

XXXXXXPol 698~960MHz×2/1710~2690MHz×4 65°/65° 16.8/17.5dBi 2°~10°/2°~10°
 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	66±4	65±4
Vertical 3dB beamwidth (°)	9.0±0.8	8.6±0.6	8.0±0.5	7.7±0.5
Front to back ratio (dB) Total power, ±30°	>23	>23	>24	>25
Cross polar ratio (dB) (at Boresight)	>16	>17	>17	>18
Electrical downtilt (°)	2~10			
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>16	>17
VSWR	<1.5			
Isolation: intra-system (dB)	≥25			
Isolation: inter-system (dB)	≥25 (R1//R2) ≥28 (Other Ports)			
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc			
Impedance (Ω)	50			
Max. power per input (W) @50°C	400			
Lightning protection	Dc Ground			

Electrical specifications

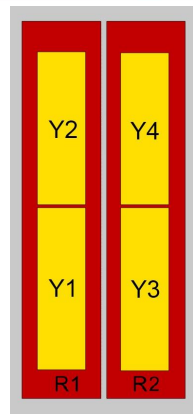
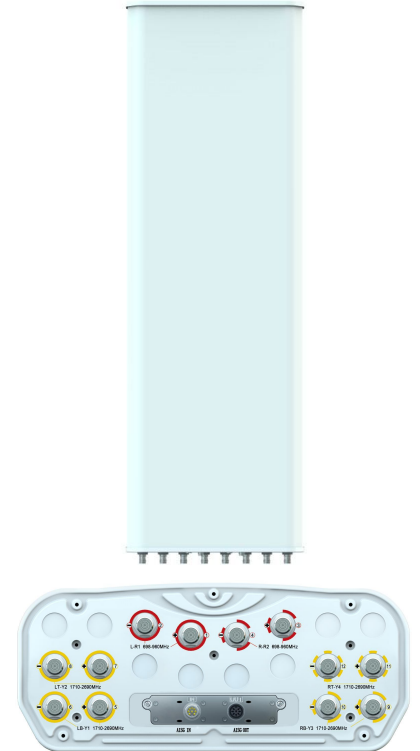
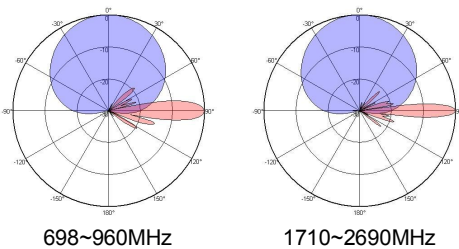
Frequency Range (MHz)	Y1/Y3-1710~2690				Y2/Y4-1710~2690			
	1710~1990	1920~2200	2200~2490	2490~2690	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°							
Gain at mid tilt (dBi) (Bottom)	16.5	16.8	17.5	17.3				
Gain over all tilts (dBi) (Bottom)	16.3±0.5	16.6±0.5	17.2±0.6	17.0±0.5				
Gain at mid tilt (dBi) (Top)					16.3	16.6	17.3	17.1
Gain over all tilts (dBi) (Top)					16.1±0.5	16.4±0.5	17.1±0.4	16.9±0.6
Horizontal 3dB beamwidth (°)	68±5	64±6	59±5	61±5	67±5	63±6	59±6	61±5
Vertical 3dB beamwidth (°)	8.2±0.5	7.3±0.5	6.5±0.5	6.0±0.5	7.0±0.5	6.3±0.5	5.5±0.4	5.0±0.4
Front to back ratio (dB) Total power, ±30°	>25	>26	>25	>26	>25	>26	>25	>26
Cross polar ratio (dB) (at Boresight)	>17	>18	>16	>16	>17	>18	>16	>16
Electrical downtilt (°)	2~10				2~10			
Sidelobe suppression (dB) (First sidelobe above main beam)	>17	>17	>16	>16	>17	>17	>16	>16
VSWR	<1.5				<1.5			
Isolation: intra-system (dB)	≥25				≥25			
Isolation: inter-system (dB)	≥28				≥28			
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)	2680×469×198
Packing size (mm)	3120×585×350
Antenna weight (kg)	48.0
Installation kit weight (kg)	8.7
Packing weight (kg)	65.3
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	1163/352/1207
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