

FDD 8T8R Beamforming

Model: EHST102A



ELECTRICAL SPECIFICATIONS

Frequency Range (MHz)	R1/R2 (698-960)			Y1/Y2/Y3/Y4 (1695-2690)			
	698-824	791-894	880-960	1695-1990	1920-2180	2300-2400	2490-2690
Polarization	$\pm 45^\circ$						
Gain over all tilts (dBi)	15.0 $\pm$ 0.7	15.8 $\pm$ 0.6	16.2 $\pm$ 0.6	17.2 $\pm$ 0.8	17.6 $\pm$ 0.8	17.9 $\pm$ 0.8	18.2 $\pm$ 1
Horizontal 3dB beam width($^\circ$)	68 $\pm$ 6	66 $\pm$ 7	60 $\pm$ 7	69 $\pm$ 7	67 $\pm$ 6	64 $\pm$ 6	61 $\pm$ 9
Vertical 3dB beam width($^\circ$)	10.7 $\pm$ 1.0	10.1 $\pm$ 0.9	9.6 $\pm$ 1.0	5.9 $\pm$ 0.9	5.4 $\pm$ 0.8	4.9 $\pm$ 0.8	4.5 $\pm$ 0.8
Front to back ratio(dB)	≥ 22	≥ 23	≥ 25	≥ 24	≥ 24	≥ 25	≥ 25
Cross polar ratio(0 $^\circ$)(dB)	≥ 15	≥ 15	≥ 15	≥ 15	≥ 15	≥ 15	≥ 15
Upper side lobe suppression (dB)	≥ 15	≥ 16	≥ 15	≥ 15	≥ 16	≥ 16	≥ 15
Electrical Downtilt ($^\circ$)	2-12						
Electrical Downtilt accuracy ($^\circ$)	± 1						
Ports VSWR	≤ 1.5						
Isolation: intra-system (dB)	≥ 25						
Isolation: inter-system (dB)	≥ 25						
Intermodulation IM3 (2 $\times$ 43dBm)	≤ -153 dBc						
Impedance (Ω)	50						
Max Input Power (W)	1200						

MECHANICAL SPECIFICATIONS

Connector(s)	12 $\times$ 4.3-10 female+CAL port female
Connector position	Bottom
Antenna Dimensions (mm)	2300 $\times$ 500 $\times$ 158
Packing Dimensions (mm)	2590 $\times$ 560 $\times$ 200
Mechanical Downtilt kits ($^\circ$)	0-12
Radome Color	light gray
Radome Material	Fiberglass
Antenna weight (kg)	≤ 43
Packing weight (kg)	≤ 50
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	2043/2362/302N
Operating temperature ($^\circ$ C)	-40 ~ +60
Maximum Wind Speed(km/h)	200
Mounting Pipe Diameter (mm)	$\Phi 50 \sim \Phi 115$



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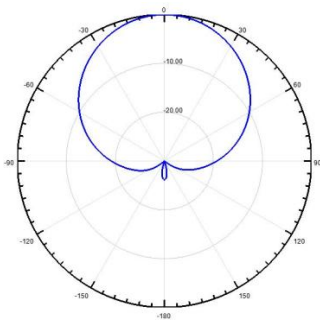
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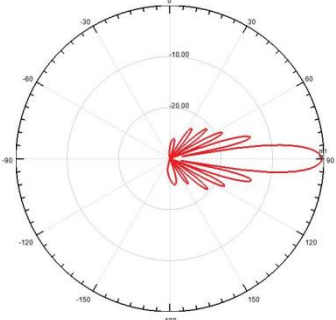
Integrated RET Properties

RET type	Replaceable Integrated RET
RET protocol	AISG 2.0/3GPP
Power supply(V)	10-30 DC
Power consumption(W)	≤0.6(Idle,12V), ≤6(in Motion,12V)
Adjustment time (Full Range)	≤4Mins
Adjustment cycles	> 50,000
Temperature range(°C)	-40~65
Lightning protection	3KA(8/20μs) @ Pin5& Pin3; 5KA(8/20μs) @ Pin1/ Pin6& Pin7
Connectors	2 x 8 Pin circle connector according To IEC 60130- 9 And AISG.Daisy chain in:Male,Daisychain out :Female Pin1:12V;Pin3:RS485B;Pin5:RS485A;Pin6:10- 30V; Pin7:GND; Pin2 &Pin4 & Pin8:N/C

Pattern



H Pattern



E Pattern

