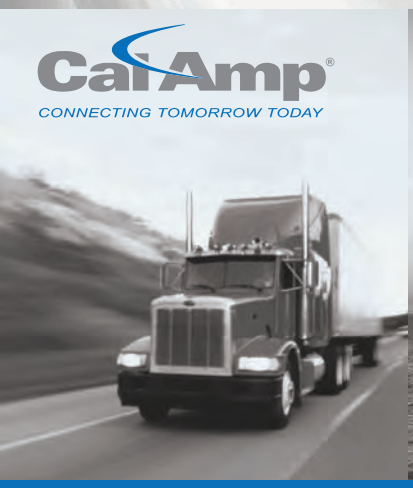
CalAmp
CONNECTING TOMORROW TODAY




LMU-2000™ GPRS/CDMA/HSPA Series

Insurance Tracking Unit with Leading Technologies

EXPERIENCE THE ADVANTAGE

- GSM/GPRS/CDMA 1xRTT or HSPA configuration
- Superior GPS and cellular performance
- Built-in battery backup
- Built-in cellular and GPS antenna for easy installation
- Built-in OBD-II connector for easy installation
- Built-in 3-axis accelerometer for monitoring driver behavior and impact detection
- Pre-impact data capture capabilities
- Power sleep modes

The LMU-2000 is an economical, full-featured vehicle tracking product designed for easy and reliable installation in automobiles. The LMU-2000 is an ideal solution for automotive insurance, driver behavior management, auto rental, and easy-install fleet management and automotive applications.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The LMU-2000 full featured tracking unit from CalAmp features a small size, superior GPS design, OBD-II interface, 3-axis accelerometer. These features enable the LMU-2000 to track vehicle speed and location, detect hard braking, cornering or acceleration in addition to a full set of fleet management features. Superior internal antennas for both cellular and GPS coupled with an OBD-II connector eliminate the need for professional installation and makes the LMU-2000 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-2000 is designed to dramatically reduce cost of ownership, power and size while providing excellent field reliability.

FLEXIBILITY

The LMU-2000 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 applications 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-2000 leverages CalAmp's management and maintenance system, PULS™ (Programming, Updates, and Logistics System), for over-the-air 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-2000 SPECIFICATIONS

GENERAL

Communication Modes	GPRS/EDGE/HSPA and CDMA 1xRTT, UDP packet data and SMS
Location Technology	50 channel GPS
Operating Voltage	12 and 24 volt vehicle systems

GPS

Location Technology	GPS
Enhancement Technology	SBAS: WAAS, EGNOS, MSAS, GAGAN
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-147 dBm
Location Accuracy	2.0m
AGPS Capable	

CELLULAR

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

COMPREHENSIVE I/O

Inputs	OBD-II connector with ignition sense
Outputs	None
Serial Interface	1 TTL serial
Status LED's	GPS, OBD-II and cellular

MOUNTING

Built-in OBD-II connector

DEVELOPMENT SUPPORT OPTIONS

Customized hardware and software development available on request

ENVIRONMENTAL

Temperature	-30° to + 75° C (operating) tethered -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
EMC/EMI	SAE J1113; FCC-Part 15B; Industry Canada
RoHS Compliant	

ELECTRICAL

Operating Voltage	7-20 VDC
Power Consumption	3mA @ 12V (deep sleep) 11mA @ 12V (sleep on network) 140mA @ 12V (active)
Back Up Battery	(Optional) Lithium-Ion 200mAh or 1000mAh (See online technical specifications for latest details regarding battery options)

PHYSICAL

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

CONNECTORS, SIM ACCESS

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

CERTIFICATIONS

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

KEY FEATURES

- OBD-II plug for power and ground with ignition sense
- Packet data (GPRS/CDMA 1xRTT, or HSPA) and SMS-based messaging
- Internal 200mAh back-up battery
- Internal cellular and GPS antennas
- Super sensitive GPS (-162dBm)
- 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 configuration on power-up (PULS™)
- Over-the-air firmware download (PULS™)
- Web-based device management (PULS™)
- Garmin® FMI compatible interface
- Optional serial cable
- Optional Garmin® interface or MDT serial interface

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.

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