

XXXXXXPol 698~960MHzx2/1710~2690MHzx4 65°/Dual-beam 33° 15.3/18.7dBi 2°~12°/2°~12° Integrated and replaceable RCU (Remote Control Unit) Antenna

Electrical Specifications			
Frequency range (MHz)	R1/R2-698~960×2		
	698~798	790~862	880~960
Polarization	±45°		
Gain at mid tilt (dBi)	14.7	15.0	15.5
Gain over all tilts (dBi)	14.5±0.4	14.8±0.5	15.3±0.5
Horizontal 3dB beamwidth (°)	68±6	64±5	61±5
Vertical 3dB beamwidth (°)	11.1±0.9	9.9±0.6	9.3±0.6
Front to back ratio (dB) Total power, ±30°	>22	>23	>24
Cross polar ratio (dB) (at Boresight)	>15	>16	>16
Electrical downtilt (°)	2~12		
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15
VSWR	<1.5		
Isolation: intra-system (dB)	>25		
Isolation: inter-system (dB)	>25		
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc		
Impedance (Ω)	50		
Max. power per input (W) @50°C	400		
Lightning protection	Dc Ground		

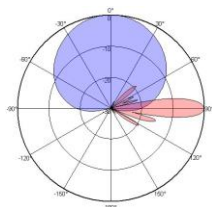
Electrical Specifications			
Frequency Range (MHz)	Y1/Y2,Y3/Y4-1710~2690×4		
	1710~1880	1920~2170	2490~2690
Polarization	±45°		
Gain at mid tilt (dBi) (Bottom)	17.5	18.7	18.4
Gain over all tilts (dBi) (Bottom)	17.3±0.9	18.5±0.6	18.2±0.6
Gain at mid tilt (dBi) (Top)	16.8	18.3	18.0
Gain over all tilts (dBi) (Top)	16.6±0.6	18.1±0.4	17.8±0.6
Horizontal beam centers (°)	±32	±31	±30
Horizontal 3dB beamwidth (°)	35±3	32±3	30±3
Vertical 3dB beamwidth (°)	9.3±0.6	8.7±0.6	6.7±0.5
Front to back ratio (dB) Total power, ±30°	>25	>26	>26
Electrical downtilt (°)	2~12		
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15
VSWR	<1.5		
Isolation: intra-system (dB)	>25		
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc		
Impedance (Ω)	50		
Max. power per input (W) @50°C	200		
Lightning protection	Dc Ground		

Mechanical Specifications

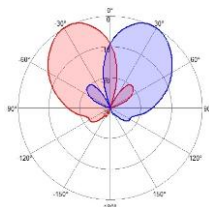
Connector	12×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2080×499×198
Packing size (mm)	2370×565×250
Antenna weight (kg)	37.7
Installation kit weight (kg)	5.4
Packing weight (kg)	52.5
Wind load (N,at 150km/h) Frontal/Lateral/Maximum	740/240/950
Max. wind velocity (km/h)	216
Radome material	Fiberglass
Radome color	Gray
Mechanical tilt (°)	0-10
Operating temperature (°C)	-50~65
Mounting hardware (mm)	Φ50~Φ115

Integrated RET Properties

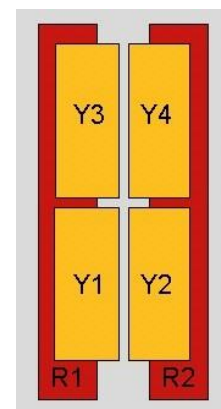
RET model	TRCU-TQ20P3V01
RET type	Integrated (Replaceable)
RET protocol	AISG 2.0/3GPP
Power supply(V)	10-30 DC
Power consumption(W)	≤0.6 (Idle,12V),≤6 (In motion,12V)
Adjustment time (Full Range)	<4Mins
Adjustment cycles	>50,000
Temperature range (°C)	-40~65
Lightning protection	3KA(8/20μs) @ Pin5 & 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

Values provided based on NGMN-P-BASTA requirements
Sample of propagation 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
Y4	TY00000.....Y4