

XXXXXXXXXPoI 694~960MHz×2/1695~2180MHz×2/2490~2690MHz×2/1427~2690MHz×2
 65°/65°/65°/65° 15.5/17.0/17.3/17.5dBi 2°~12°/2°~12°/2°~12°/2°~12° Integrated and
 replaceable RCU (Remote Control Unit) Antenna

Electrical specifications

Frequency Range (MHz)	R1/R2 -694~960				B1/B2-1695~2180		Y2/Y3-2490~2690
	694~806	790~862	824~894	880~960	1695~1920	1920~2180	2490~2690
Polarization	±45°				±45°		±45°
Gain at mid tilt (dBi)	14.2	14.7	14.8	15.1	16.6	16.9	17.1
Gain over all tilts (dBi)	13.9±0.5	14.5±0.5	14.6±0.5	14.9±0.5	16.4±0.5	16.7±0.5	16.8±0.5
Horizontal 3dB beamwidth (°)	68±6	67±6	67±5	66±6	65±6	65±7	61±6
Vertical 3dB beamwidth (°)	11.5±0.9	10.2±0.7	9.5±0.5	9.2±0.5	6.9±0.5	6.3±0.5	4.8±0.5
Front to back ratio (dB) Total power, ±30°	>20	>21	>22	>22	>25	>26	>25
Cross polar ratio (dB) (at Boresight)	>16	>18	>18	>17	>17	>18	>16
Electrical downtilt (°)	2~12				2~12		2~12
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>16	>15	>16	>16	>16
VSWR	<1.5				<1.5		<1.5
Isolation: intra-system (dB)	≥25				≥25		≥25
Isolation: inter-system (dB)	R1//R2 ≥ 25 R1,R2//Others ≥ 27				B1//B2 ≥ 25 B1,B2//Others ≥ 27		Y2//Y3 ≥ 25 Y2,Y3//Others ≥ 27
Intermodulation IM3 (2×43dBm carrier)	≤-150 dBc				≤-150 dBc		≤-150 dBc
Impedance (Ω)	50						
Max. power per input (W) @50°C	400				200		200
Lightning protection	Dc Ground						

Electrical specifications

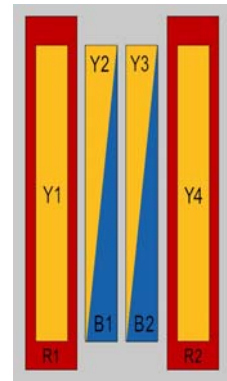
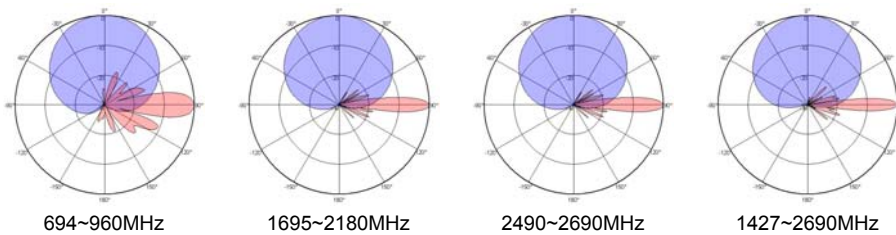
Frequency Range (MHz)	Y1/Y4-1427~2690				
	1427~1518	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°				
Gain at mid tilt (dBi)	16.3	16.7	17.2	17.4	17.2
Gain over all tilts (dBi)	16.0±0.4	16.6±0.4	17.0±0.6	17.2±0.5	17.0±0.5
Horizontal 3dB beamwidth (°)	66±7	64±5	62±6	61±6	58±5
Vertical 3dB beamwidth (°)	8.3±0.5	6.6±0.6	5.9±0.5	5.4±0.4	4.8±0.4
Front to back ratio (dB) Total power, ±30°	>25	>26	>25	>26	>26
Cross polar ratio (dB) (at Boresight)	>20	>20	>20	>19	>18
Electrical downtilt (°)	2~12				
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>15	>16	>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				
Lightning protection	Dc Ground				

Mechanical specifications

Connector	16×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2080×499×198
Packing size (mm)	2465×620×330
Antenna weight (kg)	43.9
Installation kit weight (kg)	5.4
Packing weight (kg)	56.3
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	1100/325/1240
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)	-50~65
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
Y1	TY00000.....Y1
Y2	TY00000.....Y2
Y3	TY00000.....Y3
Y4	TY00000.....Y4