

Asset Tracking External Antenna

Cell+GPS|Gain



LOW-PROFILE ANTENNA IS IDEAL FOR TRUCKING APPLICATIONS

The Gain antenna's weatherproof housing and low profile offers excellent solutions for trucks, trailers and tall vehicles. The cost-effective solution transmits AMPS or GSM, and PCS or DCS frequency voice and data while functioning on either a ground plane or no ground plane surface. The antenna operates in the 3 to 5 volt range.

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

- Low-profile weatherproof design is an excellent solution for trucks, trailers, and tall vehicles
- The cost-effective solution transmits voice and data while measuring only 145 x 131 x 24 mm
- Sleek durable housing mounts on either a ground plane or no ground plane surface
- Magnetic or adhesive tape mount available

BENEFITS

- Low total-cost implementation
- High-performance RF reception
- Easy installation
- Small package size
- Meets enhanced environmental specifications
- Ground plane independent

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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External Gain

AMPS or GSM

DCS or PCS

GPS

ANTENNA SPECIFICATION

Frequency Range	824-896 MHz or 880-960 MHz	1710-1880 MHz or 1850-1990 MHz	1575.42 MHz
Peak Gain	1.0 dBi	3.0 dBi	3.5 dBi @ Boresight
Polarization	Linear	Linear	RHCP
Impedance	50 Ω	50 Ω	50 Ω
Output VSWR (Min. Performance)	$\leq 2.5:1$	$\leq 2.5:1$	$\leq 2:1$

LNA SPECIFICATION

Gain (Max)	—	—	29 dBi
Noise Figure	—	—	≤ 1.5 dB
Supply Voltage	—	—	3.3 $\pm$ 0.3V or 5.0 $\pm$ 0.5V
Current (typical)	—	—	15 mA
Input P1dB	—	—	≥ -27 dBm
Output VSWR	—	—	$\leq 2:1$

MECHANICAL SPECIFICATION

Dimension	145 x 131 x 24mm
Radome Material	Black PC/ABS Blend (Xenoy 5220U)
Connector	TNC for cellular, RP-TNC for GPS
Cable Length	6096 mm
Cable Type	RG-174
Mounting Method	Magnetic, Adhesive

ENVIRONMENTAL SPECIFICATION

Operating Temperature	-40° to +85°C
Humidity	Operation 95% RH at 65°C
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	62105 NA, 62102 EU
Customization available w/MOQ	Cable type, length, connector type, mounting style

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