TRANSIT ANTENNA

698-2700MHz & 5700-5800MHz

TLA4100, TLA4200

The TLA4100/4200 transit antenna is designed specifically for rail, light rail and bus applications and other similarly demanding transit or stationary applications. With a VSWR less than 2.5:1 covering 698-2700 MHz, the TLA4100/4200 operate in all cellular bands globally plus the 2.4 & 5.8 GHz ISM bands. 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.

Features:

- NF-F-16-101/102 (materials standard)
- EN50155 (vibration standard)
- EN50124-1 (electrical isolation standard)
- Functions with or without a ground plane*

Electrical

Model Number	TLA4100/4200
Frequency *MHz*	698-960 / 1710-2170 / 2300-2700 / 5700-5800
Peak Gain *dBi*	5 @ 698-960 / 6 @ 1710-2170 / 3 @ 2300-2700 / 7 @ 5700-5800
Tuned Bandwidth	Full
VSWR	<2.5:1 – Full band on ground plane* <2.0:1 – 800-5800MHz off ground plane
Nominal Impedance Ω	50
Vertical Beamwidth	38°/180°/ 155° / 40°
Horizontal Beamwidth	Omnidirectional
Input Power *W*	100

Mechanical

Model Number	TLA4100/4200
Construction	NF-F-16-102 compliant injection moulded radome / cast aluminium alloy base
Area *mm*	205 x 100
Height *mm*	90 including gasket
Termination	Antenna Port: Fixed N-female GPS Port: Fixed TNC-female
Mounting Area	4 x M6 screws (not included)

GPS (TLA4200 only)

Model Number	TLA4100/4200
Frequency *MHz*	1575.42
Operation Temperature *°C*	-40 to +85
Storage Temperature *°C*	-40°C to +100
System Gain *dBi*	28 (including cable and filter losses)
Impedance *Ohm*	50
Polarization	RHCP
VSWR	1.5:1
Noise Figure *dB*	<1.8 max.
Power Input *Vdc*	+2.5 VDC to +12 VDC input, Auto Switching
Power Consumption *mA*	11 to 13 (max)
Typical Isolation Between Ports *dB*	>36 for 698-960 MHz, >30 for 1710-2170 MHz, >38 for 2300-2700MHz & 5700-5800MHz

* Nominated gain & VSWR achieved using a $1m^2$ ground plane