The TLA600 series is a range of low profile transmission line antennas for use in applications where little or no ground plane exists.

These antennas can be used on buses, trucks, trains or in telemetry applications where the antennas are to be mounted on a fibreglass roof or similar non conductive surface.

Features:

- Available with integrated active GPS antenna for asset tracking/vehicle location applications on request.*
- Functions with or without a ground plane, allowing one antenna to be used in an entire system, regardless of mounting application.**
- Performance equivalent to a ¼ wave whip mounted in the centre of a metal roof
- All antennas supplied pre-tuned to the nominated bands and require no field adjustment
- Neoprene gasket seal provides excellent waterproofing of fitted antenna
- Available in all major UHF bands

Electrical Specifications

Mechanical Specifications

Model Number	TLA600-57	TLA600-65	TLA600-66	TLA600-70	TLA600-71	TLA600-72	TLA620-99
Gain	Unity over a ¼ wave						
Frequency MHz	380-400	400-420	410-430	450-470	470-500	500-530	255-380
Power W	50						
Tuned Bandwidth	Entire band @ VSWR <2.0:1 off ground plane <2.4:1 on ground plane	Entire operating $@ < 2.0:1$ VSWR on or off ground plane					4% @ <1.5:1 VSWR 5% @ <2.0:1 VSWR
Tuning	Supplied pre-tuned						Supplied pre- tuned, requires ground plane

* When ordering specify - GPS suffix - i.e. TLA600-57-GPS

** TLA620-99 cannot be used without a ground plane

Typical VSWR response for TLA600-71



Typical VSWR response for TLA600-71



This is a logarithmic plot of the horizontal (H Plane) pattern of the TLA600 Series. With a peak gain of 2.1 dBi, the TLA-600 is performing effectively identically to a 1/4 wave whip.

Model Number	TLA600 Series
Construction	White Geloy ASA radome
Length mm	375
Height mm	78
Width mm	140
Mounting	Screw and gasket
IP Rating	IP65
Termination	UHF - N type female connector GPS (Optional) terminated with SMA female connector

GPS Specifications

Model Number	TLA600-XX Series
Frequency MHz	1575.42 MHz
Operating Temp.	-40 to +85°C
Storage Temp.	-40 to +100°C
System Gain	28dBi including cable and filter losses
Impedance	50 Ohm
Polarization	RHCP
VSWR	1.5:1
Noise Figure at Fo	<1.8 dB max.
Power Input	+2.5Vdc to +12Vdc input, Auto Switching
Power Consumption	11mA to 13mA (max)
Power Input	Reverse Polarity Short Circuit Shutdown
Over-Current	Thermal over-current shutdown >+150°C

