

XXXXXXPol 698~960MHz×2/1710~2690MHz×2/1710~2690MHz×2 65°/65°/65° 16.8/17.5/17.2dBi 2°~12°/2°~12°/2°~12° Integrated and replaceable RCU (Remote Control Unit) Antenna

Electrical Specifications				
Frequency range (MHz)	R1/R2-698~960			
	698~803	790~862	824~894	880~960
Polarization	±45°			
Gain at mid tilt (dBi)	16.0	16.2	16.5	16.8
Gain over all tilts (dBi)	15.8±0.4	16.0±0.4	16.2±0.4	16.6±0.4
Horizontal 3dB beamwidth (°)	69±6	67±5	64±5	63±5
Vertical 3dB beamwidth (°)	9.0±0.8	8.6±0.6	7.9±0.5	7.5±0.4
Front to back ratio (dB)	>23	>23	>24	>25
Total power, ±30°				
Cross polar ratio (dB) (at Boresight)	>16	>17	>17	>18
Electrical downtilt (°)	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>16	>17
VSWR	<1.5			
Isolation: intra-system (dB)	≥25			
Isolation: inter-system (dB)	R1//R2≥25 R1,R2//Others≥28			
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc			
Impedance (Ω)	50			
Max. power per input (W) @50°C	400			
Lightning protection	Dc Ground			

Electrical Specifications								
Frequency Range (MHz)	Y1/Y3-1710~2690				Y2/Y4-1710~2690			
	1710~1920	1920~2200	2200~2490	2490~2690	1710~1920	1920~2200	2200~2490	2490~2690
Polarization	±45°							
Gain at mid tilt (dBi) (Bottom)	16.7	17.1	17.5	17.3				
Gain over all tilts (dBi) (Bottom)	16.5±0.5	16.9±0.5	17.3±0.6	17.1±0.5				
Gain at mid tilt (dBi) (Top)					16.4	16.8	17.3	17.1
Gain over all tilts (dBi) (Top)					16.2±0.5	16.6±0.5	17.1±0.4	16.9±0.6
Horizontal 3dB beamwidth (°)	66±5	63±5	62±5	60±5	66±5	63±6	62±6	60±5
Vertical 3dB beamwidth (°)	7.2±0.5	6.4±0.5	5.8±0.5	5.1±0.4	7.2±0.5	6.4±0.5	5.8±0.4	5.1±0.4
Front to back ratio (dB)	>28	>28	>28	>26	>28	>28	>28	>26
Total power, ±30°								
Cross polar ratio (dB)	>17	>18	>16	>16	>17	>18	>16	>16
(at Boresight)								
Electrical downtilt (°)	2~12				2~12			
Sidelobe suppression (dB)	>17	>17	>16	>16	>17	>17	>16	>16
(First sidelobe above main beam)								
VSWR	<1.5				<1.5			
Isolation: intra-system (dB)	≥25				≥25			
Isolation: inter-system (dB)	≥28				≥28			
Intermodulation IM3	≤-153 dBc							
(2×43dBm carrier)								
Impedance (Ω)								
Max. power per input (W) @50°C								
Lightning protection								
	Dc Ground							

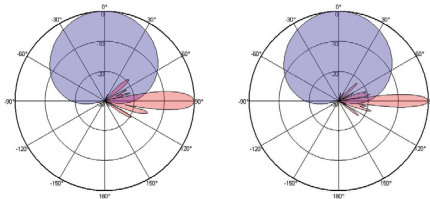
Mechanical Specifications

Connector	12×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2680×446×165
Packing size (mm)	2925×510×215
Antenna weight (kg)	39.3
Installation kit weight (kg)	8.8
Packing weight (kg)	57.1
Wind load (N,at 150km/h) Frontal/Lateral/Maximum	1440/375/1609
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



698~960MHz

1710~2690MHz



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