

XXXXXXPol 1710~2690MHz×6 Triple Beam 30° 21.5dBi 3°~13° Integrated and replaceable RCU (Remote Control Unit) Antenna

Electrical specifications

Frequency Range (MHz)	0°Beam:1710~2690			
	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°			
Gain at mid tilt (dBi) (Bottom)	20	20.7	21.2	21.5
Gain over all tilts (dBi) (Bottom)	19.8±0.5	20.5±0.5	21.0±0.5	21.3±0.5
Gain at mid tilt (dBi) (Top)	19	19.7	20.2	20.5
Gain over all tilts (dBi) (Top)	18.8±0.5	19.5±0.5	20.0±0.5	20.3±0.5
Horizontal beam centers (°)	0	0	0	0
Horizontal 3dB beamwidth (°)	24±2	21±2	19±2	17±2
Vertical 3dB beamwidth (°)	8.0±0.5	7.1±0.5	6.4±0.5	5.7±0.5
Front to back ratio (dB)	>28	>28	>29	>29
Total power, ±30°				
Cross polar ratio (dB) (at Boresight)	>15	>15	>15	>15
Electrical downtilt (°)	3~13			
Sidelobe suppression (dB) (First sidelobe above main beam)	>18	>17	>17	>17
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	150			
Lightning protection	Dc Ground			

Electrical specifications

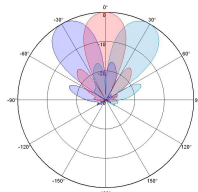
Frequency Range (MHz)	±33°Beam:1710~2690			
	1710~1990	1920~2200	2200~2490	2490~2690
Polarization	±45°			
Gain at mid tilt (dBi) (Bottom)	19.1	19.6	19.6	20
Gain over all tilts (dBi) (Bottom)	18.9±0.5	19.4±0.5	19.4±0.5	19.8±0.5
Gain at mid tilt (dBi) (Top)	18.4	18.8	18.8	19.3
Gain over all tilts (dBi) (Top)	18.2±0.5	18.6±0.5	18.6±0.5	19.1±0.5
Horizontal beam centers (°)	+39/-39	+35/-35	+31/-31	+27/-27
Horizontal 3dB beamwidth (°)	28±2	25±2	22±2	20±2
Vertical 3dB beamwidth (°)	7.9±0.5	7.1±0.5	6.3±0.5	5.8±0.5
Front to back ratio (dB)	>28	>28	>29	>29
Total power, ±30°				
Cross polar ratio (dB) (at Boresight)	>15	>15	>15	>15
Electrical downtilt (°)	3~13			
Sidelobe suppression (dB) (First sidelobe above main beam)	>18	>16	>17	>17
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	150			
Lightning protection	Dc Ground			

Mechanical specifications

Connector	12×4.3-10-Female
Connector position	Bottom
Height × width × depth (mm)	2680×446×165
Packing size (mm)	3135×540×265
Antenna weight (kg)	45.3
Installation kit weight (kg)	8.7
Packing weight (kg)	60.5
Wind load (N,at 150km/h) Frontal/Lateral/Rearside	1440/375/1609
Max. wind velocity (km/h)	216
Radome material	Fiberglass
Radome color	Gray
Mechanical tilt (°)	0~8
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


1710~2690MHz



Ant Array	RET Unique ID
Y1	TY00000.....Y1
Y2	TY00000.....Y2
Y3	TY00000.....Y3
Y4	TY00000.....Y4
Y5	TY00000.....Y5
Y6	TY00000.....Y6