

XXXXXXPol 698~960MHz/1710~2690MHz×5 65°/65° 17/18dBi 2°~10°/2°~12° Integrated and replaceable RCU (Remote Control Unit) Antenna

Electrical specifications								
Frequency Range (MHz)	R1:698~960				Y3: 1710~2690			
	698~806	790~862	824~894	880~960	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°				±45°			
Gain at mid tilt (dBi)	16.2	16.6	16.8	17.0	16.9	17.1	17.7	17.5
Gain over all tilts (dBi)	16.0±0.5	16.3±0.5	16.5±0.5	16.8±0.5	16.8±0.5	16.9±0.5	17.4±0.5	17.2±0.5
Horizontal 3dB beamwidth (°)	69±1.0	69±1.0	68±1.6	68±1.7	68±3.3	67±3.8	61±7.1	66±6.6
Vertical 3dB beamwidth (°)	9.1±0.7	8.3±0.5	8.0±0.5	7.6±0.4	7.2±0.6	6.5±0.7	5.6±0.4	5.1±0.3
Front to back ratio (dB) Total power, ±30°	>22	>24	>24	>24	>27	>27	>26	>26
Cross polar ratio (dB) (at Boresight)	>28	>28	>28	>28	>17	>22	>20	>18
Electrical downtilt (°)	2~10				2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>17	>16	>17	>17	>18	>17	>17	>16
VSWR	<1.5				<1.5			
Isolation: intra-system (dB)	>26				>26			
Isolation: inter-system (dB)	>26				>30			
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc				≤-150 dBc			
Impedance (Ω)	50				50			
Max. power per input (W) @50°C	400				200			
Lightning protection	DC Ground							

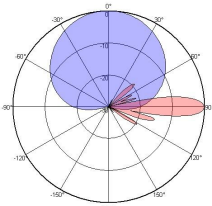
Electrical specifications				
Frequency Range (MHz)	Y1/Y2/Y4/Y5: 1710~2690×4			
	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°			
Gain at mid tilt (dBi) (Bottom)	16.8	17.0	17.6	18.0
Gain over all tilts (dBi) (Bottom)	16.7±0.5	16.8±0.5	17.5±0.5	17.8±0.5
Gain at mid tilt (dBi) (Top)	16.3	16.5	17.1	17.5
Gain over all tilts (dBi) (Top)	16.2±0.5	16.3±0.5	16.9±0.5	17.3±0.5
Horizontal 3dB beamwidth (°)	67±6.1	63±3.7	61±3.5	61±2.7
Vertical 3dB beamwidth (°)	7.4±0.7	6.6±0.5	5.8±0.4	5.3±0.3
Front to back ratio (dB) Total power, ±30°	>27	>28	>25	>25
Cross polar ratio (dB) (at Boresight)	>21	>21	>22	>20
Electrical downtilt (°)	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>18	>18	>19	>18
VSWR	<1.5			
Isolation: intra-system (dB)	>28			
Isolation: inter-system (dB)	>30			
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc			
Impedance (Ω)	50			
Max. power per input (W) @50°C	200			
Lightning protection	DC Ground			

**Mechanical specifications**

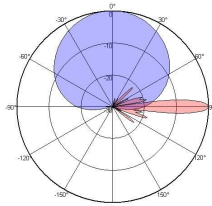
Connector	12×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2680×379×177
Packing size (mm)	3065×485×275
Antenna weight (kg)	40
Installation kit weight (kg)	5.4
Packing weight (kg)	52.1
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	1298/403/1451
Max. wind velocity (km/h)	216
Radome material	Fiberglass
Radome color	Gray
Mechanical tilt (°)	0-8
Operating temperature (°C)	-50~65
Mounting hardware (mm)	Φ50~Φ115

**Integrated RET properties**

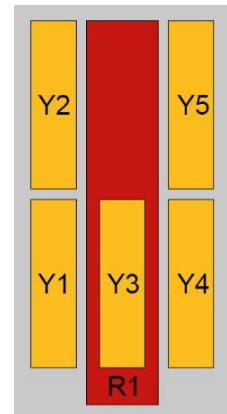
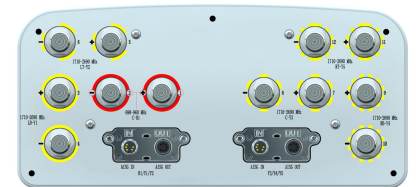
RET model	TRCU-TQ10P2V01
RET type	Integrated ,Replaceable
RET protocol	AISG 2.0 / 3GPP
Power supply(V)	10-30 DC
Power consumption(W)	≤0.6 (Idle, 12V), ≤6 (In motion, 12V)
Adjustment time (Full Range)	< 4Mins
Adjustment cycles	> 50,000
Temperature range (°C)	-40~65
Lightning protection	3KA(8/20μs) @ Pin5 & 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**


698~960 MHz



1710~2690 MHz



Ant Array	RET Unique ID
R1	TY00000.....R1
Y1	TY00000.....Y1
Y2	TY00000.....Y2
Y3	TY00000.....Y3
Y4	TY00000.....Y4
Y5	TY00000.....Y5