

# LMU-800™

## GPRS/CDMA/HSPA Series

Flexible, Economical GPS Tracking Unit



Cal/Amp®



### Experience The Advantage

- GSM/GPRS, CDMA 1xRTT or HSPA configuration
- Economical and flexible device
- Superior GPS and cellular performance
- Internal cellular and GPS antenna for easy installation
- Built-in 3-axis accelerometer for motion, tilt, and impact detection
- Built-in harness
- Low power sleep modes
- 3 Inputs and 3 outputs
- Over-the-air update capability for configuration and firmware

The LMU-800 is an economical, full-featured vehicle tracking product designed for easy and reliable installation in automobiles. The LMU-800 is an ideal solution for stolen vehicle, vehicle finance, auto rental and other automotive track and trace applications where internal back-up battery is required.

### Competitive Price, Competitive Technology, Competitive Edge

The LMU-800 high-value tracking unit from CalAmp features a small size, superior GPS performance, an internal 200mAh back-up battery, ultra low power sleep modes, 3-axis accelerometer for motion sense, and three inputs and three outputs (I/O). The LMU-800 is a complete vehicle tracking and communication device incorporating next-generation, super-sensitive GPS technology on GSM/GPRS/CDMA 1xRTT/HSPA 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-800 mountable virtually anywhere in the vehicle for easy, inexpensive installations. Messages are transported across the cellular network using enhanced SMS or UDP messaging providing a reliable communication link between the device and your application servers. The LMU-800 is designed to dramatically reduce cost of ownership, power and size while providing excellent field reliability.

### Flexibility

The LMU-800 employs CalAmp's advanced industry on-board alert engine, PEG™ (Programmable Event Generator) to monitor external conditions and support customer-defined exception-based rules to meet your applications requirements. PEG™ monitors the vehicle environments 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-800 leverages CalAmp's management and maintenance system, PULS™ (Programming, Updates and Logistics System), for all 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-720 Specifications

## General

Network Technology	GPRS/EDGE/HSPA/CDMA 1xRTT, UDP and SMS
Operating Voltage	12 and 24 volt vehicle systems

## GPS

Location Technology	GPS (with SBAS)
Enhancement Technology	SBAS: WAAS, EGNOS, MSAS, GAGAN
Receiver Type	50 channels
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-147 dBm
Location Accuracy	2.0m
AGPS / Location assistance capable	

## Cellular

Data Support	SMS, UDP packet data	
Operating Bands (MHz)		
GSM/GPRS	850/900/1800/1900	
CDMA/1xRTT	850/1900	
HSPA/UMTS	800/850/900/1700/1900/2100	
Transmitter Power		
GSM/GPRS	850/900	32.5 dBm
	1800/1900	29.3 dBm
CDMA/1xRTT	850	24 dBm
	1900	23 dBm
HSPA/UMTS	(all bands)	23 dBm
HSPA Data Rates	5.6 Mbps upload / 7.2 Mbps download	
HSPA Fallback	EDGE/GPRS/GSM quad band EDGE MCS1-MCS9 3GPP release 6	

## Comprehensive I/O

Digital Inputs	3 fixed bias/ programmable bias
Digital Outputs	3 open collector (150 mA)
Analog Inputs	1 internal VCC monitor
Status LED's	GPS and cellular

## Certifications

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

## Electrical

Operating Voltage	7-32 VDC (momentary) 9-30 VDC (start-up, operating)
Power Consumption	<7mA @ 12V (deep sleep) <22mA @ 12V (radio-active sleep) <29mA @ 12V (SMS+UDP connection, GPS off) <115mA @ 12V (continuous transmit)

## Environmental

Temperature	-30° to + 75° C (connected to primary power) -40° to + 85° C (storage)
Humidity	95% R.H. @ 50° C non-condensing
Shock and Vibration	U.S. Military Standard 202G and 801G, SAE J1455 J1113; FCC-Part 15B; Industry Canada
EMC/EMI SAE RoHS Compliant	

## Physical

Dimensions	3.5" x 2.125" x 0.625" (89 x 54 x 16mm)
Weight	3.7oz (106g) Internal

## Connectors, SIM Access

SIM Access	Internal (GSM,GPRS or HSPA variant only)
Connection Type	Captive 8 wire harness
GPS Antenna	External SMA (tamper monitoring, 3 V) or internal
Cellular Antenna	External SMC or internal

## Mounting

Tie-wrap or adhesive

## Key Features

- UDP and SMS-based messaging
- Super sensitive GPS (-162dBm)
- Internal 200mAh back-up battery
- Ultra-low power sleep mode (<2mA)
- 3-axis accelerometer for motion sense and tilt
- 3 inputs and 3 outputs
- Voltage monitoring and low battery notification
- 2,000 buffered messages
- Built-in harness
- 10 Built-in geo-fences
- PEG™ Exception-Based Rules
- Automatic, over-the-air unit configurations on power-up (PULS™)
- Over-the-air firmware download (PULS™)
- Web-based device management (PULS™)
- Optional Internal or external cellular and GPS antennas
- Optional starter interrupt harness
- Optional ODB-II easy install harness
- Optional serial programming cable

## Development Support Options

Customized hardware and software development available on request

## About CalAmp

CalAmp (NASDAQ: CAMP) is a telematics pioneer leading transformation in a global connected economy. We help reinvent businesses and improve lives around the globe with technology solutions that streamline complex IoT deployments and bring intelligence to the edge. Our software applications, scalable cloud services, and intelligent devices collect and assess business-critical data from mobile assets, cargo, companies, cities and people. We call this The New How, powering autonomous IoT interaction, facilitating efficient decision making, optimizing resource utilization, and improving road safety. CalAmp is headquartered in Irvine, California and has been publicly traded since 1983. Lojack is a wholly owned subsidiary of CalAmp. For more information, visit [calamp.com](http://calamp.com), or LinkedIn, Twitter, YouTube or CalAmp Blog.

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