

XXXXXXPol 698~960MHz×2/1710~2690MHz×4 65°/Dual-beam 33° 14.7/17.7dBi 2°~12°/2°~10° Integrated and replaceable RCU (Remote Control Unit) Antenna

Electrical specifications				
Frequency Range (MHz)	R1/R2-698~960×2			
	698~803	790~862	824~894	880~960
Polarization	±45°			
Gain at mid tilt (dBi)	14.2	14.4	14.6	14.7
Gain over all tilts (dBi)	14.0±0.5	14.2±0.5	14.4±0.5	14.5±0.5
Horizontal 3dB beamwidth (°)	71±6	64±5	63±5	61±5
Vertical 3dB beamwidth (°)	12.1±1.2	11.0±0.6	10.7±0.5	10.3±0.6
Front to back ratio (dB) Total power, ±30°	>22	>23	>23	>24
Cross polar ratio (dB) (at Boresight)	>15	>16	>16	>16
Electrical downtilt (°)	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15	>15
VSWR	<1.5			
Isolation: intra-system (dB)	≥25			
Isolation: inter-system (dB)	≥25 (R1//R2) ≥25 (R1,R2//Y1,Y2,Y3,Y4)			
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc			
Impedance (Ω)	50			
Max. power per input (W) @50°C	400			
Lightning protection	Dc Ground			

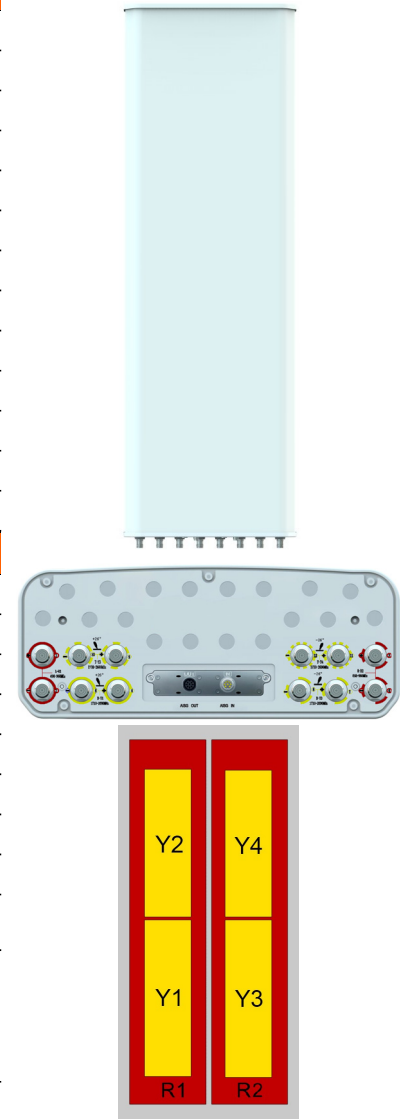
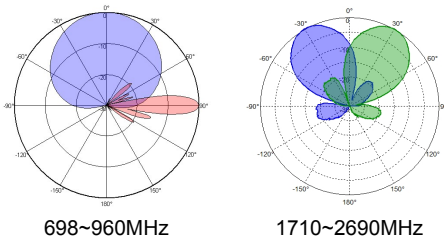
Electrical specifications				
Frequency Range (MHz)	Y1/Y2,Y3/Y4-1710~2690×4			
	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°			
Gain at mid tilt (dBi) (Bottom)	17.0	17.7	17.7	17.5
Gain over all tilts (dBi) (Bottom)	16.8±0.9	17.5±0.6	17.5±0.6	17.3±0.6
Gain at mid tilt (dBi) (Top)	16.5	17.2	17.2	17.0
Gain over all tilts (dBi) (Top)	16.3±0.9	17.0±0.6	17.0±0.6	16.8±0.6
Horizontal beam centers (°)	±27	±26	±23	±21
Horizontal 3dB beamwidth (°)	35±3	32±3	31±3	29±3
Vertical 3dB beamwidth (°)	9.5±0.6	8.3±0.6	7.5±0.4	7.0±0.5
Front to back ratio (dB) Total power, ±30°	>25	>25	>25	>25
Electrical downtilt (°)	2~10			
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15	>15
VSWR	<1.5			
Isolation: intra-system (dB)	≥25			
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)	2080×499×198
Packing size (mm)	2465×620×330
Antenna weight (kg)	40.6
Installation kit weight (kg)	5.5
Packing weight (kg)	53.6
Max. wind velocity (km/h)	216
Radome material	Fiberglass
Radome color	Gray
Mechanical tilt (°)	0-10
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


View from the front of the antenna

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