

XXXXXXPol 694~960MHz×2/1710~2690MHz×2/1427~2690MHz×2 65°/65°/65°
 16.8/17.1/17.2dBi 2°~12°/2°~12°/2°~12° Integrated and replaceable RCU (Remote Control Unit) Antenna

Electrical specifications

Frequency Range (MHz)	R1/R2-694~960				Y2/Y4-1710~2690			
	694~806	790~862	824~894	880~960	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°				±45°			
Gain at mid tilt (dBi)	16.0	16.2	16.5	16.8	16.3	16.6	17.0	17.1
Gain over all tilts (dBi)	15.8±0.5	16.0±0.5	16.3±0.5	16.6±0.5	16.1±0.4	16.4±0.5	16.8±0.4	16.9±0.5
Horizontal 3dB beamwidth (°)	67±5	65±3	62±4	60±3	67±5	63±6	59±6	61±5
Vertical 3dB beamwidth (°)	8.8±0.7	8.1±0.5	7.9±0.5	7.6±0.4	7.4±0.5	6.5±0.5	6.0±0.4	5.3±0.4
Front to back ratio (dB) Total power, ±30°	>23	>23	>24	>25	>25	>26	>25	>26
Cross polar ratio (dB) (at Boresight)	>16	>17	>18	>19	>17	>18	>16	>16
Electrical downtilt (°)	2~12				2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>16	>16	>16	>17	>17	>16
VSWR	<1.5				<1.5			
Isolation: intra-system (dB)	≥25				≥25			
Isolation: inter-system (dB)	≥25 (R1//R2) ≥28 (Other)				≥28			
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc							
Impedance (Ω)	50				50			
Max. power per input (W) @50°C	400				200			
Lightning protection	Dc Ground							

Electrical specifications

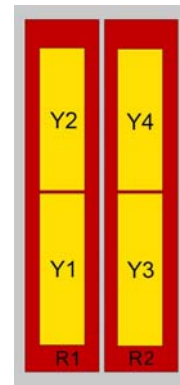
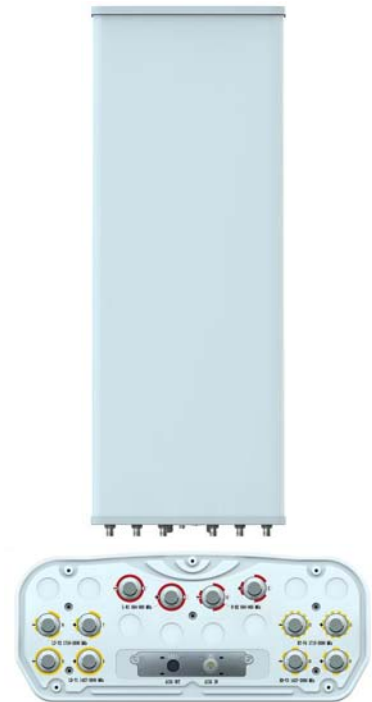
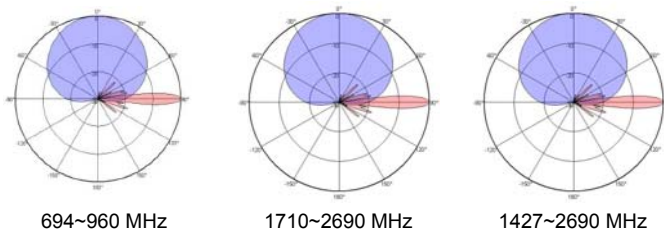
Frequency Range (MHz)	Y1/Y3-1427~2690				
	1427~1518	1710~1920	1920~2200	2200~2490	2490~2690
Polarization	±45°				
Gain at mid tilt (dBi)	15.5	16.5	16.8	17.1	17.2
Gain over all tilts (dBi)	15.3±0.5	16.3±0.5	16.6±0.5	16.9±0.5	17.0±0.5
Horizontal 3dB beamwidth (°)	69±8	68±5	64±6	59±6	61±5
Vertical 3dB beamwidth (°)	8.8±0.6	7.0±0.5	6.5±0.5	6.0±0.5	5.3±0.5
Front to back ratio (dB) Total power, ±30°	>24	>25	>26	>25	>26
Cross polar ratio (dB) (at Boresight)	>16	>17	>18	>16	>16
Electrical downtilt (°)	2~12				
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>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	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)	46
Installation kit weight (kg)	8.6
Packing weight (kg)	61.6
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