

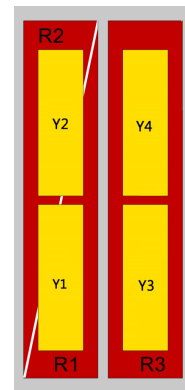
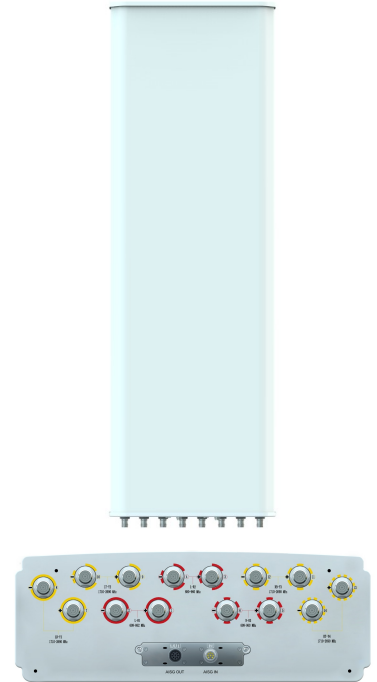
**XXXXXXXXX Pol 698~862MHz/880~960MHz/698~960MHz/1710~2690MHz×2/1710~2690MHz×2 65°/65°/65°/65° 15.6/16.6/16.6/17.7/17.5dBi 2°~12°/2°~12°/2°~12°/2°~12° Integrated and replaceable RCU (Remote Control Unit) Antenna,with Combiner Integrated**

| Electrical Specifications                                     |             |          |             |             |          |          |          |
|---|-------------|----------|-------------|-------------|----------|----------|----------|
| Frequency range (MHz)   | R1 -698~862 |          | R2 -880~960 | R3 -698~960 |          |          |          |
|   | 698~803     | 790~862  | 880~960     | 698~803     | 790~862  | 824~894  | 880~960  |
| Polarization  | ±45°        |          |             |             |          |          |          |
| Gain at mid tilt (dBi)  | 15.3        | 15.4     | 16.4        | 15.6        | 15.7     | 16.3     | 16.6     |
| Gain over all tilts (dBi)                                     | 15.1±0.5    | 15.2±0.4 | 16.2±0.5    | 15.4±0.5    | 15.5±0.4 | 16.1±0.5 | 16.5±0.4 |
| Horizontal 3dB beamwidth (°)                                  | 69±5        | 67±4     | 64±4        | 69±5        | 67±4     | 65±5     | 64±4     |
| Vertical 3dB beamwidth (°)                                    | 8.7±0.8     | 8.2±0.5  | 7.2±0.5     | 8.7±0.8     | 8.1±0.5  | 7.9±0.5  | 7.2±0.5  |
| Front to back ratio (dB)<br>Total power, ±30°                 | >22         | >24      | >25         | >22         | >24      | >24      | >25      |
| Cross polar ratio (dB)<br>(at Boresight)                      | >17         | >18      | >16         | >17         | >18      | >17      | >16      |
| Electrical downtilt (°)                                       | 2~12        |          | 2~12        | 2~12        |          |          |          |
| Sidelobe suppression (dB)<br>(First sidelobe above main beam) | >15         | >16      | >17         | >15         | >16      | >16      | >17      |
| VSWR  | <1.5        |          |             |             |          |          |          |
| Isolation: intra-system (dB)                                  | ≥25         |          |             |             |          |          |          |
| Isolation: inter-system (dB)                                  | ≥26         |          |             |             |          |          |          |
| Intermodulation IM3<br>(2×43dBm carrier)                      | ≤-153 dBc   |          |             |             |          |          |          |
| Impedance (Ω)   | 50          |          |             |             |          |          |          |
| Max. power per input (W) @50°C                                | 300         |          |             |             |          |          |          |
| Lightning protection  | Dc Ground   |          |             |             |          |          |          |

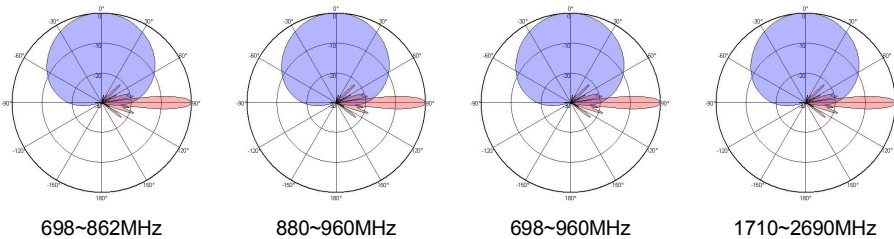
| Electrical Specifications                                     |                 |           |           |           |                 |           |           |           |
|---|-----------------|-----------|-----------|-----------|-----------------|-----------|-----------|-----------|
| Frequency Range (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)                               | 16.8            | 17.2      | 17.7      | 17.3      | 16.7            | 17.2      | 17.5      | 17.1      |
| Gain over all tilts (dBi) (Bottom)                            | 16.6±0.5        | 17.0±0.5  | 17.5±0.6  | 17.2±0.5  | 16.5±0.5        | 17.0±0.5  | 17.3±0.5  | 17.0±0.5  |
| Horizontal 3dB beamwidth (°)                                  | 68±6            | 64±5      | 59±6      | 61±6      | 67±6            | 65±5      | 59±5      | 60±5      |
| Vertical 3dB beamwidth (°)                                    | 7.6±0.4         | 6.8±0.5   | 6.1±0.4   | 5.6±0.5   | 7.8±0.6         | 6.9±0.6   | 6.1±0.5   | 5.6±0.5   |
| Front to back ratio (dB)<br>Total power, ±30°                 | >24             | >26       | >25       | >25       | >24             | >26       | >25       | >25       |
| Cross polar ratio (dB)<br>(at Boresight)                      | >16             | >18       | >17       | >16       | >17             | >16       | >16       | >17       |
| Electrical downtilt (°)                                       | 2~12            |           |           |           | 2~12            |           |           |           |
| Sidelobe suppression (dB)<br>(First sidelobe above main beam) | >17             | >16       | >16       | >16       | >17             | >16       | >16       | >16       |
| VSWR  | <1.5            |           |           |           |                 |           |           |           |
| Isolation: intra-system (dB)                                  | ≥25             |           |           |           |                 |           |           |           |
| Isolation: inter-system (dB)                                  | ≥28             |           |           |           |                 |           |           |           |
| Intermodulation IM3<br>(2×43dBm carrier)                      | ≤-153 dBc       |           |           |           |                 |           |           |           |
| Impedance (Ω)   | 50              |           |           |           |                 |           |           |           |
| Max. power per input (W) @50°C                                | 250             |           |           |           |                 |           |           |           |
| Lightning protection  | Dc Ground       |           |           |           |                 |           |           |           |

| Mechanical Specifications                           |                  |
|---|------------------|
| Connector   | 14×4.3-10 Female |
| Connector position                                  | Bottom           |
| Height × width × depth (mm)                         | 2749×499×178     |
| Packing size (mm)                                   | 3225×620×330     |
| Antenna weight (kg)                                 | 53               |
| Installation kit weight (kg)                        | 8.8              |
| Packing weight (kg)                                 | 73               |
| Wind load (N,at 150km/h)<br>Frontal/Lateral/Maximum | 1472/397/1564    |
| 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;<br>5KA(8/20μs) @ Pin1 / Pin6 & Pin7  |
| Connectors                   | 2×8 Pin circle connector according to IEC 60130-9 and AISG.<br>Daisy chain in:Male,Daisy chain out:Female<br>Pin1:12V;Pin3:RS485B;Pin5:RS485A;Pin6:10-30V;<br>Pin7:GND;Pin2&Pin4&Pin8:N/C |



**Antenna Pattern Sample For Reference**



| Ant Array | RET Unique ID  |
|-----------|----------------|
| R1        | TY00000.....R1 |
| R2        | TY00000.....R2 |
| R3        | TY00000.....R3 |
| Y1        | TY00000.....Y1 |
| Y2        | TY00000.....Y2 |
| Y3        | TY00000.....Y3 |
| Y4        | TY00000.....Y4 |