

XXXXXPol 698~960MHz×2/1695~2690MHz×3 65°/65° 15.4/17.2dBi 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)	14.5	14.9	15.2	15.4
Gain over all tilts (dBi)	14.9±0.3	15.3±0.3	15.5±0.3	15.8±0.3
Horizontal 3dB beamwidth (°)	68±3	67±3	65±3	63±3
Vertical 3dB beamwidth (°)	11.3±0.5	10.7±0.5	10.2±0.5	9.2±0.5
Front to back ratio (dB)	>21	>22	>22	>22
Total power, ±30°				
Electrical downtilt (°)	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15	>15
VSWR	<1.5			
Isolation: intra-system (dB)	≥25			
Isolation: inter-system (dB)	≥25(R1//R2) ≥25(Other)			
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/Y2/Y3-1695~2690			
	1695~1990	1920~2200	2300~2400	2490~2690
Polarization	±45°			
Gain at mid tilt (dBi)	16.6	17.1	17.3	17.5
Gain over all tilts (dBi)	17.1±0.3	17.5±0.3	17.7±0.3	17.9±0.3
Horizontal 3dB beamwidth (°)	66±3	64±3	62±3	59±3
Vertical 3dB beamwidth (°)	6.9±0.5	6.1±0.5	5.3±0.5	4.9±0.5
Front to back ratio (dB)	>23	>24	>24	>24
Total power, ±30°				
Electrical downtilt (°)	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15	>15
VSWR	≤1.5			
Isolation: intra-system (dB)	≥25			
Isolation: inter-system (dB)	≥25			
Intermodulation IM3 (2×43dBm carrier) (dBc)	≤-150			
Impedance (Ω)	50			
Max. power per input (W) @50°C	200			
Lightning protection	DC Ground			

***Notes: Values calculated according to NGMN BASTA v11.1**

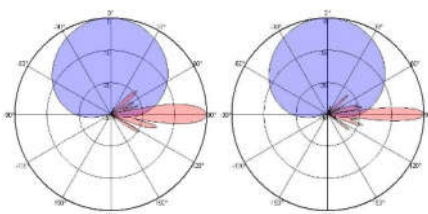
Mechanical Specifications

Connector	10×7/16DIN Female
Connector position	Bottom
Height × width × depth (mm)	1980×469×198
Packing size (mm)	2270×565×250
Antenna weight (kg)	≤31
Installation kit weight - included (kg)	5.4
Packing weight (kg)	42
Wind load (N, at 150km/h) Frontal/Lateral/Maximum	860/260/880
Max. wind velocity (km/h)	216
Radiator material	Aluminum/Low loss circuit board
Reflector material	Aluminum
Radome material	Fiberglass (UV resistant)
Radome color	Grey
Mechanical tilt (°)	0~10
Operating temperature (°C)	-50~60
Storage temperature (°C)	-50~60
Mounting hardware (mm)	Φ50~Φ115

Integrated RET Properties

RET model	TRCU-TQ10P2V01
	Integrated (Replaceable)
RET protocol	AISG 2.0/3GPP
Power supply (VDC)	10 ~ 30
Power consumption(W)	≤0.6 (Idle) ≤6 (In motion)
Adjustment time (Full Range)	≤4Mins
Adjustment cycles (time)	>50,000
Temperature range (°C)	-50~60
Lightning protection	3KA(8/20μs) @ Pin5 & Pin3; 5KA(8/20μs) @ Pin1, Pin6 & Pin7
Remote Control Unit	Can be controlled from OMC and BTS/ NodeB, External tools
Description and features	2×8 Pin circle connector according to IEC 60130-9 and AISG/3GPP. Pin1:12V; Pin3:RS485B; Pin5:RS485A/B; Pin6:10-30V; Pin7: DC return; Pin2&Pin4&Pin8:N/C Daisy chain in: Male Daisy chain out: Female Connection support Daisy-chaining/Cascade

Antenna Pattern for Reference



698~960MHz

1710~2690MHz



View from the front of the antenna

Ant Array	RET Unique ID
R1	TY00000.....R1
R2	TY00000.....R2
Y1	TY00000.....Y1
Y2	TY00000.....Y2
Y3	TY00000.....Y3

Compliance

- Certified quality assurance system and environmental management system of company:

EN ISO9001, EN ISO 14001, OHSAS 18001, ETSI EN300019-1-1 Class

1.2, ETSI EN300019-1-2 Class 2.3, ETSI EN300019-1-4 Class 4.1

- Environmentally regulations: ROHS 2 (2011/65/EU), REACH

- Comply with CE certification

- Comply with AISG 2.0/3GPP

