LMU-3000™ GPRS/CDMA/HSPA Series

GPS TRACKING UNIT WITH OBD-II INTERFACE

The LMU-3000 is an economical, full-featured vehicle tracking product designed for easy and reliable installation in automobiles. The LMU-3000 is an ideal solution for automotive insurance, driver behavior management, auto rental and automotive applications when access to the vehicle diagnostics interface (OBD-II) is required.

Competitive Price, Competitive Technology, Competitive Edge

The LMU-3000 full featured tracking unit from CalAmp features a small size, superior GPS design, OBD-II interface, and a 3-axis accelerometer. These features enable the LMU-3000 to access vehicle diagnostic interface data, track vehicle speed and location, plus detect hard braking, cornering or acceleration. Superior internal antennas for both cellular and GPS eliminate the need for professional installation and make the LMU-3000 install quick, easy and inexpensive. Messages are transported across the cellular network using enhanced SMS or UDP messaging providing a reliable communications link between the device and your application servers. The LMU-3000 is designed to dramatically reduce cost, power and size while significantly improving field reliability in 12 volt passenger or light-duty vehicles.

Flexibility

The LMU-3000 employs CalAmp's industry leading on-board alert engine, PEG™ (Programmable Event Generator). This advanced engine monitors external conditions and supports customer-defined exception-based rules to help meet the needs of your application. PEG continuously monitors the vehicle environment and responds instantaneously to pre-defined threshold conditions related to time, date, motion, location, geo-zone, input and other event combinations. With PEG, your unique application will meet demanding customer requirements. This behavior can be programmed by CalAmp before shipment, at a customer's facility, or over-the-air once the unit has been fielded.

Over-the-Air Serviceability

The LMU-3000 also leverages CalAmp's industry leading over-the-air device management and maintenance system, PULS™ (Programming, Updates, and Logistics System). Configuration parameters, PEG rules, and firmware can all be updated over the air. PULS offers out-of-the-box hands free configuration and automatic post-installation upgrades. You can also monitor unit health status across your customers' fleets to quickly identify issues before they become expensive problems.

Experience *The Advantage*

- Superior GPS & cellular quality
- Built-in cellular and GPS antenna for easy installation
- Built-in OBD-II connector to read vehicle bus data
- Built-in accelerometer for driver behavior capabilities and impact detection
- Pre-impact data capture capabilities
- Power sleep modes

LMU-3000 Specifications

General Specifications

Communication Modes	GPRS/EDGE/HSPA and CDMA 1xRTT packet data, UDP and SMS
Location Technology	50-channel GPS
Operating Voltage	12 volt vehicle systems

GPS Specifications

Location Technology	50-channel GPS (with SBAS) SBAS: WAAS, EGNOS, MSAS, GAGAN
Location Accuracy	2.0 meter CEP (with SBAS)
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-147 dBm
AGPS Capable	

Cellular Specifications

Data Support	SMS, GPRS, CDMA 1xRTT or HSPA packet data
GSM/GPRS Quad-Band	850/900/1800/1900 MHz
GSM/GPRS Output Power	Class 4 (2 Watts) 850/900 bands Class 1 (1 Watt) 1800/1900 bands
CDMA Dual-Band	800/1900 MHz
CDMA Output Power	800: +24dBm 1900: +24dBm
HSPA/UMTS Dual-Band	900/2100 MHz (bands VIII, I) or 850/1900 MHz (bands V, II) 3GPP release 6 5.6 Mbps upload, 7.2 Mbps download
GSM/GPRS/EDGE Fallback	850/900/1800/1900 quad-band GPRS class 12, EDGE MCS1-MCS9

Comprehensive I/O

Inputs	OBD-II input: J1850 PWM, J1850 VPW, ISO-9141-2, ISO-14230, KWP2000, ISO-15765, CAN
Outputs	None
Serial Interface	1 TTL serial
Status LEDs	GPS, OBD-II and cellular

Certifications

Fully certified FCC, CE, IC, PTCRB, Applicable Carriers

Environmental Specifications

Temperature	-30° to +75° C (operating) -40° to +85° C (storage)
Humidity	95%RH @ 50° C non-condensing
Shock and Vibration	SAE J1455
EMC/EMI:	SAE J1113; FCC–Part 15B; Industry Canada
RoHS Compliant	

Electrical Specifications

Operating Voltage	7-20 VDC
Power Consumption	3 mA @ 12 V (deep sleep) 11 mA @ 12 V (sleep on network) 140 mA @ 12 V (active)

Physical Specifications

Dimensions	1.7 x 2.5 x 1”, (43 x 64 x 25 mm)
Weight	1.8 oz, (51 g)

Connectors, SIM Access

SIM Access	Internal
Connection Type	Built-in OBD-II interface

Mounting

Built-in OBD-II connector

Key Features

- OBD-II interface
- Packet data (GPRS, CDMA 1xRTT, or HSPA) and SMS-based messaging
- Internal cellular and GPS antennas
- Super sensitive GPS (-162 dBm tracking)
- Ultra-low power sleep mode (<3mA)
- 3-axis accelerometer for driver behavior and impact detection
- Voltage monitoring and low battery notification
- 20,000 buffered messages
- 32 built-in geo-fences, plus any combination of circle or polygon zones, up to 5400 points
- PEG™ exception-based rules
- Automatic, over-the-air unit configuration on power-up (PULS™)
- Over-the-air firmware download (PULS™)
- Web-based device management (PULS™)
- Garmin® FMI compatible interface

Optional Features/Functions

- Serial cable
- Garmin® interface or MDT serial interface

Development Support Options

- Customized hardware and software development available on request

Air Superiority™

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All specifications are typical and subject to change without notice.

CalAmp
2231 Rutherford Road, Suite 110
Carlsbad, CA 92008
t: 760.438.9010 | f: 760.438.5835
www.calamp.com