

LMU-400[™] GPRS/CDMA/HSPA Series

Built-In Battery Economical GPS Tracking Unit

EXPERIENCE THE ADVANTAGE

- GSM/GPRS, CDMA 1xRTT or HSPA
- Economical device
- Superior GPS and cellular performance
- Built-in cellular and GPS antenna for easy installation
- Built-in backup battery
- Built-in starter interrupt relay
- Built in buzzer
- Low power sleep modes
- Over-the-air update capability for configuring firmware
- Optional 3-axis accelerometer for motion, tilt and impact detection.

The LMU-400 is an economical, full-featured vehicle tracking product designed for easy and reliable installation in automobiles. The LMU-400 is an ideal solution for stolen vehicle, vehicle finance, auto rental and other automotive track and trace applications when internal back-up battery is required.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The LMU-400 high-value tracking unit from CalAmp features a small size, superior GPS performance, an internal 200mAh back-up battery, ultra low power sleep modes, optional 3-axis accelerometer for motion sense, and an integrated buzzer and starter interrupt relay. The LMU-400 is a complete vehicle tracking and communications device incorporating next-generation, super-sensitive GPS technology on GSM/GPRS/CDMA 1xRTT and 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-400 mountable virtually anywhere in the vehicle for easy, inexpensive installations. Messages are transported across the cellular network using enhanced SMS and UDP messaging providing a reliable communications link between the device and your application servers. The LMU-400 is designed to dramatically reduce the cost of ownership, power and size while providing excellent field reliability.

FLEXIBILITY

The LMU-400 employs CalAmp's advanced industry leading on-board alert engine, PEG[™] (Programmable Event Generator) to monitor external conditions and support customerdefine exceptions based rules to meet you 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 overthe-air once the unit has been fielded.

OVER-THE-AIR SERVICEABILITY

The LMU-400 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-th-box hands free configuration and automatic postinstallation upgrades can monitor unit health status across your customers' fleets to identify issues before they become expensive problems.



LMU-400 SPECIFICATIONS

GENERAL

Communication Modes Location Technology Operating Voltage

UDP Packet data and SMS 50 channel GPS 12 and 24 volt vehicle system

GPS

Location Technology Enhancement Technology Tracking Sensitivity Acquisition Sensitivity Location Accuracy AGPS / Location assistance capable

GPS (with SBAS) SBAS: WAAS, EGNOS, MSAS, GAGAN -162 dBm -147 dBm 2.0m

CELLULAR

CELLULAR			
Data Support	SMS, UDP Packet data		
Operating Bands: (MHz Bar	nd)		
GSM/GPRS	850/900/1800/1900		
CDMA/1xRTT	850/1900		
HSPA/UMTS	800(VI)/850(V)/900(VIII)/		
	1700(IV)/1900(II)/	2100(l)	
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		
ENVIRONMENTAL			
Temperature	-30° to + 75° C		

Humidity Shock and Vibration

(connected to primary power) -40° to $+85^{\circ}$ C (storage) 95% R.H. @ 50° C non-condensing U.S. Military Standard 202G and 801G, SAE J1455 SAE J1113; FCC-Part 15B; Idustry Canada

RoHS Compliant

EMC/EMI

CERTIFICATIONS

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

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.

COMPREHENSIVE I/O				
Digital Outputs	1 open collector (200mA)			
Digital Inputs	1 ignition input or general purpose			
Internal Relay	1 30A SPST, normally closed contacts			
Status LEDs	GPS and cellular			
ELECTRICAL				
Operating Voltage	7-32 VDC (momentary)			
	9-30 VDC (start-up, operating)			
Power Consumption	<2mA @ 12V (deep sleep)			
	10mA @ 12V (sleep on network with SMS)			
	20mA @ 12V (sleep on network with GPRS)			
	70mA @ 12V (active standby)			
Back Up Battery	Lithium-Ion 200mAh			
	(See online technical specifications for latest			
	details regarding battery options)			
PHYSICAL				
Dimensions	2.1″ x 3.6″ x 0.77″ (53 x 96 x 19mm)			
Weight	3.7oz / (106g)			
CONNECTORS, SIM ACCES				
SIM Access	Internal Cellular			
Connection Type	Captive 6 wire harness			
MOUNTING				
Tie-wrap or adhesive				
 VDP and SMS-based messaging 				
 ODP and SMS-based messaging Internal GSM and GPS antennas 				
 Super sensitive GPS (-162 dBm) 				
 Internal back-up battery 200 mAh 				
 Ultra low power sleep mode (<2mA) 				
Internal buzzer				
Built-in starter interrupt relay				
 Voltage monitoring and low battery notification 				
• 2,000 buffered messag	es			
 10 built-in geo-fences PEG[™] exception-based 	rulac			
 PEG[™] exception-based Automatic over-the-air 	unit configuration on power-up (PULS™)			
 Over-the-air firmware of 	download (PHI S™)			
 Web-based device mar 				
 Optional 3-axis acceler 	ometer for motion sense, tilt and impact			
	טווופנפו וטו וווטנוטוו זפווזב, נווג מווע ווווטמכנ			
detection	ometer for motion sense, tilt and impact			
detection	ometer for motion sense, tilt and impact			

Customized hardware and software development available on request

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All specifications are typical and subject to change without notice

