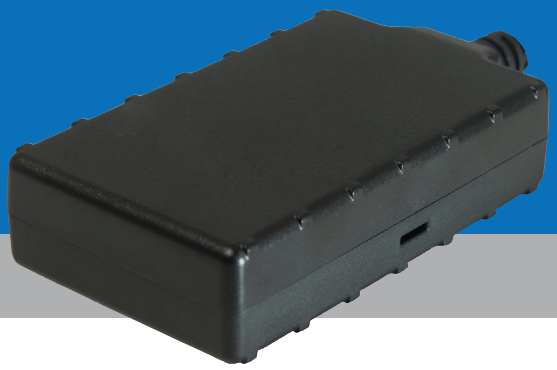
CalAmp
CONNECTING TOMORROW TODAY

LMU-200™ CDMA Series

Economical GPS Tracking Unit



EXPERIENCE THE ADVANTAGE

- CDMA 1xRTT Cellular Operation
- 12/24V vehicle operation
- High sensitivity GPS
- Built-in antenna for easy installation
- Built-in harness
- Power management sleep modes
- 2,000 buffered message logs
- Up to 2 inputs and 2 outputs
- Optional backup battery
- Optional 3-axis accelerometer for motion, tilt, and impact detection
- Optional 1-Wire® interfacefor temperature sense and driver ID
- 10 geo-fence capability
- Over-the-air update capability for configuration and firmware

The LMU-200 is an economical, full-featured vehicle tracking product designed for covert and reliable installation in automobiles. The LMU-200 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-200 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 four Inputs/Outputs (I/O). The LMU-200 is a complete vehicle tracking and communications device incorporating next-generation, super-sensitive GPS technology on CDMA cellular networks for installation in any 12/24 volt mobile vehicle. Internal antennas for both cellular and GPS eliminate the need for wired antennas and make the LMU-200 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-200 is designed to dramatically reduce cost of ownership, power and size while providing excellent field reliability.

FLEXIBILITY

The LMU-200 employs 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-200 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-200 SPECIFICATIONS

GENERAL

Network Technology	CDMA 1xRTT
Data Modes	UDP Packet data and SMS
Location Technology	56 channel GPS
Operating Voltage	12 and 24 volt vehicle systems

GPS

Location Technology	GPS
Tracking Sensitivity	-156 dBm
Acquisition Sensitivity	-144 dBm
Cold Start TTFF	30 sec
Hot Start TTFF	1 sec
Location Accuracy	2.5m
Location Update Rate	1Hz

AGPS / Location assistance capable

CELLULAR

Data Support	UDP, SMS	
Dual-Band	850/1900MHz	
Output Power	850	24dBm
	1900	23dBm

COMPREHENSIVE I/O

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

CERTIFICATIONS

Fully certified FCC, CE, IC, CDG Applicable Carriers

ENVIRONMENTAL

Temperature	-30° to +70° C (connected to primary power) -40° to +80° 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	

ELECTRICAL

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

PHYSICAL

Dimensions	1.84 x 3.3 x 0.78" /46.5 x 83.6 x 19.4mm (without harness)
Weight	3.1 oz / 87 g (with harness)

CONNECTORS, SIM ACCESS

Connection Type	Captive wire harness in 2 wire, 4 wire, 6 wire, and 8 wire configurations

MOUNTING

Standard tie-wrap or adhesive

KEY FEATURES

- CDMA and SMS-based messaging
- Internal GSM and GPS antennas
- Optional internal back-up battery
- Ultra-low power sleep mode (<2mA)
- Optional 3-axis accelerometer for motion sense and tilt
- Up to 2 inputs and 2 outputs
- Voltage monitoring and low battery notification
- 2,000 buffered messages
- 10 Built-in geo-fences
- Automatic, Over-The-Air Unit Configuration on Power-up (PULS™)
- Over-The-Air Firmware Download (PULS™)
- Web-Based Device Management (PULS™)

OPTIONAL FEATURES/FUNCTIONS

Starter interrupt harness
OBDII easy install harness

DEVELOPMENT SUPPORT OPTIONS

Customized hardware and software development available on request

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.

CalAmp Corp.
2177 Salk Avenue, Suite 200, Carlsbad, CA 92008
T: 760.438.9010 l F: 760.438.5835 l www.calamp.com