CalAmp
CONNECTING TOMORROW TODAY

LMU-920™ GPRS/CDMA/HSPA Series

Flexible, Economical GPS Tracking Unit

EXPERIENCE THE ADVANTAGE

- GSM/GPRS, CDMA 1xRTT or HSPA configuration
- Economical and flexible device
- Superior and cellular performance
- Built-in or external cellular and GPS antenna for easy installation
- Built-in 3-axis accelerometer for motion, tilt, and impact detection
- Low power sleep modes
- 4 Inputs and 4 outputs
- Over-the-air update capability for configuration and firmware

The LMU-920 is a flexible vehicle tracking product designed for easy and reliable installation in automobiles . The LMU-920 is an ideal solution for small fleet, automotive insurance, stolen vehicle, vehicle finance, auto rental and other vehicle track and trace or AVL applications.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The LMU-920 high-value tracking unit from CalAmp features a small size, superior GPS performance, 3-axis accelerometer for motion and tilt sense, ultra low power sleep modes, and four inputs ans four outputs (I/O). The LMU-920 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. Internal or external antenna options enables the device to be mounted virtually anywhere for easy, inexpensive installations. 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-920 is designed to dramatically reduce cost, power and size while providing excellent field reliability.

FLEXIBILITY

The LMU-920 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-920 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-920 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	4 fixed bias/ programmable bias
Digital Outputs	4 open collector (150 mA)
Analog Inputs	1 external ADC / 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

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	875uA @ 12V (deep sleep) 13mA @ 12V (radio-active sleep) 12mA @ 12V (SMS+UDP connection, GPS off) 90mA @ 12V (continuous transmit)

PHYSICAL

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

CONNECTORS, SIM ACCESS

SIM Access	Internal (GSM,GPRS or HSPA variant only)
Connection Type	20 pin Molex-type fused power harness
GPS Antenna	External SMC (tamper monitoring, 3 V) or internal
Cellular Antenna	External SMC or internal

MOUNTING

Screw mounting bracket
Tie-wrap or adhesive

KEY FEATURES

- GPRS/HSPA or CDMA 1xRTT packet data, UDP and SMS
- Super sensitive GPS (-162 dBm)
- Ultra low power sleep modes (<2mA)
- 3-axis accelerometer for motion sense and tilt
- 4 inputs and 4 outputs
- Voltage monitoring and low battery notification
- 2,000 buffered messages
- 10 built-in geo-fences
- PEG™ exception-based rules
- Automatic, over-the-air unit configuration 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 OBDII easy install harness
- Optional serial cable

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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