CalAmp®
CONNECTING TOMORROW TODAY

LMU-720™ GPRS/CDMA/HSPA Series

Economical GPS Tracking Unit

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-700 is an economical full featured vehice tracking product designed for easy and reliable installation in automobiles. The LMU-700 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-700 high-value tracking unit from CalAmp features a small size, superior GPS performance, ultra low power sleep modes, 3-axis accelerometer for motion sense, and three inputs and three outputs (I/O). The LMU-700 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-700 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-700 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-700 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

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

GPS

Location Technology	50 channel GPS (with SBAS)
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, UDP packet data
Operating Bands (MHz)	
GSM/GPRS	850/900/1800/1900
CDMA/ 1xRTT	850/1900
HSPA/UMTS	800(VI)/ 850(V)/ 900(VIII)/
	1700(IV)/ 1900(II)/ 2100(I)
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

DEVELOPMENT SUPPORT OPTIONS

Customized hardware and software development available on request

CERTIFICATIONS

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

MOUNTING

Tie-wrap or adhesive

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
EMC/EMI	SAE J1113; FCC-Part 15B; Industry Canada
RoHS Compliant	

ELECTRICAL

Operating Voltage	7-32 VDC (momentary)
	9-30 VDC (start-up, operating)
Power Consumption	<7.3mA @ 12V (deep sleep)
	<22mA @ 12V (radio-active sleep)
	<26mA @ 12V (SMS+UDP connection, GPS off)
	<78mA @ 12V (continuous transmit)
Back-up Battery	(optional) 200mAh or 1000mAh Lithium-ion
	(see online technical specifications for latest
	details regarding battery options)

PHYSICAL

Dimensions	2.125" x 3.5" x 0.625" (54 x 89 x 16mm)
Weight	2.6oz (74g) 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

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