

VHF Low Profile Antennas

118-175MHz

TLA150, TLA160 & TLR160



Transmission line antenna designs, as used in this group of antennas, provide excellent omnidirectional radiation patterns for vertically polarised antennas but allow a substantial height reduction over standard 1/4 wave whip style antennas.

A number of design styles available to suit a variety of applications including heavy duty industrial, mining, rail, commercial, airforce and security.

Features:

- TLA150 - For extra heavy duty applications
- TLA160 - Lightweight, field tuneable
- TLR Series - Enclosed radiator, field tuneable



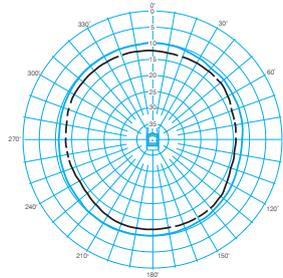
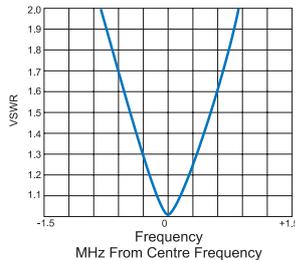
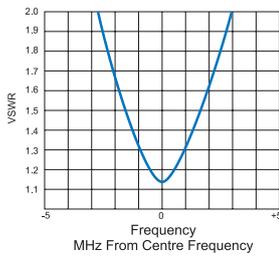
TLA160



TLR160

Typical VSWR response (TLA160)

Typical VSWR response (TLR160)



This transmission line antenna provides excellent omnidirectional coverage. The antenna is approximately 2dB down in gain over a 3 wave whip, due to its low profile. The antenna is highly recommended in applications where height is critical though it is important to note the performance trade off and need for a large, flat ground plane.

TEST FREQUENCY: 460 MHz
REFERENCE ANTENNA MODEL: SW2
MOUNT: MB9 Roof Centre
TEST ANTENNA MODEL: TLA160
MOUNT: 1800 x 1200 Ground Plane

Electrical Specifications

Model Number	TLA160	TLA150	TLR160
Frequency MHz	148 - 175	166 - 175	148 - 160
Gain	-2dB over 1/4 wave		
Power W	100		
Tuned Bandwidth	3.0MHz @ <1.5:1	1.5MHz @ 1.5:1	1.6MHz @ <2.0:1
Tuning	Field tune to minimum VSWR	Factory tuned to user specific frequency	Field tune to minimum VSWR

Mechanical Specifications

Model Number	TLA160	TLA150	TLR160
Whip Material	Alodined aluminium	Rugged cast aluminium coated in chlorinated rubber	Copper plated steel element inside a ASA plastic radome
Length mm	650		429
Height mm	100		104
Width mm	56		83
Cable / Connector	TLA160 = UHF Female TLA160-N = N-type Female	N-type Female	UHF Female