

**XXXXXXPol 698~960MHz×2/1710~2690MHz×4 65°/Twin-beam 33° 15.3/18.3dBi 2°~12°/2°~12° Integrated and replaceable RCU (Remote Control Unit) Antenna**

Electrical Specifications				
Frequency range (MHz)	R1/R2-698~960×2			
	698~803	790~862	824~894	880~960
Polarization	±45°			
Gain at mid tilt (dBi)	14.6	15.0	15.4	15.6
Gain over all tilts (dBi)	14.4±0.3	14.8±0.3	15.2±0.3	15.4±0.3
Horizontal 3dB beamwidth (°)	68±3	64±3	63±3	61±3
Vertical 3dB beamwidth (°)	11.5±0.6	10.5±0.4	10.0±0.4	9.4±0.5
Front to back ratio (dB)	>22	>23	>23	>24
Total power, ±30°				
Cross polar ratio (dB) (at Boresight)	>15	>16	>16	>16
Electrical downtilt (°)	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15	>15
VSWR	<1.5			
Cross Polar Isolation/Intra-Cluster isolation (dB)	≥25			
Inter-band Isolation/Inter-Cluster isolation (dB)	≥25			
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc			
Impedance (Ω)	50			
Efficiency	≥70%			
Max. power per input (W) @50°C	400			
Lightning protection	Dc Ground			
Electrical Specifications				
Frequency Range (MHz)	Y1/Y2,Y3/Y4-1710~2690×4			
	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°			
Gain at mid tilt (dBi) (Bottom)	17.5	17.9	18.5	18.4
Gain over all tilts (dBi) (Bottom)	17.3±0.5	17.7±0.3	18.3±0.3	18.2±0.3
Gain at mid tilt (dBi) (Top)	17.1	17.5	18.2	18.0
Gain over all tilts (dBi) (Top)	16.6±0.5	17.3±0.3	18.0±0.3	17.8±0.3
Horizontal beam centers (°)	±29	±27	±25	±25
Horizontal 3dB beamwidth (°)	36±1.5	33±1	32±1	31±1
Vertical 3dB beamwidth (°)	9.5±0.3	8.5±0.3	7.3±0.3	6.7±0.3
Front to back ratio (dB)	>25	>25	>25	>25
Total power, ±30°				
Electrical downtilt (°)	2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>15	>15	>15	>15
VSWR	<1.5			
Cross Polar Isolation/Intra-Cluster isolation (dB)	≥25			
Inter-band Isolation/Inter-Cluster isolation (dB)	≥25			
Isolation beam to beam (dB)	≥25			
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc			
Impedance (Ω)	50			
Efficiency	≥65%			
Max. power per input (W) @50°C	200			
Lightning protection	Dc Ground			

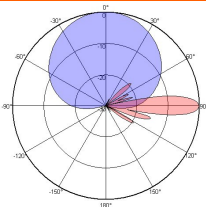
\*Values calculated according to NGMN BASTA v11.1 requirement.

**Mechanical Specifications**

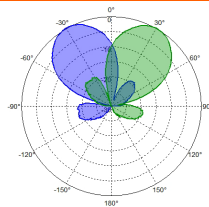
Connector	12×4.3-10 Female
Connector position	Bottom
Height × width × depth (mm)	2080×499×198
Packing size (mm)	2370×565×250
Antenna weight (kg)	38
Installation kit weight (kg)	5.4
Packing weight (kg)	52.5
Wind load (N,at 150km/h) Frontal/Lateral/Rear	740/240/950
Max. wind velocity (km/h)	216
Radome material	Fiberglass, UV resistant
Radome color	Gray or color customized
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
Daisy chain connection solution	Ready for daisy-chaining/cascade
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**


698~960MHz



1710~2690MHz

Ant Array	Freq(MHz)	Conns	Beams	RET Unique ID
R1	698-960	2	1	TY00000.....R1
R2	698-960	2		TY00000.....R2
Y1	1710-2690	2	2	TY00000.....Y1
Y2	1710-2690	2		TY00000.....Y2
Y3	1710-2690	2		TY00000.....Y3
Y4	1710-2690	2		TY00000.....Y4

**Compliance**

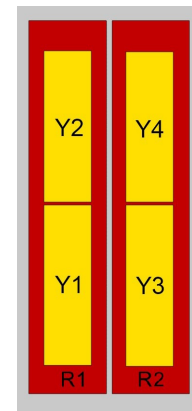
-Certified quality assurance system and environmental management system of company:

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, REACH;

-Comply with CE certification;



View from the front of the antenna