



TYDA-233815DEI4

XXPol 2300~2690MHz/3300~3800MHz 90°/65° 16.0/16.3dBi 2°~12°/2°~12° Integrated and replaceable RCU
(Remote Control Unit) Antenna

Electrical specifications-TDD			
General parameters	Frequency range(MHz)	2300~2690	3300~3800
	Polarization	±45°	
	Electrical downtilt(°)	2~12	
	Electrical downtilt tolerance(°)	±1	
Calibration and electrical parameters	Coupling factor between calibration port and each antenna port(dB)	-26±2	
	Max.amplitude tolerance from calibration port to input ports(dB)	≤0.9	
	Max.phase tolerance from calibration port to input ports(°)	≤8	
	Ports VSWR	≤1.5	
	Co-polarization isolation between ports(dB)	>20	
	Cross-polarization isolation between ports(dB)	>22	
	Inter array spacing(mm)	58(0.48λ@2495MHz,0.68λ@3550MHz)	
Radiation parameters	Single column beam	Horizontal 3dB beam width(°)	95 ±15
		Gain(dBi)	14.3±0.9
		Vertical 3dB beam width(°)	7.6±0.6
		Cross polar ratio(0°)(dB)	>15
		Cross polar ratio(±60°)(dB)	>6
		Front to back ratio(dB)	>22
		Vertical sidelobe suppression for first sidelobe above main beam(dB)	>14
	Broadcast beam	Gain(dBi)	16.0±0.9
		SPR(±60°)(%)	≥87
		Vertical 3dB beam width(°)	7.6±0.6
		Front to back ratio(dB)	>24
		Vertical sidelobe suppression for first sidelobe above main beam(dB)	>14
	Service beam	0° direct beam gain(dBi)	19.8±0.9
		0° direct beam horizontal 3dB beam width(°)	27±4
		0° direct beam sidelobe suppression(dB)	>12
		0° direct beam cross polar ratio(axial)(dB)	>18
		0° direct beam front to back ratio(dB)	>27
		±30° direct beam gain(dBi)	17±0.8
			18.3±0.8

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Mechanical specifications

Connector	9×4.3-10-Female
Connector position	Bottom
Height × width × depth (mm)	998×270×140
Packing size (mm)	1340×365×220
Antenna weight (kg)	12.9
Installation kit weight (kg)	4.4
Packing weight (kg)	19
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	294/91/349
Max. wind velocity (km/h)	216
Radome material	Fiberglass
Radome color	Gray
Mechanical tilt (°)	0~10
Operating temperature (°C)	-50~65
Mounting hardware (mm)	Φ50~Φ115



Integrated RET properties

RET model	TRCU-TM10P1V01
RET type	Integrated (Replaceable)
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	2×8 Pin circle connector according to IEC 60130-9 and AISG. Daisy chain in:Male,Daisy chain out:Female Pin1:12V;Pin3:RS485B;Pin5:RS485A;Pin6:10-30V;Pin7:GND; Pin2 &Pin4 & Pin8:N/C



Antenna pattern sample for reference

