

XXXXXXPol 694~960MHz×2/1710~2690MHz×2/1427~2690MHz×2 65°/65°/65°  
 17/17.5/17.5dBi 2°~12°/2°~12°/2°~12° Integrated and replaceable RCU (Remote Control Unit) Antenna

**Electrical specifications**

Frequency Range (MHz)	R1/R2-694~960				Y2/Y4-1710~2690			
	694~806	790~862	824~894	880~960	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°				±45°			
Gain at mid tilt (dBi)	15.4	15.9	16.0	16.3	16.7	17.0	17.4	17.5
Gain over all tilts (dBi)	15.2±0.5	15.6±0.5	15.8±0.5	16.1±0.5	16.5±0.4	16.8±0.5	17.2±0.4	17.3±0.5
Horizontal 3dB beamwidth (°)	68±5	67±3	66±4	65±3	67±5	63±6	59±6	61±5
Vertical 3dB beamwidth (°)	8.8±0.7	8.1±0.5	7.9±0.5	7.6±0.4	7.4±0.5	6.5±0.5	6.0±0.4	5.3±0.4
Front to back ratio (dB) Total power, ±30°	>20	>21	>22	>24	>25	>26	>25	>26
Cross polar ratio (dB) (at Boresight)	>15	>15	>15	>18	>17	>18	>16	>16
Electrical downtilt (°)	2~12				2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>16	>16	>16	>17	>17	>16
VSWR	<1.5				<1.5			
Isolation: intra-system (dB)	≥25				≥25			
Isolation: inter-system (dB)	≥25 (R1//R2) ≥25 (Other)				≥28			
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc							
Impedance (Ω)	50				50			
Max. power per input (W) @50°C	400				200			
Lightning protection	Dc Ground							

**Electrical specifications**

Frequency Range (MHz)	Y1/Y3-1427~2690				
	1427~1518	1710~1920	1920~2200	2200~2490	2490~2690
Polarization	±45°				
Gain at mid tilt (dBi)	16.1	16.9	17.2	17.5	17.6
Gain over all tilts (dBi)	16±0.5	16.8±0.5	17.1±0.5	17.4±0.5	17.5±0.5
Horizontal 3dB beamwidth (°)	69±8	68±5	64±6	59±6	61±5
Vertical 3dB beamwidth (°)	8.8±0.6	7.0±0.5	6.5±0.5	6.0±0.5	5.3±0.5
Front to back ratio (dB) Total power, ±30°	>25	>25	>26	>25	>26
Cross polar ratio (dB) (at Boresight)	>16	>17	>18	>16	>16
Electrical downtilt (°)	2~12				
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>16	>16	>16
VSWR	<1.5				
Isolation: intra-system (dB)	≥25				
Isolation: inter-system (dB)	≥28				
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc				
Impedance (Ω)	50				
Max. power per input (W) @50°C	200				
Lightning protection	Dc Ground				

**Mechanical specifications**

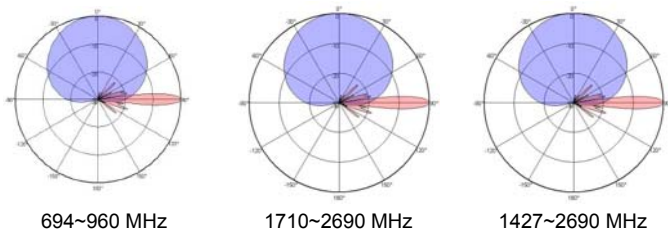
Connector	12×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2680×379×177
Packing size (mm)	3120×485×275
Antenna weight (kg)	46
Installation kit weight (kg)	8.8
Packing weight (kg)	61.6
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	864/225/965
Max. wind velocity (km/h)	216
Radome 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-TQ20P3V01
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**



Ant Array	RET Unique ID
R1	TY00000.....R1
R2	TY00000.....R2
Y1	TY00000.....Y1
Y2	TY00000.....Y2
Y3	TY00000.....Y3
Y4	TY00000.....Y4