PRISM TELECOM

# PYMB-D172721DEI5-30FT3

**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)<br>Total power, ±30° | >28 | >28 | >29 | >29 |
| Cross polar ratio (dB)<br>(at Boresight) | >15 | >15 | >15 | >15 |
| Electrical downtilt (°) | 3~13 | | | |
| Sidelobe suppression (dB)<br>(First sidelobe above main beam) | >18 | >17 | >17 | >17 |
| VSWR | ≤1.5 | | | |
| Isolation: intra-system (dB) | ≥25 | | | |
| Intermodulation IM3<br>(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)<br>Total power, ±30° | >28 | >28 | >29 | >29 |
| Cross polar ratio (dB)<br>(at Boresight) | >15 | >15 | >15 | >15 |
| Electrical downtilt (°) | 3~13 | | | |
| Sidelobe suppression (dB)<br>(First sidelobe above main beam) | >18 | >16 | >17 | >17 |
| VSWR | ≤1.5 | | | |
| Isolation: intra-system (dB) | ≥25 | | | |
| Intermodulation IM3<br>(2×43dBm carrier) | ≤-153 dBc | | | |
| Impedance (Ω) | 50 | | | |
| Max. power per input (W) @50°C | 150 | | | |
| Lightning protection | Dc Ground | | | |

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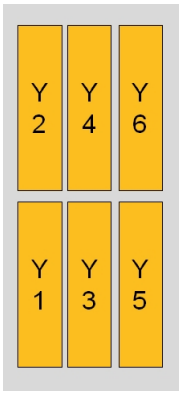
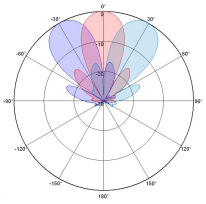
| Mechanical Specifications | |
|---|---|
| Connector | 12×4.3-10-Female |
| Connector position | Bottom |
| Height × width × depth (mm) | 2680×446×165 |
| Packing size (mm) | 3135×540×265 |
| Antenna weight (kg) | 45.3 |
| Installation kit weight (kg) | 8.7 |
| Packing weight (kg) | 60.5 |
| Wind load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




| Ant Array | RET Unique ID |
|---|---|
| Y1 | TY00000……Y1 |
| Y2 | TY00000……Y2 |
| Y3 | TY00000……Y3 |
| Y4 | TY00000……Y4 |
| Y5 | TY00000……Y5 |
| Y6 | TY00000……Y6 |

## Antenna Pattern Sample For Reference



1710~2690MHz