

XXXXXXPol 698~862MHz/880~960MHz/1710~2690MHz×2/1710~2690MHz×2
 65°/65°/65°/65° 16.2/16.5/17.5/17.3dBi 2°~12°/2°~12°/2°~12°/2°~12° Integrated and
 replaceable RCU (Remote Control Unit) Antenna

Electrical specifications

Frequency Range (MHz)	R1-698~862		R2-880~960
	698~806	790~862	880~960
Polarization	±45°		
Gain at mid tilt (dBi)	15.8	16.2	16.5
Gain over all tilts (dBi)	15.6±0.5	15.9±0.4	16.3±0.4
Horizontal 3dB beamwidth (°)	69±4	68±4	66±5
Vertical 3dB beamwidth (°)	9.5±0.7	8.8±0.5	7.8±0.4
Front to back ratio (dB) Total power, ±30°	>25	>25	>25
Cross polar ratio (dB) (at Boresight)	>19	>18	>17
Electrical downtilt (°)	2~12		2~12
Sidelobe suppression (dB) (First sidelobe above main beam)	>18	>18	>16
VSWR	<1.5		<1.5
Isolation: intra-system (dB)	≥25		≥25
Isolation: inter-system (dB)	≥30		≥30
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc		
Impedance (Ω)	50		
Max. power per input (W) @50°C	350		
Lightning protection	Dc Ground		

Electrical specifications

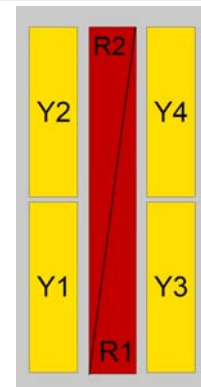
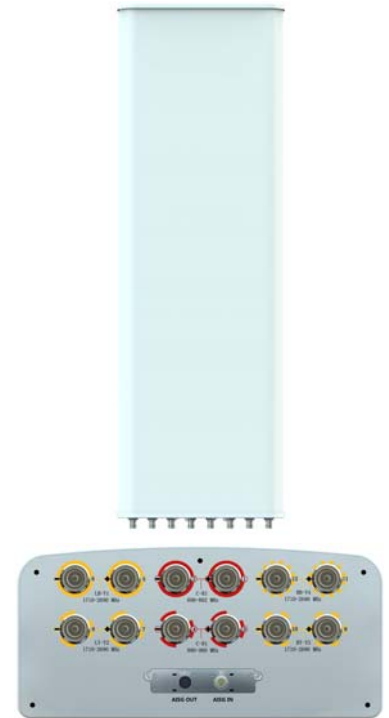
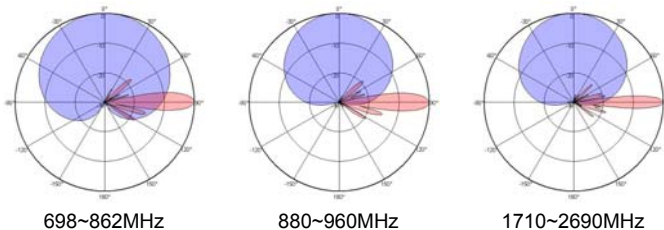
Frequency Range (MHz)	Y1/Y3 -1710-2690				Y2/Y4 -1710-2690			
	1710~1920	1920~2200	2200~2490	2490~2690	1710~1920	1920~2200	2200~2490	2490~2690
Polarization	±45°							
Gain at mid tilt (dBi)	16.7	17.0	17.2	17.5	16.4	16.8	17.0	17.2
Gain over all tilts (dBi)	16.4±0.5	16.8±0.4	17.0±0.4	17.3±0.5	16.2±0.5	16.6±0.4	16.8±0.4	17.0±0.5
Horizontal 3dB beamwidth (°)	66±6	64±5	63±5	65±4	66±6	64±5	63±5	65±4
Vertical 3dB beamwidth (°)	8±0.6	7±0.4	6.6±0.4	6.4±0.5	7.5±0.7	6.4±0.5	5.9±0.5	5.6±0.5
Front to back ratio (dB) Total power, ±30°	>27	>26	>25	>24	>27	>26	>25	>24
Cross polar ratio (dB) (at Boresight)	>20	>19	>18	>18	>20	>19	>18	>18
Electrical downtilt (°)	2~12				2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>18	>18	>17	>16	>18	>18	>17	>16
VSWR	<1.5							
Isolation: intra-system (dB)	≥25							
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)	3125×485×275
Antenna weight (kg)	43
Installation kit weight (kg)	8.7
Packing weight (kg)	58.5
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	1298/685/1451
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-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