

# High Gain, Jam-Resistant GPS Timing Antenna

## APPLICATIONS

Network Timing and Synchronisation

Long Cable-Run Installations

Anti-Jamming GPS

Military and Security

## KEY FEATURES

Professional-Grade Permanent Mount Antenna.

Weather-Proof, IP67, Housing.

Pre-Filtered, Jam-Resistant, GPS Antenna.

High LNA Gain.

Wide Voltage Range.

## KEY BENEFITS

Great out-of-band signal rejection.

Ideal For High Level RF Environments.

Great Signal to Noise Ratio.

Long Cable Runs

## PRODUCT OVERVIEW

The T-3072 is a professional grade, high gain, pre-filtered permanent mount, GPS L1 antenna. It is housed in an industrial-grade, weather-proof, conical white enclosure, and is supplied with a TNC Jack (female) connector.

The antenna features a conical radome and is specially designed for timing applications in environments characterized by high L-Band RF fields and long cable runs.

The T-3072 also features a precisely tuned ceramic patch element, a tight band-pass SAW pre-filter, a first LNA gain stage, an in line SAW filter, followed by a two stage amplifier. The antenna provides a reliable and clear GPS signal while minimizing loss-of-lock, even when conditions are less than ideal.

It covers the GPS L1 and SBAS (WAAS/EGNOS/MSAS) frequency band (1572.5 to 1578 MHz), and it offers unparalleled out-of-band signal rejection and excellent axial ratio for improved signal reception and multi-path rejection.

An optional specially-designed right-angled bracket is available for securely mounting the antenna on to a vertical surface, such as a wall, or antenna pole (P/N MT4-GPS).



## SPECIFICATION

### Antenna

Architecture:  
Custom single-feed ceramic patch.  
Antenna Gain:  
5 dBic at 90° on 100mm Ground Plane.  
Axial Ratio: 4 dB at 90°, 6dB at 20°

### Electrical

Architecture:  
SAW Pre-Filter, 1st LNA, in-line SAW filter, two stage LNA.  
Frequency Bandwidth:  
1572.5 to 1578 MHz.  
Polarization: RHCP  
LNA Gain (including SAW pre-filter):  
40 dB min. at 90° (at 1575.42 MHz)  
VSWR (at LNA output): <1.5:1  
Noise Figure: 3.3 dB typ.  
Supply Voltage Range:  
+2.7 to 10 VDC nominal  
Supply Current: 25 mA Max.  
ESD Circuit protection:  
15 KV air discharge

### Mechanical & Environmental

Mechanical Size:  
66.5 mm dia. x 47.5 mm H  
Connector: TNC female  
Operating Temp. Range: -40 to +85 °C  
Enclosure:  
Radome: White ASA Plastic,  
Base: Zamak White Metal  
Weight: 150 g  
Attachment Method:  
L-Bracket option: P/N# MT4-GPS  
Environmental:  
IP67 and RoHS compliant  
Shock Vertical axis:  
50 G, other axes: 30 G  
Vibration 3 axis, sweep = 15 min, 10 to 200 Hz sweep: 3 G

### Warranty

One year parts and labour

### Dimensions (mm)

