

XXXXXXPol 698~960MHz×2/1710~2690MHz×4 65°/65° 15/18dBi 2°~12°/2°~12° 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)	14.1	14.4	14.8	15.0
Gain over all tilts (dBi)	13.9±0.4	14.2±0.4	14.5±0.4	14.9±0.4
Horizontal 3dB beamwidth (°)	69±6	67±6	66±6	65±6
Vertical 3dB beamwidth (°)	12.1±0.8	11.2±0.4	10.7±0.4	9.9±0.4
Front to back ratio (dB) Total power, ±30°	>21	>22	>23	>23
Cross polar ratio (dB) (at Boresight)	>17	>17	>16	>16
Electrical downtilt (°)	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>16	>16	>16	>16
VSWR	<1.5			
Isolation: intra-system (dB)	≥25			
Isolation: inter-system (dB)	R1//R2≥25 R1,R2//Other≥ 27			
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc			
Impedance (Ω)	50			
Max. power per input (W) @50°C	400			
Lightning protection	Dc Ground			

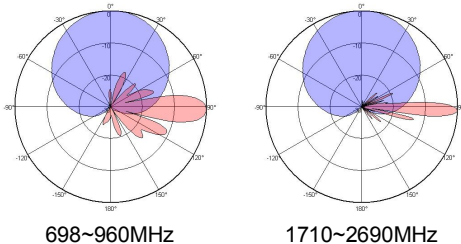
Electrical specifications								
Frequency Range (MHz)	Y1/Y4-1710~2690				Y2/Y3-1710~2690			
	1710~1990	1920~2200	2200~2490	2490~2690	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°							
Gain at mid tilt (dBi)	16.5	16.8	17.1	17.5	16.6	17.1	17.5	17.8
Gain over all tilts (dBi)	16.3±0.5	16.6±0.5	17.0±0.5	17.3±0.5	16.4±0.5	16.9±0.5	17.3±0.6	17.6±0.5
Horizontal 3dB beamwidth (°)	69±6	62±5	60±6	58±5	64±8	63±6	61±6	62±6
Vertical 3dB beamwidth (°)	7.0±0.6	6.3±0.6	5.5±0.6	5.0±0.6	7.0±0.6	6.2±0.6	5.5±0.6	5.0±0.6
Front to back ratio (dB) Total power, ±30°	>26	>25	>26	>25	>25	>25	>26	>25
Cross polar ratio (dB) (at Boresight)	>19	>18	>19	>20	>19	>20	>18	>18
Electrical downtilt (°)	2~12				2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>16	>16	>16	>16	>16	>16	>16
VSWR	<1.5				<1.5			
Isolation: intra-system (dB)	≥25				≥25			
Isolation: inter-system (dB)	Y1,Y4//Other≥27				Y2//Y3≥25 Y2,Y3//Other≥ 27			
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc				≤-153 dBc			
Impedance (Ω)	50							
Max. power per input (W) @50°C	200				200			
Lightning protection	Dc Ground							

Mechanical specifications

Connector	12×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2080×499×198
Packing size (mm)	2465×620×330
Antenna weight (kg)	41
Installation kit weight (kg)	5.4
Packing weight (kg)	52.8
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 RCU
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