

XXXXXXPol 698~960MHz×2/1710~2690MHz×4 65°/Dual-beam 33° 16.2/19.5dBi 2°~10°/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 over all tilts (dBi)	15.5±0.6	16.0±0.5	16.2±0.4	16.1±0.5
Horizontal 3dB beamwidth (°)	70±5	64±4	62±4	60±5
Vertical 3dB beamwidth (°)	8.9±0.6	8.1±0.6	7.7±0.5	7.4±0.5
Front to back ratio (dB) Total power, ±30°	>22	>23	>23	>24
Cross polar ratio (dB) (at Boresight)	>19	>19	>19	>19
Electrical downtilt (°)	2~10			
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>15	>15
VSWR	<1.5			
Isolation: intra-system (dB)	≥25			
Isolation: inter-system (dB)	≥25 (R1//R2) ≥28 (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			

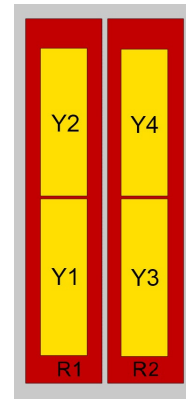
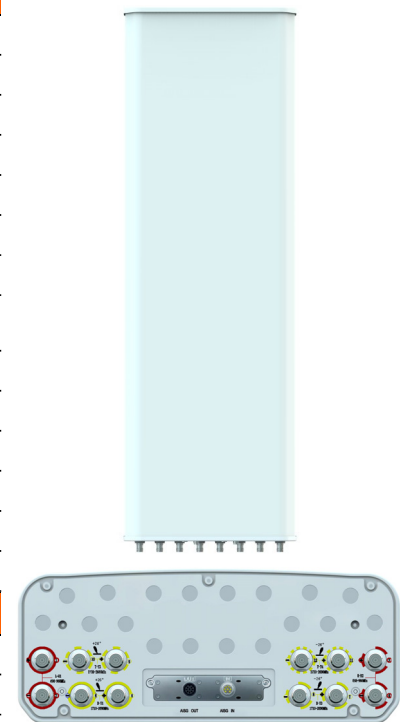
Electrical specifications				
Frequency Range (MHz)	Y1/Y2,Y3/Y4-1710~2690×4			
	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°			
Gain over all tilts (dBi) (Bottom)	18.2±0.7	19.0±0.6	19.5±0.8	18.9±0.7
Gain over all tilts (dBi) (Top)	17.7±0.7	18.5±0.6	19.0±0.6	18.4±0.7
Horizontal beam centers (°)	±27	±26	±25	±23
Horizontal 3dB beamwidth (°)	34±3	32±3	31±3	30±3
Vertical 3dB beamwidth (°)	7.0±0.6	6.2±0.6	5.5±0.5	5.0±0.5
Front to back ratio (dB) Total power, ±30°	>26	>26	>26	>26
Cross polar ratio (dB) (at Boresight)	>15	>15	>15	>15
Electrical downtilt (°)	2~10			
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>15	>15
VSWR	<1.5			
Isolation: intra-system (dB)	≥25			
Isolation: beam to beam (dB)	>15			
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)	2780×499×198
Packing size (mm)	3220×620×330
Antenna weight (kg)	50
Installation kit weight (kg)	8.7
Packing weight (kg)	68
Wind load (N, at 150km/h) Frontal/Lateral/Rearside	1540/451/1737
Max. wind velocity (km/h)	250
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



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

Antenna pattern sample for reference
