

**XXXXXXXXPoI**
**698~862MHz/880~960MHz/698~960MHz/1710~2690MHz×2/1710~2690MHz×2**
**65°/65°/65°/65°/65° 15.6/16.6/16.6/17.7/17.5dBi 2°~12°/2°~12°/2°~12°/2°~12°/2°~12°**
**Integrated and replaceable RCU (Remote Control Unit) Antenna,with Combiner Integrated**
**Electrical specifications**

Frequency Range (MHz)	R1 -698~862		R2 -880~960	R3 -698~960			
	698~803	790~862	880~960	698~803	790~862	824~894	880~960
Polarization	±45°						
Gain at mid tilt (dBi)	15.3	15.4	16.4	15.6	15.7	16.3	16.6
Gain over all tilts (dBi)	15.1±0.5	15.2±0.4	16.2±0.5	15.4±0.5	15.5±0.4	16.1±0.5	16.5±0.4
Horizontal 3dB beamwidth (°)	69±5	67±4	64±4	69±5	67±4	65±5	64±4
Vertical 3dB beamwidth (°)	8.7±0.8	8.2±0.5	7.2±0.5	8.7±0.8	8.1±0.5	7.9±0.5	7.2±0.5
Front to back ratio (dB) Total power, ±30°	>22	>24	>25	>22	>24	>24	>25
Cross polar ratio (dB) (at Boresight)	>17	>18	>16	>17	>18	>17	>16
Electrical downtilt (°)	2~12		2~12	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>16	>17	>15	>16	>16	>17
VSWR	<1.5						
Isolation: intra-system (dB)	≥25						
Isolation: inter-system (dB)	≥26						
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc						
Impedance (Ω)	50						
Max. power per input (W) @50°C	300						
Lightning protection	Dc Ground						

**Electrical specifications**

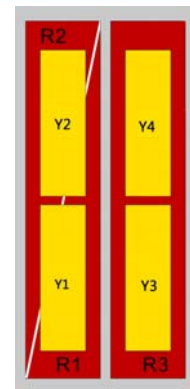
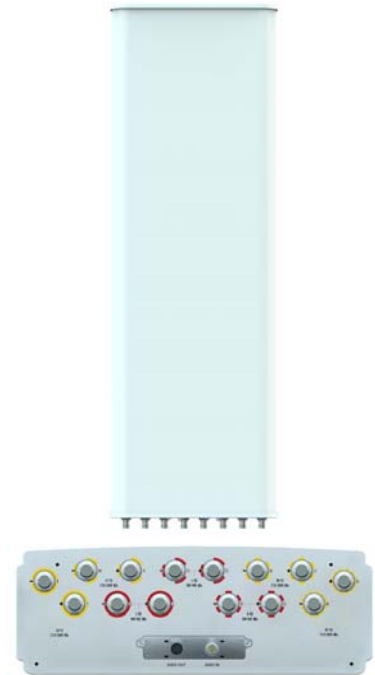
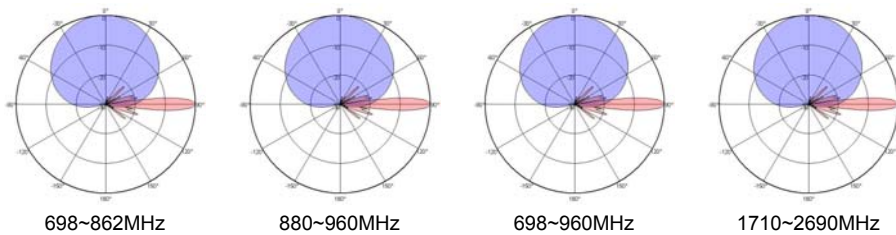
Frequency Range (MHz)	Y1/Y3-1710~2690				Y2/Y4-1710~2690			
	1710~1920	1920~2200	2200~2490	2490~2690	1710~1920	1920~2200	2200~2490	2490~2690
Polarization	±45°							
Gain at mid tilt (dBi) (Bottom)	16.8	17.2	17.7	17.3	16.7	17.2	17.5	17.1
Gain over all tilts (dBi) (Bottom)	16.6±0.5	17.0±0.5	17.5±0.6	17.2±0.5	16.5±0.5	17.0±0.5	17.3±0.5	17.0±0.5
Horizontal 3dB beamwidth (°)	68±6	64±5	59±6	61±6	67±6	65±5	59±5	60±5
Vertical 3dB beamwidth (°)	7.6±0.4	6.8±0.5	6.1±0.4	5.6±0.5	7.8±0.6	6.9±0.6	6.1±0.5	5.6±0.5
Front to back ratio (dB) Total power, ±30°	>24	>26	>25	>25	>24	>26	>25	>25
Cross polar ratio (dB) (at Boresight)	>16	>18	>17	>16	>17	>16	>16	>17
Electrical downtilt (°)	2~12				2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>17	>16	>16	>16	>17	>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	250							
Lightning protection	Dc Ground							

**Mechanical specifications**

Connector	14×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2749×499×178
Packing size (mm)	3225×620×330
Antenna weight (kg)	53
Installation kit weight (kg)	8.8
Packing weight (kg)	73
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	1472/397/1564
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
R3	TY00000.....R3
Y1	TY00000.....Y1
Y2	TY00000.....Y2
Y3	TY00000.....Y3
Y4	TY00000.....Y4