

SKU: XPOL700-2700PL**Telco XPOL MIMO Industrial Class Panel Antenna**

- Dual-polarised antenna feed with high isolation
- Industrial grade weatherproof PVC radome
- Mechanical tilt adjustment
- High gain, high F/B ratio
- Two integrated N Female connectors
- Wide spectrum design, suits all current and planned networks.

This heavy duty wideband panel antenna sports an extremely wideband design - operating on two bands 698-960MHz, 1710-2700MHz. As the highest grade multiband panel antenna on the market, this antenna has an incredibly low VSWR and $< -140\text{dBc}$ PIM making it not only the ideal antenna for commercial and industrial 2X2 4G applications, but also suitable for broadcast and carrier applications.

This is one of the few antennas on the market capable of covering the recently auctioned 700 and 2600MHz spectrum, as well as the current 1800MHz 4G, all the while being backwards compatible on all 2G and 3G voice and data networks. This is an incredibly high performance antenna, highly recommended for most suburban, metro, and semi-rural applications.

See below for electrical & mechanical specification data.



Electrical Specifications

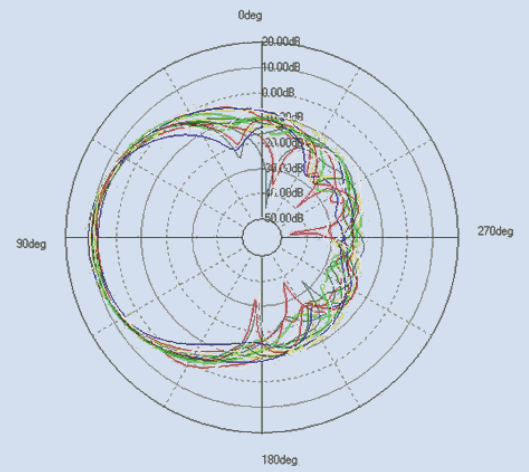
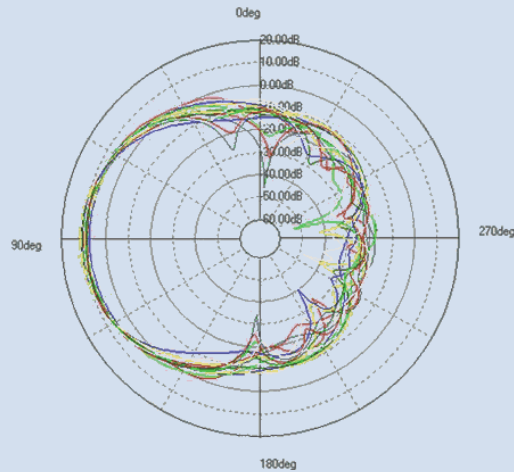
| | |
|-----------------------|----------------------------------|
| Frequency Range: | 698-960MHz / 1710-2700MHz |
| Input Impedance: | 50Ω |
| VSWR: | <1.8:1 (<1.6:1 / <1.5:1 typical) |
| Polarisation: | ±45° (XPOL) |
| Vertical Beamwidth: | 60° (± 10°) |
| Horizontal Beamwidth: | 60° (± 10°) |
| Front to Back Ratio: | >23dB |
| Cross Pol Isolation: | >27dB |
| PIM IMD (3rd Order): | <-140dBc |
| Radiation: | Directional |
| Maximum Power: | 100Watts |

Radiation Patterns

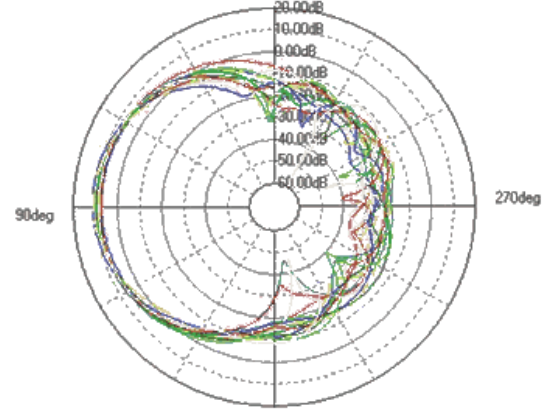
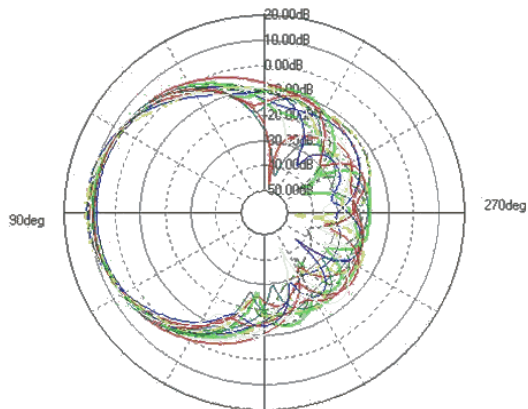
+45 Polarity

-45 Polarity

Vertical:



Horizontal:



| Test Item | Technical Requirement | Unit | Tested Frequency | Result | |
|-------------------------|-----------------------|-------|----------------------|-------------------|--------|
| | | | | +45 | -45 |
| Frequency Range | 698-960/1710-2700 | MHz | Whole frequency band | 698-960/1710-2700 | |
| VSWR | ≤1.8 | / | 698MHz | 1.30 | 1.18 |
| | | | 960MHz | 1.48 | 1.56 |
| | | | 1710MHz | 1.26 | 1.27 |
| | | | 2700MHz | 1.42 | 1.47 |
| Isolation between Ports | ≥26 | dB | 698MHz | 27.30 | |
| | | | 960MHz | 39.60 | |
| | | | 1710MHz | 39.09 | |
| | | | 2700MHz | 40.51 | |
| PIM 3rd | ≤-140 | dBc | 900MHz | -146.8 | -144.0 |
| | | | 1900MHz | -159.9 | -157.3 |
| Front to Back Ratio | ≥20 | dB | 698MHz | 31.13 | 25.31 |
| | | | 800MHz | 26.51 | 28.60 |
| | | | 850MHz | 26.32 | 24.44 |
| | | | 900MHz | 25.53 | 21.34 |
| | | | 960MHz | 23.33 | 22.71 |
| | | | 1710MHz | 25.08 | 25.28 |
| | | | 1800MHz | 27.21 | 27.31 |
| | | | 1900MHz | 25.42 | 25.52 |
| | | | 2000MHz | 31.40 | 29.46 |
| | | | 2100MHz | 31.47 | 29.52 |
| | | | 2200MHz | 24.41 | 27.24 |
| | | | 2300MHz | 26.59 | 27.94 |
| | | | 2400MHz | 24.54 | 25.64 |
| | | | 2500MHz | 23.05 | 26.68 |
| 2600MHz | 23.25 | 26.01 | | | |
| 2700MHz | 25.03 | 31.97 | | | |

| | | | | | |
|--------------------|-------|-------|---------|-------|-------|
| Gain | 7-11 | dB | 698MHz | 8.31 | 8.77 |
| | | | 800MHz | 7.82 | 8.20 |
| | | | 850MHz | 7.37 | 7.48 |
| | | | 900MHz | 8.11 | 8.21 |
| | | | 960MHz | 9.03 | 9.10 |
| | | | 1710MHz | 8.72 | 8.76 |
| | | | 1800MHz | 9.13 | 9.33 |
| | | | 1900MHz | 9.69 | 9.89 |
| | | | 2000MHz | 10.41 | 10.40 |
| | | | 2100MHz | 11.16 | 11.25 |
| | | | 2200MHz | 10.79 | 11.39 |
| | | | 2300MHz | 9.85 | 10.39 |
| | | | 2400MHz | 9.00 | 9.31 |
| | | | 2500MHz | 8.66 | 8.97 |
| | | | 2600MHz | 8.64 | 9.09 |
| 2700MHz | 9.00 | 9.92 | | | |
| Vertical Beamwidth | 60±10 | ° | 698MHz | 68.19 | 66.39 |
| | | | 800MHz | 68.69 | 65.35 |
| | | | 850MHz | 68.43 | 72.39 |
| | | | 900MHz | 64.32 | 63.95 |
| | | | 960MHz | 56.61 | 56.54 |
| | | | 1710MHz | 65.27 | 65.64 |
| | | | 1800MHz | 60.64 | 59.51 |
| | | | 1900MHz | 51.36 | 51.52 |
| | | | 2000MHz | 46.04 | 47.13 |
| | | | 2100MHz | 43.64 | 44.33 |
| | | | 2200MHz | 47.85 | 45.49 |
| | | | 2300MHz | 54.36 | 52.18 |
| | | | 2400MHz | 66.61 | 66.33 |
| | | | 2500MHz | 68.27 | 70.48 |
| | | | 2600MHz | 69.30 | 70.16 |
| 2700MHz | 60.62 | 62.03 | | | |

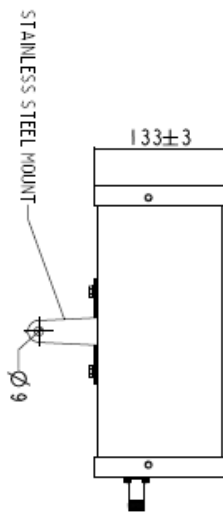
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|----------------------|-------|-------|---------|-------|-------|
| Horizontal Beamwidth | 60±10 | ° | 698MHz | 71.03 | 69.41 |
| | | | 800MHz | 68.04 | 68.46 |
| | | | 850MHz | 65.76 | 66.34 |
| | | | 900MHz | 65.48 | 63.26 |
| | | | 960MHz | 59.47 | 59.85 |
| | | | 1710MHz | 64.27 | 62.68 |
| | | | 1800MHz | 60.66 | 59.19 |
| | | | 1900MHz | 51.65 | 51.36 |
| | | | 2000MHz | 47.91 | 47.13 |
| | | | 2100MHz | 45.80 | 45.04 |
| | | | 2200MHz | 42.90 | 42.29 |
| | | | 2300MHz | 48.74 | 47.95 |
| | | | 2400MHz | 66.83 | 65.53 |
| | | | 2500MHz | 80.31 | 76.09 |
| | | | 2600MHz | 77.43 | 69.36 |
| 2700MHz | 65.96 | 59.46 | | | |

Mechanical/Environmental Specifications

| | |
|---------------|--|
| Construction: | PVC Radome, Stainless Steel Tilt Bracket |
| Cable: | none |
| Connector: | 2x N-Type Female (Low-PIM White Bronze) |
| Wind Rating: | 198km/hr |
| Temperature: | -40°C +60°C |
| Weight: | 3.2kg + 0.8kg mounting kit |
| Dimensions: | 300 x 330 x 135mm (L x W x D) |
| Mounting | 25-72mm Ø pole |

CAD Drawing

Side View



Rear View

