



# MPA-154

## L1 PASSIVE GPS MICROSTRIP ANTENNA

Ordering Part #: 189-00006-01

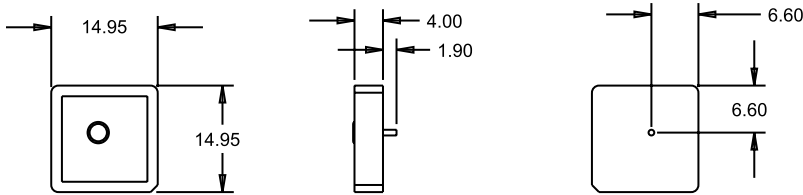


### Description

Our patch antenna offerings are perfect for projects with a smaller scope and budget for which high-performance and lower weight is not a primary factor for consideration for the antenna. They are ideal for less demanding applications where extreme performance and battery life can be sacrificed at the expense of device cost. This antenna is designed for embedded applications such as GPS handheld units, mobile devices, and tracking devices. It features higher upper hemisphere efficiency and a lower axial ratio as compared to regular patch antennas. The interface connector is a through pin solution.

### Mechanical Specifications

dimensions are in mm



### Electrical Specifications

76x76 mm ground plane

Parameter	Design Specifications
Frequency	1575.42 MHz
Polarization	RHCP
Efficiency	70%
Realized gain	4 dBic
Axial ratio	1.5 dB (typical) / 2.5 dB (max)
Bandwidth (-1db)	10 MHz
Beamwidth (3dB)	100° (both axes)
CP rejection	15 dB (typical) / 10 dB (min)
VSWR	1.3:1
Impedance	50 Ohm
Operating temp.	from -40°C to 85°C

### Features

- GPS L1 frequency
- Adhesive mounting
- Pin connector
- Compact size
- Custom tuning

### Applications

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Embedded applications
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement

### Realized gain plot

Measured at 1575.42 MHz on a 76x76 mm ground plane

