

XXXXXXXXPoI 694~960MHz×2/1710~2170MHz×2/2490~2690MHz×2/1427~2200MHz
 65°/65°/65°/65° 14.5/16.6/17.1/17.2dBi 2°~14°/2°~12°/2°~12°/2°~12° Integrated RCU
 (Remote Control Unit) Antenna

Electrical specifications

Frequency Range (MHz)	R1/R2 -694~960×2			
	694~803	790~862	824~894	880~960
Polarization	±45°			
Gain at mid tilt (dBi)	13.7	14.3	14.5	14.7
Gain over all tilts (dBi)	13.5±0.5	14.1±0.5	14.3±0.5	14.5±0.5
Horizontal 3dB beamwidth (°)	68±6	66±5	66±5	65±6
Vertical 3dB beamwidth (°)	15.8±1.5	14.3±0.8	13.8±0.5	13.3±0.8
Front to back ratio (dB) Total power, ±30°	>22	>22	>22	>24
Cross polar ratio (dB) (at Boresight)	>16	>17	>18	>18
Electrical downtilt (°)	2~14			
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(Other)			
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc			
Impedance (Ω)	50			
Max. power per input (W) @50°C	500			
Lightning protection	Dc Ground			

Electrical specifications

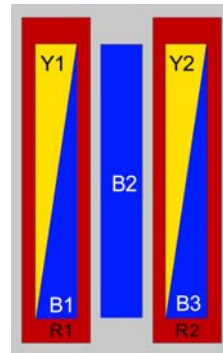
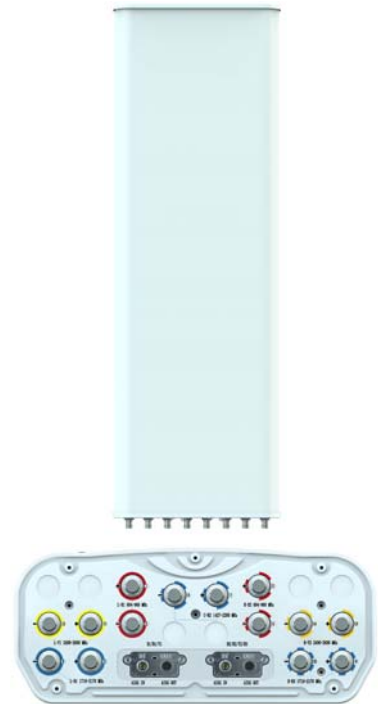
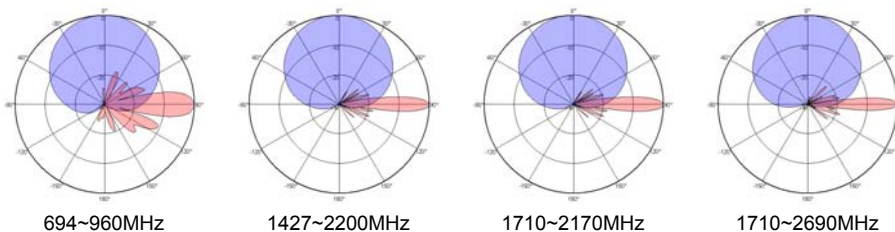
Frequency Range (MHz)	B1/B3-1710~2170×2		Y1/Y2-2490~2690×2	B2-1427~2200		
	1710~1990	1920~2170	2490~2690	1427~1518	1710~1990	1920~2200
Polarization	±45°					
Gain at mid tilt (dBi)	16.6	16.8	17.3	16.2	17.3	17.4
Gain over all tilts (dBi)	16.4±0.5	16.6±0.5	17.1±0.5	16.0±0.3	17.1±0.5	17.2±0.5
Horizontal 3dB beamwidth (°)	67±5	66±5	58±4	72±7	61±4	60±6
Vertical 3dB beamwidth (°)	6.2±0.6	5.5±0.5	4.6±0.5	8.3±0.4	6.8±0.6	6.2±0.5
Front to back ratio (dB) Total power, ±30°	>26	>26	>25	>28	>28	>28
Cross polar ratio (dB) (at Boresight)	>20	>20	>20	>19	>19	>19
Electrical downtilt (°)	2~12		2~12	2~12		
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15	>17	>16	>16
VSWR	<1.5					
Isolation: intra-system (dB)	>25					
Isolation: inter-system (dB)	>28					
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc					
Impedance (Ω)	50					
Max. power per input (W) @50°C	200		200	250		
Lightning protection	Dc Ground					

Mechanical specifications

Connector	14×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	1499×469×198
Packing size (mm)	1880×585×350
Antenna weight (kg)	34.5
Installation kit weight (kg)	5.4
Packing weight (kg)	45.5
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	629/202/657
Max. wind velocity (km/h)	216
Radome material	Fiberglass
Radome color	Gray
Mechanical tilt (°)	0-15
Operating temperature (°C)	-50~65
Mounting hardware (mm)	Φ50~Φ115

Integrated RET properties

RET model	TRCU-TQ10P2V01
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
B1	TY00000.....B1
B2	TY00000.....B2
B3	TY00000.....B3
Y1	TY00000.....Y1
Y2	TY00000.....Y2