

# Asset Tracking External Antenna

## 1575 MHz|GPS



### LOW-COST ANTENNA IS IDEAL IN RUGGED CONDITIONS

Laird Technologies' low-cost GPS antenna is designed to receive GPS broadcast. The GPS magnet mount car antenna specifications are based on a one-meter ground plane. This high-volume, low-cost product meets automotive specifications for durability and quality.

Laird Technologies is a leading supplier of mobile antenna solutions for automotive, asset tracking and consumer electronics industries. Products include cellular antennas (AMPS, GSM/DCS/PCS, UMTS), GPS antennas, entertainment antennas (AM/FM, DAB, DVB-T, Satellite radio, TV), mobile communication antennas (Bluetooth, DSRC, RKE, TPMS, WiFi), satellite communication antennas and battery packs.

Leveraging our experience in M2M wireless modules, Laird Technologies also designs smart antennas integrating functionalities such as cellular, WiFi and Bluetooth® modems, GPS receivers and vehicle networking. All of these capabilities can be further integrated into M2M Devices, that add control electronics and firmware to provide the latest evolution in telematics systems.

### FEATURES

- Small footprint - very low profile
- Multiple connectors available
- RG-174 or micro cable available
- Grommet over mold allows for better cable stability
- Rubber splint to route cable directly in edge-of-roof applications
- Label and liner can be modified to meet the needs of the customer
- Magnet mount with rubber feet to ensure no damage to vehicle surface

### BENEFITS

- Low total-cost implementation
- Easy installation
- Small package size
- Meets enhanced environmental specifications

### APPLICATIONS

- General automotive aftermarket
- Fleet logistics, tracking, and diagnostics
- Theft protection
- Vehicle and asset recovery
- Navigation systems
- Infotainment systems
- On-board computing

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Innovative **Technology**  
for a **Connected** World

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### External GPS

#### ANTENNA SPECIFICATION

|                                |                         |
|--------------------------------|-------------------------|
| Frequency Range                | 1574.42-1576.42 MHz     |
| Peak Gain                      | 4.0 dBi max @ Boresight |
| Polarization                   | RHCP                    |
| Impedance                      | 50 $\Omega$             |
| Output VSWR (Min. Performance) | $\leq 2:1$              |

#### LNA SPECIFICATION

|                |                                     |
|----------------|-------------------------------------|
| Gain (Max)     | 29 dB                               |
| Noise Figure   | $\leq 1.5$ dB                       |
| Supply Voltage | 3.3 $\pm$ 0.3V<br>or 5.0 $\pm$ 0.5V |
| Current        | 25 mA                               |
| Input P1dB     | $\geq -27$ dBm                      |
| Output VSWR    | $\leq 2:1$                          |

#### MECHANICAL SPECIFICATION

|                 |                             |
|-----------------|-----------------------------|
| Dimension       | 44 x 36 x 14 mm             |
| Radome Material | Black ASA+PC (Luran S 778T) |
| Connector       | SMA                         |
| Cable Length    | 6000 mm                     |
| Cable Type      | RG-174                      |
| Mounting Method | Magnetic                    |

#### ENVIRONMENTAL SPECIFICATION

|                       |                                             |
|-----------------------|---------------------------------------------|
| Operating Temperature | -40 C to +85 C                              |
| Humidity              | Operation 95% RH at 65oC                    |
| Ingress Protection    | IP-66                                       |
| Drop Test / Shock     | 50 g shocks 10x3 axis / 1 meter drop 6 axis |
| Vibration             | 10-1000 Hz vibration 1 hour 3 axis          |

#### ORDERING INFORMATION

|                               |                                    |
|-------------------------------|------------------------------------|
| Part Number                   | 637114                             |
| Customization available w/MOQ | Cable type, length, connector type |



Magnetic Base

#### TEL-DS-EXTERNAL-GPS 1210

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