

XXXXXXPol 698~960MHz×2/1710~2690MHz×4 65°/65° 16/16.5dBi 2°~12°/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) | 14.8 | 15.5 | 15.8 | 16.0 |
| Gain over all tilts (dBi) | 14.6±0.5 | 15.3±0.5 | 15.5±0.5 | 15.8±0.5 |
| Horizontal 3dB beamwidth (°) | 69±6 | 68±5 | 66±5 | 65±5 |
| Vertical 3dB beamwidth (°) | 10.1±0.9 | 9.6±0.8 | 9.2±0.7 | 8.8±0.6 |
| Front to back ratio (dB) Total power, ±30° | >22 | >23 | >23 | >24 |
| Cross polar ratio (dB) (at Boresight) | >16 | >16 | >16 | >17 |
| Electrical downtilt (°) | 2~12 | | | |
| Sidelobe suppression (dB) (First sidelobe above main beam) | >16 | >16 | >16 | >17 |
| VSWR | <1.5 | | | |
| Isolation: intra-system (dB) | ≥25 | | | |
| Isolation: inter-system (dB) | ≥25 (R1//R2) ≥28 (Other Ports) | | | |
| Intermodulation IM3 (2×43dBm carrier) | ≤-153 dBc | | | |
| Impedance (Ω) | 50 | | | |
| Max. power per input (W) @50°C | 400 | | | |

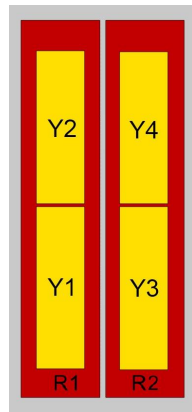
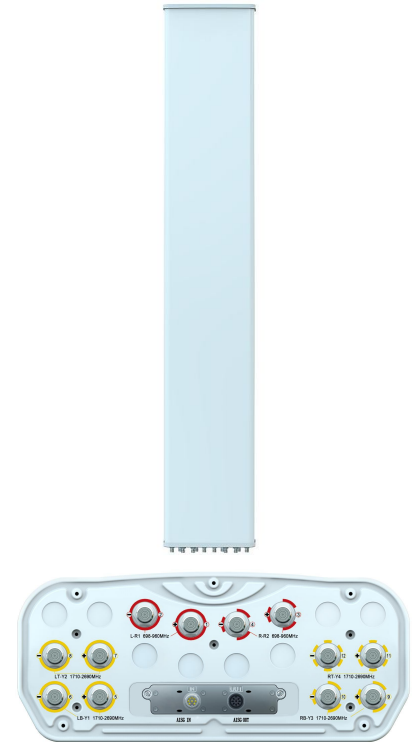
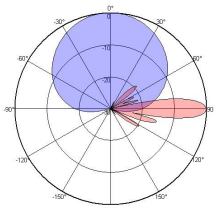
| Electrical specifications | | | | | | | | |
|---|-----------------|-----------|-----------|-----------|-----------------|-----------|-----------|-----------|
| Frequency Range (MHz) | Y1/Y3-1710~2690 | | | | Y2/Y4-1710~2690 | | | |
| | 1710~1920 | 1920~2200 | 2200~2490 | 2490~2690 | 1710~1920 | 1920~2200 | 2200~2490 | 2490~2690 |
| Polarization | ±45° | | | | | | | |
| Gain at mid tilt (dBi) (Bottom) | 15.5 | 15.9 | 16.5 | 16.3 | | | | |
| Gain over all tilts (dBi) (Bottom) | 15.4±0.5 | 15.7±0.5 | 16.2±0.5 | 15.9±0.5 | | | | |
| Gain at mid tilt (dBi) (Top) | | | | | 15.2 | 15.2 | 16.2 | 15.8 |
| Gain over all tilts (dBi) (Top) | | | | | 15±0.5 | 15.3±0.5 | 15.9±0.5 | 15.6±0.5 |
| Horizontal 3dB beamwidth (°) | 68±6 | 65±5 | 61±5 | 59±6 | 68±6 | 65±5 | 61±6 | 59±6 |
| Vertical 3dB beamwidth (°) | 9.9±0.8 | 9.0±0.8 | 8.3±0.7 | 7.8±0.7 | 9.0±0.7 | 7.8±0.6 | 7.1±0.6 | 6.5±0.5 |
| Front to back ratio (dB) Total power, ±30° | >24 | >25 | >24 | >23 | >24 | >25 | >24 | >25 |
| Cross polar ratio (dB) (at Boresight) | >15 | >15 | >15 | >15 | >15 | >15 | >15 | >15 |
| Electrical downtilt (°) | 2~12 | | | | 2~12 | | | |
| Sidelobe suppression (dB) (First sidelobe above main beam) | >16 | >16 | >16 | >16 | >16 | >16 | >16 | >16 |
| 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 | | | | | | | |

Mechanical specifications

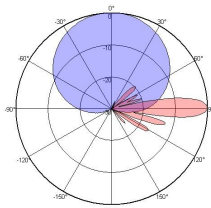
| | |
|--|------------------|
| Connector | 12×4.3-10 Female |
| Connector position | Bottom |
| Height × width × depth (mm) | 2080×469×198 |
| Packing size (mm) | 2460×585×350 |
| Antenna weight (kg) | 39.7 |
| Installation kit weight (kg) | 5.4 |
| Packing weight (kg) | 52.6 |
| Wind load (N,at 150km/h) Frontal/Lateral/Rearside | 216 |
| Max. wind velocity (km/h) | 903/273/924 |
| 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 |


Antenna pattern sample for reference


698~960MHz



1710-2690MHz

| Ant Array | RET Unique ID |
|-----------|----------------|
| R1 | TY00000.....R1 |
| R2 | TY00000.....R2 |
| Y1 | TY00000.....Y1 |
| Y2 | TY00000.....Y2 |
| Y3 | TY00000.....Y3 |
| Y4 | TY00000.....Y4 |