

XXXXXXPol 698~960MHz×2/1710~2690MHz×4 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±0.3
Horizontal beam centers (°)	±31	±30	±29
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

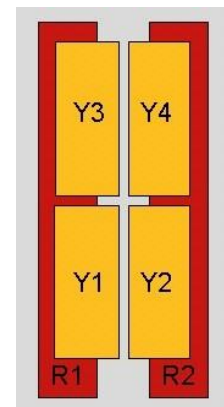
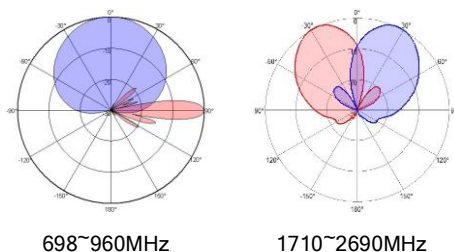
Connector	12×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2080×499×198
Packing size (mm)	2370×565×250
Antenna weight (kg)	37.7
Installation kit weight (kg)	5.4
Packing weight (kg)	52.5
Wind load (N,at 150km/h) Frontal/Lateral/Maximum	740/240/950
Max. wind velocity (km/h)	216
Radome 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



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