TONGYU

T2006L6R021

XXXXXXXXPol 698~862MHz/880~960MHz/1427~2690MHz/1710~2690MHz×5 65°/65°/65°/65° 16.5/17/18/18dBi 2°~11°/2°~11°/2°~12°/2°~12° Integrated and replaceable RCU (Remote Control Unit) Antenna

Electrical specifications

Frequency Range (MHz)	R1-698~862		R2-880~960	Y1:1427~2690				
	698~806	790~862	880~960	1427~1518	1710~1990	1920~2200	2200~2500	2500~2690
Polarization	±45°							
Gain at mid tilt (dBi)	15.9	16.3	16.7	15.6	17.0	17.2	17.6	18.0
Gain over all tilts (dBi)	15.8±0.5	16.0±0.5	16.5±0.5	15.5±0.5	16.9±0.5	17.0±0.5	17.3±0.6	17.5±0.6
Horizontal 3dB beamwidth (°)	69±1.0	69±1.0	68±1.7	73±6.2	67±5.2	63±3.2	59±4.3	60±3.8
Vertical 3dB beamwidth (°)	9.1±0.7	8.3±0.5	7.6±0.4	9.0±0.7	7.4±0.6	6.6±0.4	5.8±0.5	5.2±0.4
Front to back ratio (dB) Total power, ±30°	>22	>24	>24	＞25	＞25	＞25	＞25	＞25
Cross polar ratio (dB) (at Boresight)	>28	>28	>28	＞16	＞16	＞16	＞15	＞14
Electrical downtilt (°)	2~11		2~11	2~12				
Sidelobe suppression (dB) (First sidelobe above main beam)	>17	>16	>17	＞15	＞16	＞16	＞15	＞14
VSWR	<1.5							
Isolation: intra-system (dB)	≥25		≥25	≥25				
Isolation: inter-system (dB)	≥27		≥27	≥28				
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc							
Impedance (Ω)	50							
Max. power per input (W) @50°C	400			200				
Lightning protection	Dc Ground							

Electrical specifications

Frequency Range (MHz)	Y2/Y5/Y6: 1710~2690×3				Y3/Y4: 1710~2690×2			
	1710~1990	1920~2200	2200~2490	2490~2690	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°							
Gain at mid tilt (dBi) (Bottom)	17.0	17.2	17.8	18.2	16.9	17.1	17.7	17.5
Gain over all tilts (dBi) (Bottom)	16.9±0.5	17.0±0.5	17.7±0.6	17.7±0.6	16.8±0.5	16.9±0.5	17.4±0.5	17.2±0.5
Gain at mid tilt (dBi) (Top)	16.5	16.7	17.3	17.7	16.4	16.6	17.2	17.0
Gain over all tilts (dBi) (Top)	16.4±0.5	16.5±0.5	17.2±0.5	17.5±0.5	16.3±0.5	16.4±0.5	17.0±0.5	16.8±0.5
Horizontal 3dB beamwidth (°)	67±6.1	63±3.7	61±3.5	61±2.7	68±3.3	67±3.8	61±7.1	66±6.6
Vertical 3dB beamwidth (°)	7.4±0.7	6.6±0.5	5.8±0.4	5.3±0.3	7.2±0.6	6.5±0.7	5.6±0.4	5.1±0.3
Front to back ratio (dB) Total power, ±30°	＞27	＞28	＞25	＞25	＞27	＞27	＞26	＞26
Cross polar ratio (dB) (at Boresight)	＞21	＞21	＞22	＞20	＞17	＞22	＞20	＞18
Electrical downtilt (°)	2~12							
Sidelobe suppression (dB) (First sidelobe above main beam)	＞18	＞18	＞19	＞18	＞18	＞18	＞18	＞18
VSWR	<1.5							
Isolation: intra-system (dB)	≥25				≥25			
Isolation: inter-system (dB)	≥28				≥27			
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc							
Impedance (Ω)	50							
Max. power per input (W) @50°C	200							
Lightning protection	Dc Ground							

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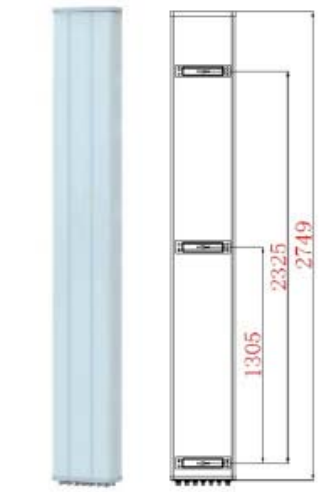
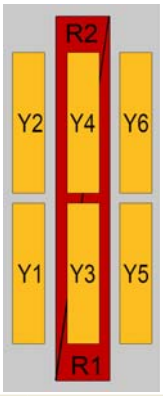
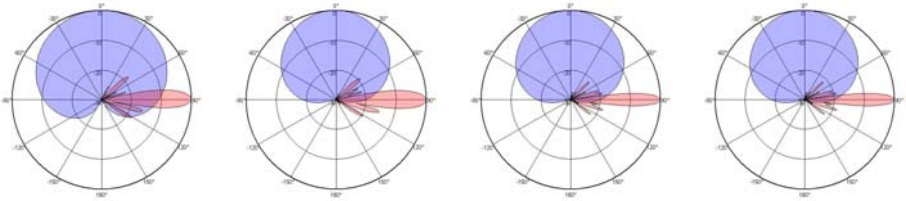
Mechanical specifications	
Connector	16×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2749×379×177
Packing size (mm)	3134×485×275
Antenna weight (kg)	52.4
Installation kit weight (kg)	8.7
Packing weight (kg)	64.1
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	1238/413/1470
Max. wind velocity (km/h)	216
Radome material	Fiberglass
Radome color	Gray
Mechanical tilt (°)	0~8
Operating temperature (℃)	-50~65
Mounting hardware (mm)	Φ50~Φ115
Integrated RET properties	
RET model	TRCU-TQ22P3V01
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 (℃)	-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





Ant Array	RET Unique ID
R1	TY00000……R1
R2	TY00000……R2
Y1	TY00000……Y1
Y2	TY00000……Y2
Y3	TY00000……Y3
Y4	TY00000……Y4
Y5	TY00000……Y5
Y6	TY00000……Y6

Antenna pattern sample for reference



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