



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

Asset Tracking Internal Antenna

Cell+GPS|Wedge



LOW-PROFILE ANTENNA IS IDEAL FOR COVERT INSTALLATIONS

The Wedge antenna helps enable fleet tracking while providing five radio frequency options. The antenna's small size offers covert installation for fleet, logistics, utility, and public safety applications. The versatile multiband solution supports AMPS, GSM, DCS, PCS, and UMTS frequency voice and data; and operates in the 3 to 5 volt range. An optional housing is available which is suitable for glass mounting.

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

- Compact and ideally suited for stealth applications
- Measures only 138 x 32 x 11.2mm
- Hook and Loop fastener or adhesive mounts available
- Operates in the 3 to 5 volt range
- Two housing options available

BENEFITS

- Low total-cost implementation
- Easy installation
- Easy concealment
- 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

global solutions: local support™

Americas: +810.695.9810
Europe: +44.1628.858.940
Asia: +852.2268.6567

www.lairdtech.com



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ANTENNA SPECIFICATION

Frequency Range	824-896 MHz	880-960 MHz	1710-1880 MHz	1850-1990 MHz	1920-2170 MHz	1574.42 - 1576.42 MHz
Peak Gain	3.5 dBi	3.0 dBi	3.5 dBi	0 dBi	2.5 dBi	3.0 dBi @ Boresight
Polarization	Linear	Linear	Linear	Linear	Linear	RHCP
Impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Output VSWR (Min. Perf.)	$\leq 2:1$	$\leq 2:1$	$\leq 2:1$	$\leq 2:1$	$\leq 2:1$	$\leq 2:1$

LNA SPECIFICATION

Gain (Max)	28 dB
Noise Figure	≤ 1.5 dB
Supply Voltage	3.3 \pm 0.3V or 5.0 \pm 0.5V
Current	17 mA
Input P1dB	≥ -27 dBm
Output VSWR	$\leq 2:1$

MECHANICAL SPECIFICATION

Dimension	138 X 32 X 11.2 mm
Radome Material	Cyclopy
Connectors	SMC for cellular, SMA for GPS
Cable Length	4000 mm
Cable Type	RG-174 Coaxial
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	637112
Customization available w/MOQ	Cable type, length, connector type, mounting style



Optional housing available.

TEL-DS-INTERNAL WEDGE 1210

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