

Asset Tracking Internal Antenna 1575 MHz GPS





COMPACT ANTENNA IS IDEAL FOR COVERT INSTALLATIONS

The Internal GPS antenna enables direction and location information in a compact housing. The antenna measures only $63.5 \times 63.5 \times 13$ mm, allowing covert installation into vehicle interiors. It performs well with or without a ground plane.

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 **FROHS**

- High gain antenna for excellent satellite reception
- Compact, ideally suited for stealth applications
- Built-in ground plane to increase mounting flexibility
- Can be combined with Cellular Blade antenna (part # 637109)

APPLICATIONS

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

BENEFITS

- Low total-cost implementation
- Easy installation
- Easy concealment
- Small package size
- Meets enhanced environmental specifications
- Ground plane independent

global solutions: local support ...

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

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Internal GPS

GPS

ANTENNA SPECIFICATION	
Frequency Range	1574.42 -1576.42 MHz
Peak Gain	4.5 dBic @ Boresight
Polarization	RHCP
Impedance	50 Ω
Output VSRW (Min. Performance)	≤ 2:1

LNA SPECIFICATION	
Gain (Max)	28 dB
Noise Figure	≤ 1.5 dB
Supply Voltage	$3.3 \pm 0.3 \text{V}$
Current	12 mA
Input P1dB	≥ -27 dBm
Output VSWR	≤ 2:1

MECHANICAL SPECIFICATION	DN
Dimension	63.5 x 63.5 x 13 mm
Radome Material	Cycoloy
Connector	SMA
Cable Length	4000 mm
Cable Type	RG-174
Mounting Method	Hook and Loop, Adhesive

ENVIRONMENTAL SPECIFICATION	
Operating Temperature	-40°C to +85°C
Humidity	Operation 95% RH at 65°C
Ingress Protection	IP-50
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	637108
Customization available w/MOQ	Cable type, length, connector type, mounting style

Order with 637109 for a combination GPS/Cellular solution. Part #637110.

TEL-DS-INTERNAL GPS 1210

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