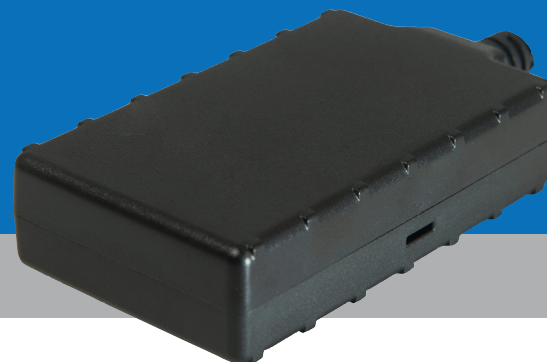




# LMU-320™ GPRS Series

## Economical GPS Tracking Unit



### EXPERIENCE THE ADVANTAGE

- Economical device
- Superior GPS and cellular performance
- Built-in cellular and GPS antenna for easy installation
- Built-in backup battery option
- Built-in harness
- Optional 3-axis accelerometer for motion, tilt, and impact detection
- Low power sleep modes
- Up to 2 inputs and 1 output
- Optional 1 bit bus
- Over-the-air update capability for configuration and firmware

The LMU-320 is an economical, full-featured vehicle tracking product designed for covert and reliable installation in automobiles. The LMU-320 is an ideal solution for stolen vehicle, vehicle finance, auto rental and other automotive track and trace applications.

#### COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The LMU-320 high-value tracking unit from CalAmp features a small footprint superior GPS performance, an optional internal 200mAh back-up battery, ultra low power sleep modes, 3-axis accelerometer for motion sense, and up to two inputs and one output (I/O). The LMU-320 is a complete vehicle tracking and communications device incorporating next-generation, super-sensitive GPS technology on GSM/GPRS cellular networks for installation in any 12 or 24 volt mobile vehicle. Superior internal antennas for both cellular and GPS eliminate the need for wired antennas and make the LMU-320 mountable virtually anywhere in the vehicle for easy, inexpensive installations. Messages are transported across the GSM/GPRS network using enhanced SMS or UDP messaging providing a reliable communications link between the device and your application servers. The LMU-320 is designed to dramatically reduce cost, power and size while providing excellent field reliability.

#### FLEXIBILITY

The LMU-320 leverages CalAmp's advanced industry leading on-board alert engine, PEG™ (Programmable Event Generator) to monitor external conditions and support customer-defined exception-based rules to meet your application requirements. PEG™ 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. 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-320 leverages CalAmp's management and maintenance system, PULS™ (Programming, Updates, and Logistics System), for over-the-air configuration parameters, PEG™ rules, and firmware. This out-of-the-box hands free configuration and automatic post-installation upgrades can monitor unit health status across your customers' fleets to identify issues before they become expensive problems.

# LMU-320 SPECIFICATIONS

## GENERAL

Communication Modes	GPRS Packet data and SMS
Location Technology	48 channel GPS (with SBAS)
Operating Voltage	12 and 24 volt vehicle systems

## GPS

Location Technology	GPS
	SBAS: WAAS, EGNOS, MSAS, GAGAN
Tracking Sensitivity	-163 dBm
Acquisition Sensitivity	-147 dBm
Location Accuracy	2.5m
AGPS / Location assistance capable	

## CELLULAR

Data Support	SMS, GPRS (UDP)
Cellular/PCS	FCC—Parts 22,24; PTCRB,UL, IC
GPRS	Up to class 10
Quad-Band	850/900/1800/1900 MHz
Output Power	850 (Class 4) 2W
	900 (Class 4) 2W
	1800 (Class 1) 1W
	1900 (Class 1) 1W

## COMPREHENSIVE I/O

Digital Inputs	Up to 2 fixed bias, optional 1-bit bus
Digital Outputs	Optional open collector (150 mA)
Analog Inputs	1 internal VCC monitor
Status LEDs	GPS and cellular

## CERTIFICATIONS

Fully certified FCC, CE, IC, CDG Applicable Carriers

## ENVIRONMENTAL

Temperature	-30° to +75° C (connected to primary power) -40° to +85° C (storage)
Humidity	95%RH @ 50° C non-condensing
Shock and Vibration	U.S. Military Standards 202G and 810F, SAE J1455
EMC/EMI:	SAE J1113; FCC-Part 15B; Industry Canada
RoHS Compliant	

## About CalAmp

CalAmp Corp. (NASDAQ: CAMP) is a proven leader in providing wireless communications solutions to a broad array of vertical market applications and customers. CalAmp's extensive portfolio of intelligent communications devices streamline otherwise complex machine-to-machine (M2M) deployments. These solutions enable customers to optimize their operations by collecting, monitoring and efficiently reporting business critical data and desired intelligence from high-value remote assets. For more information, please visit [www.calamp.com](http://www.calamp.com).

## ELECTRICAL

Operating Voltage	7-32 VDC (momentary) 9-32 VDC (startup, operating)
Power Consumption	<2mA @ 12V (deep sleep) <10mA @ 12V (radio-active) <20mA @ 12V (idle with IP connection open) <60mA @ 12V (active standby)
Back Up Battery	Optional Lithium-Ion 200mAh or 1000mAh (See technical specifications online for operational changes)

## PHYSICAL

Dimensions	1.84 x 3.0 x 0.78" (46.5 x 77 x 19.7mm) (without harness)
Weight	3.5oz / 99g (with harness)

## CONNECTORS, SIM ACCESS

SIM Access	Internal
Connection Type	Captive wire harness in 2 wire, 4 wire, and 6 wire configurations

## MOUNTING

Standard tie-wrap or adhesive

## KEY FEATURES

- GPRS and SMS-based messaging
- Internal GSM and GPS antennas
- Super sensitive GPS (-162dBm)
- Ultra low power sleep mode (<2mA)
- Up to 2 inputs and 1 output
- Voltage monitoring and low battery notification
- 2,000 buffered messages
- 10 built-in geo-fences
- PEG™ exception-based rules
- Automatic over-the-air configuration on power-up (PULS™)
- Over-the-air firmware download (PULS™)
- Web-based device management (PULS™)
- Optional internal 200mAh back-up battery
- Optional 3-axis accelerometer for motion sense and tilt
- Optional starter interrupt harness
- Optional OBD-II easy install harness

## DEVELOPMENT SUPPORT OPTIONS

Customized hardware and software development available on request

## CalAmp Corp.

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All specifications are typical and subject to change without notice

