LMU-4225™ GPRS/CDMA/HSPA Series

Enterprise Location Messaging Unit

EXPERIENCE THE ADVANTAGE

- GSM/GPRS, CDMA 1xRTT, or HSPA configurations

- Dual reporting 20,000 buffered message log

- Built-in 3-axis accelerometer for driver behavior, motion sensing, hard braking, impact detection

- 32 built-in geo-fences, plus any combination of circle or polygon zones, up to 5400 points

- Garmin®, MDT, and other advanced peripherals support

- Power sleep modes

- Comprehensive I/O system

- Switched power serial ports

CalAmp's flagship LMU-4225 product has the features, expandability, and flexibility with the intelligence to meet all customer's ever changing needs in fleet management. The LMU-4225 offers a full set of features, comprehensive I/O system and expandable accessories that make it an industry leading value proposition. The LMU-4225 expandability and flexibility lowers the cost of delivering, supporting, and growing fleet management solutions.

COMPETITIVE PRICE, COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The LMU-4225 is designed to support customers needing an array of vehicle interfaces. For example, the serial ports supply switchable power at selectable voltages to ease the installation of peripheral data devices. The integrated jPOD™ ECU (Engine Control Unit) interface reads and transmits heavy-duty engine condition and performance data such as engine temperature along with the fault codes to provide the best possible real-time picture of vehicle health. In addition, the LMU-4225 offers a WiFi version as an alternate broadband communication.

FLEXIBILITY

The LMU-4225 employs CalAmp's industry leading on-board alert engine, PEG™ (Programmable Event Generator). This advanced engine monitors external conditions and supports customer-defined exception-based rules to help meet the needs of your application. PEG continuously 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. With PEG, your unique application will meet demanding customer requirements. 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-4225 also leverages CalAmp's industry leading over-the-air device management and maintenance system, PULS™ (Programming, Updates, and Logistics System). Configuration parameters, PEG rules, and firmware can all be updated over the air. PULS offers out-of-the-box hands free configuration and automatic post-installation upgrades. You can also monitor unit health status across your customers' fleets to quickly identify issues before they become expensive problems.

LMU-4225 SPECIFICATIONS

GPS

Location Technology	50 channel GPS (with SBAS)
	SBAS: WAAS, EGNOS, MSAS, GAGAN
Location Accuracy	2.0 meter CEP (with SBAS)
Tracking Sensitivity	-162dBm
Acquisition Sensitivity	-147dBm
Kick Start	3 sec @ -130 dBm
AGPS Capable	

CELLULAR

Data Support	SMS, UDP Packet data
Operating Bands (MHz)	
GSM/GPRS	850/900/1800/1900
CDMA/1XRTT	850/1800
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 — 29.5 dBm
CDMA/1XRTT	850 — 24 dBm
	1800 — 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 Ignition Inputs	1 fixed bias
Digital Inputs	7 (high/low selectable 0-30 VDC)
Digital Outputs	5 (open collector relay 150mA)
Current Limited Outputs	2 (20mA)
A/D Inputs	4 (0 - 30VDC, +/-0.1V accuracy)
1-Wire® Interface	2 (driver ID, temperature sense)
Status LEDs	GPS and cellular

OPTIONAL CONFIGURATIONS (with add-in daughter boards)

WiFi	802.11b/g/i
jPOD Truck ECU Interface	J1708, J1939

CERTIFICATIONS

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

ENVIRONMENTAL

Temperature	-30º to +75º C (operating)
	-40º to +85º C (storage)
Humidity	95%RH @ 50º C non-condensing
Shock and Vibration	U.S. Military Standards 202G and 810F, SAE J1455
EMC/EMI	SAE J1113

ELECTRICAL

Operating Voltage	6-32 VDC
Power Consumption	4 mA @ 12 V (deep sleep)
	10 mA @ 12 V (sleep on network with SMS)
	20 mA @ 12 V (sleep on network with GPRS)
	70 mA @ 12 V (active tracking)

PHYSICAL

Dimensions	3.6 x 3.3 1.3", (92 x 83 x 33mm)
Weight	4.5 oz/128g

CONNECTORS, SIM ACCESS

SIM Access	Internal
External Cellular Ant	SMC
External GPS Ant	SMA (with tamper monitoring, 3.0v)
WiFi Option	RP-SMA
Vehicle Bus Option	DB-15
4-Pin Molex	Power, ground, ignition, A/D
Two 5-Pin Molex	Switched power serial
22-Pin Molex	I/O connection

MOUNTING

Tie-wrap, adhesive, or velcro
Screw mounting bracket

OPTIONAL FEATURES/FUNCTIONS

- External antennas (GPS, cellular, combined GPS/cellular, WiFi)
- Serial adapter cable RS-232 8-wire (PPP, AT commands, NMEA GPS output)
- J1708/J1939 truck ECU harnesses
- Connectorized I/O wiring harnesses
- Built-in or external backup batteries

DEVELOPMENT SUPPORT OPTIONS

- Customized hardware and software development available on request