0°) (dB):	15
		Front to Back Ratio (dB):	25

**Electrical Specifications (698-960/1710-2690 MHz)**

Frequency Range (MHz):	698-960(R1,R2)			1710-2690(Y1,Y2,Y3,Y4)		
	698-806	806-880	880-960	1710-2170	2300-2490	2490-2690
Gain (dBi):	11.0±0.6	11.0±0.5	11.3±0.8	11.3±0.6	12.5±0.5	13.0±0.5
Return Loss (dB):	>14 (VSWR<1.5)					
Polarization:	±45°					
Horizontal 3dB beamwidth (°):	64	67	70	65	62	58
Vertical 3dB beamwidth (°):	28	24	22	25	22	20
1 <sup>st</sup> Upper Sidelobe Suppression(dB):	>11	>11	>11	>12	>12	>12
Front to Back Ratio(dB):	>23	>25	>23	>25	>26	>24
Electrical Downtilt (°):	3 Fixed					
Polarization Isolation (dB):	>23					
Interband Isolation (dB):	>23					
Max. Power Per Port (W):	150			100		
Intermodulation IM3 (dBc):	<-150 (2×43dBm)					
Impedance (ohm):	50					
Lightning Protection:	DC Grounded					
Connector Type:	12x4.3-10 Female					

**BASTA Electrical Specifications**

Frequency Range(MHz):	698-960(R1,R2)			1710-2690(Y1,Y2,Y3,Y4)			3300-3800(P1)
	698-806	806-880	880-960	1710-2170	2300-2490	2490-2690	
Average Gain by all Beam Tilts (dBi):	10.9	11.2	11.0	12.0	12.8	12.9	13.5
Gain by all Beam Tilts Tolerance(dB):	±0.4	±0.6	±0.3	±0.7	±0.7	±0.7	±0.6
Average Gain by Beam Tilt (dBi):	3° 10.9	3° 11.2	3° 11.0	3° 12.0	3° 12.8	3° 12.9	2° 13.5 7° 13.6 12° 13.5
Horizontal Beamwidth Tolerance(°):	±9.0	±13.0	±12.8	±8.0	±7.7	±8.7	±6.8
Vertical Beamwidth Tolerance(°):	±2.1	±1.7	±1.0	±2.8	±3.6	±4.2	±1.0
1st Upper Sidelobe Suppression (dB) :	15.0	10.0	11.0	13.7	14.2	12.5	11.5
Front to back Total Power at 180° ± 30°(dB):	22.0	24.0	22.0	24.0	24.0	23.0	23.0
CPR at Boresight(dB):	15	16	16	18.8	19.0	17.3	17.5

**Mechanical Data**

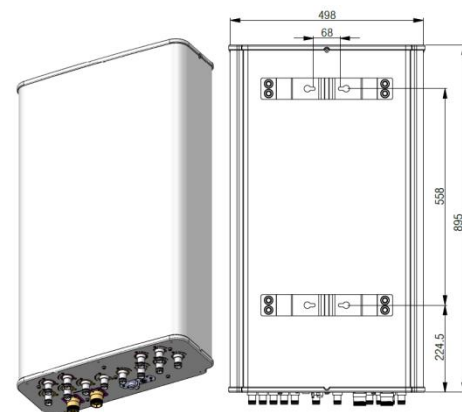
Antenna Dimensions (mm):	895×498×197
Packing Dimensions (mm):	1155×580×285
Antenna Net Weight/Bracket (kg):	18/5.9
Antenna Gross Weight (kg):	27.5
Radome Material:	Fiberglass
Pipe OD (mm):	50-115
Mounting Kits (Included):	BA.K.04.00069381, Adjustable Downtilt 0°-30°

**Environmental Ratings**

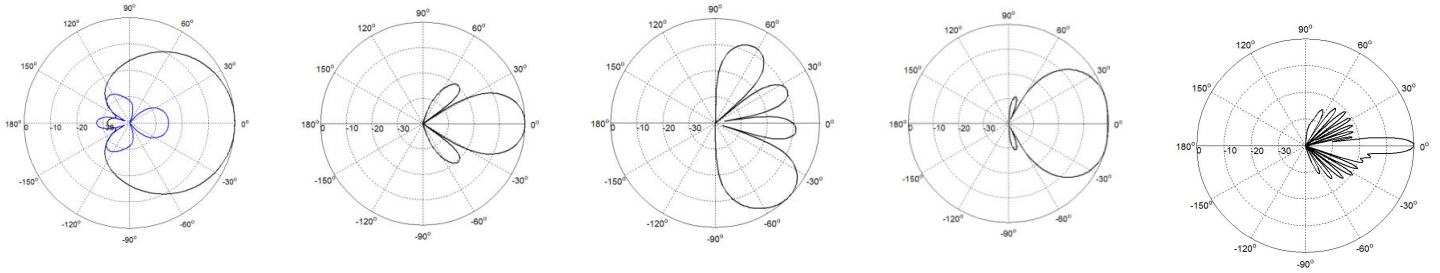
Humidity:	95%RH@+30°C
Temperature (°C):	-40~+70
Wind Load @150 km/h (N):	Frontal/Lateral/Rearside: 558/100/566
Max. Wind velocity (km/h) :	200

**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



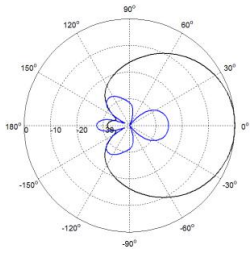
Single Column

Service Beam @0deg

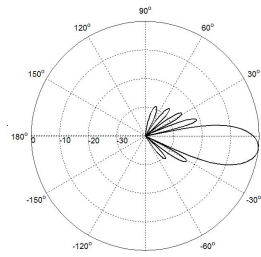
Service Beam @60deg

Broadcast Beam

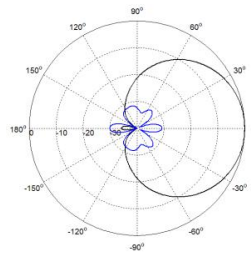
Elevation



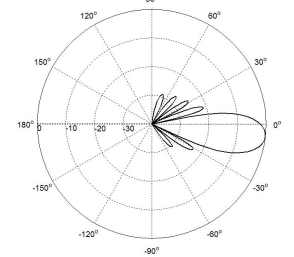
Azimuth(698-960MHz)



Elevation(698-960MHz)



Azimuth(1710-2690MHz)



Elevation(1710-2690MHz)

## Bottom View



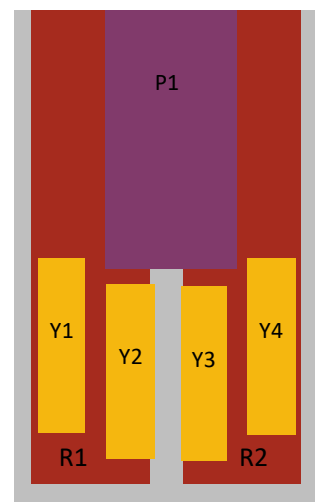
# S-VU2L4PX7.3.3PF3-2C

## Correlation Table

Frequency Range	Array	Connector	RET
698–960 MHz	R1	1-2	/
698–960 MHz	R2	3-4	/
1710–2690 MHz	Y1	5-6	/
1710–2690 MHz	Y2	7-8	/
1710–2690 MHz	Y3	9-10	/
1710–2690 MHz	Y4	11-12	/
3300-3800 MHz	P1	1xMQ5,1xMQ4	BRxxx……P1

## MQ4/MQ5 Port Mapping

Connector	Pin	Frequency Range	Polarization/Port
MQ5	1	3300-3800 MHz	+45
	2	3300-3800 MHz	+45
	3	3300-3800 MHz	+45
	4	3300-3800 MHz	+45
	5	3300-3800 MHz	Calibration port
MQ4	1	3300-3800 MHz	-45
	2	3300-3800 MHz	-45
	3	3300-3800 MHz	-45
	4	3300-3800 MHz	-45



**Broadcast Beam Weight Value for Reference**

		MQ5-P1/MQ4-P1	MQ5-P2/MQ4-P2	MQ5-P3/MQ4-P3	MQ5-P4/MQ4-P4
2C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	-30	0	-40
3C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	-26	0	-36
4C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	-22	0	-32
5C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	-18	0	-28
6C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	-14	0	-24
7C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	-10	0	-20
8C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	-6	0	-16
9C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	-2	0	-12
10C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	2	0	-8
11C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	6	0	-4
12C(3300-3800MHz)	Amp[li]	0.31	1	0.63	0.1
	Phase	170	10	0	0