

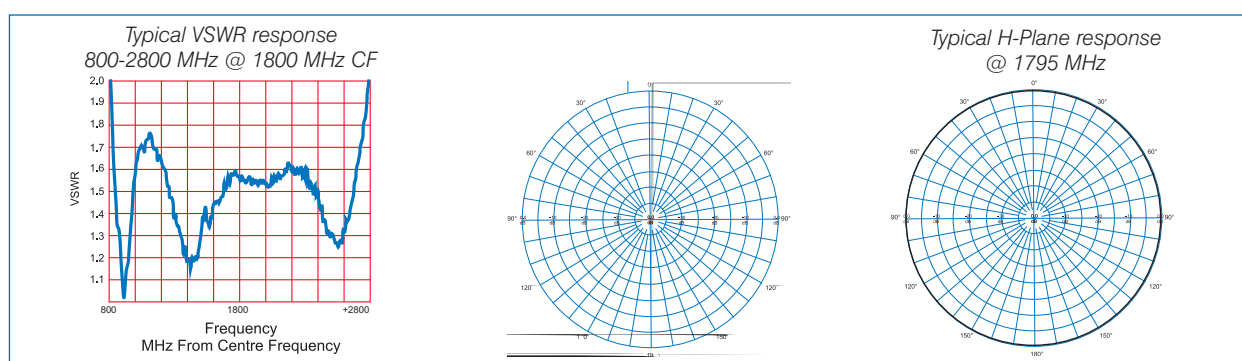
# Transit Antenna

The TLA4100/4200 Antenna is designed specifically for rail, light rail & bus applications and other similarly demanding transit or stationary applications.

With a VSWR less than 2:1 covering 800 - 2700 MHz, the TLA4100/4200 operates in all cellular bands globally plus the 2.4 GHz ISM band. In addition the TLA4200 incorporates an active GPS antenna for asset tracking and AVL applications.

Designed utilising a high impact, UV stabilised low Flame, Smoke and Toxicity (FST) radome, the TLA4100/4200 is IP68 rated to fully protect against the ingress of dust and water.

- The TLA4100/4200 meets European Traction Industry Standards, NF-F-16-102. EN50155, EN50124-1 and Deutsch Bahn high voltage specifications.
- Functions with or without a ground plane\*



## Electrical

|                      |                                     |
|----------------------|-------------------------------------|
| Model Number         | TLA4100/4200                        |
| Peak Gain dBi (dBd)  | 5 (3) @ 824-960 / 6 (4) @ 1710-2170 |
| Frequency MHz        | 800-960 / 1710-2700                 |
| Tuned Bandwidth      | Full                                |
| VSWR (Return Loss)   | <2:1                                |
| Nominal Impedance Ω  | 50                                  |
| Vertical Beamwidth   | 38°/180°                            |
| Horizontal Beamwidth | Omnidirectional                     |
| Input Power W        | 25                                  |

## Mechanical

|               |  |
|---------------|--|
| Model Number  | TLA4100/4200   |
| Construction  | UV Stabilised Plastic Moulding                             |
| Area mm       | 200 x 100  |
| Height mm     | 90 including gasket  |
| Termination   | Antenna Port: Fixed N-female<br>GPS Port: Fixed TNC-female |
| Mounting Area | 4 x M6 screws (not included)                               |

## GPS (included in TLA4200)

|                                 |  |
|---------------------------------|--|
| Fo                              | 1575.42 MHz  |
| Operation Temperature           | -40°C to +85°C   |
| Storage Temperature             | -40°C to +100°C  |
| System Gain at Fo               | 28 dBi including cable and filter losses                                   |
| Impedance                       | 50 Ω   |
| Polarization                    | RHCP   |
| VSWR at Fo                      | 1.5:1  |
| Noise Figure at Fo              | <1.8 dB max.   |
| Power Input                     | +2.5 VDC to +12 VDC input, Auto Switching                                  |
| Power Consumption               | 11 mA to 13 mA (max)   |
| Typical Isolation Between Ports | >36 dB for 806-960 MHz, >30 dB for 1710-2170 MHz, >38 dB for 2400-2700 MHz |