

XXXXXXPol 698~960MHz×2/1710~2690MHz×4 65°/65° 15/18dBi 2°~14°/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)	13.3	13.5	13.7	13.9
Gain over all tilts (dBi)	13.1±0.6	13.3±0.8	13.5±0.5	13.7±0.5
Horizontal 3dB beamwidth (°)	68±6	65±5	66±5	63±6
Vertical 3dB beamwidth (°)	17.4±1.3	16.0±0.9	15.6±1.2	14.7±1.1
Front to back ratio (dB) Total power, ±30°	>20	>21	>22	>23
Cross polar ratio (dB) (at Boresight)	>20	>19	>19	>20
Electrical downtilt (°)	2~14			
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//Others≥28			
Intermodulation IM3 (2×43dBm carrier)	≤-153 dBc			
Impedance (Ω)	50			
Max. power per input (W) @50°C	400			
Lightning protection	Dc Ground			

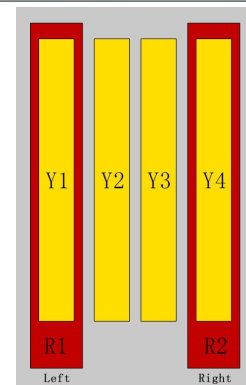
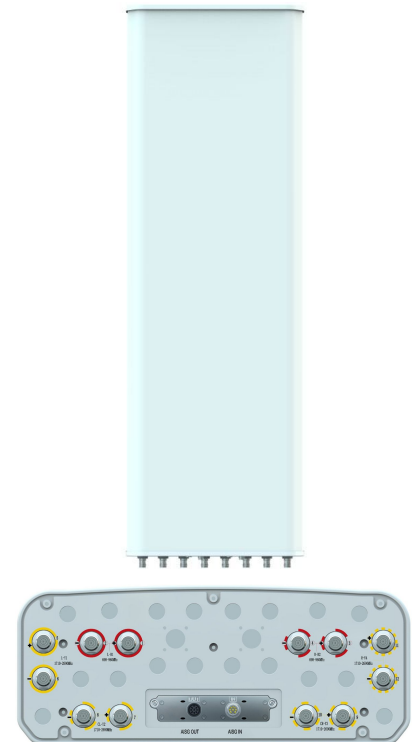
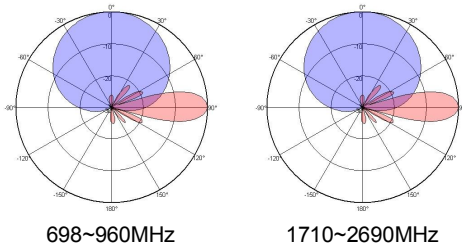
Electrical specifications								
Frequency Range (MHz)	Y1/Y4-1710~2690				Y2/Y3-1710~2690			
	1710~1990	1920~2200	2200~2490	2490~2690	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°							
Gain at mid tilt (dBi)	16.4	17.2	17.4	17.8	16.6	17.0	17.1	17.2
Gain over all tilts (dBi)	16.2±0.6	16.8±0.5	17.2±0.5	17.6±0.5	16.4±0.6	16.8±0.5	16.9±0.5	17.0±0.6
Horizontal 3dB beamwidth (°)	68±6	62±5	60±5	58±6	67±6	61±5	62±5	58±6
Vertical 3dB beamwidth (°)	7.0±0.6	6.3±0.5	5.5±0.5	5.0±0.4	7.0±0.6	6.2±0.5	5.5±0.5	5.0±0.4
Front to back ratio (dB) Total power, ±30°	>25	>26	>25	>26	>25	>25	>25	>26
Cross polar ratio (dB) (at Boresight)	>20	>19	>19	>20	>18	>18	>18	>18
Electrical downtilt (°)	2~12				2~12			
Sidelobe suppression (dB) (First sidelobe above main beam)	>17	>16	>16	>16	>16	>17	>17	>17
VSWR	<1.5				<1.5			
Isolation: intra-system (dB)	≥25				≥25			
Isolation: inter-system (dB)	≥28				≥28			
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)	1499×499×198
Packing size (mm)	1885×620×330
Antenna weight (kg)	33.9
Installation kit weight (kg)	5.4
Packing weight (kg)	44.9
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	780/225/880
Max. wind velocity (km/h)	216
Radome material	Fiberglass
Radome color	Gray
Mechanical tilt (°)	0-15
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

**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