

LMU-4250™ GPRS/CDMA/HSPA Series

ENTERPRISE LOCATION MESSAGING UNIT

CalAmp®



Competitive Edge

CalAmp's flagship LMU-4250 product has the features, expandability, and flexibility with the intelligence to meet all customer's ever changing needs in fleet management. The LMU-4250 offers a full set of features, comprehensive I/O system and expandable accessories that make it an industry leading value proposition. The LMU-4250 expandability and flexibility lowers the cost of delivering, supporting, and growing fleet management solutions.

Expanded Interface

The LMU-4250 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-4250 offers a WiFi version as an alternate broadband communication.

Flexibility

The LMU-4250 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-4250 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.

Experience The Advantage

- GSM/GPRS, CDMA 1X, or HSPA cellular 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



LMU-4250 Specifications

GPS Specifications

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

Cellular Specifications

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|------------------------|---|
| Data Support | SMS, GPRS, CDMA 1xRTT or HSPA packet data |
| GSM/GPRS Quad-Band | 850/900/1800/1900 MHz |
| GSM/GPRS Output Power | Class 4 (2 Watts) 850/900 bands Class 1 (1 Watt) 1800/1900 bands |
| CDMA Dual-Band | 800/1900 MHz |
| CDMA Output Power | 800: +24dBm 1900: +24dBm |
| HSPA/UMTS Dual-Band | 900/2100 MHz (bands VIII, I) or 850/1900 MHz (bands V, II) 3GPP release 6 5.6 Mbps upload, 7.2 Mbps download |
| GSM/GPRS/EDGE Fallback | 850/900/1800/1900 quad-band GPRS class 12, EDGE MCS1-MCS9 |

Comprehensive I/O

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|------------------------|----------------------------------|
| Digital Ignition Input | 1 fixed bias |
| Digital Inputs | 7 (high/low selectable 0-30 VDC) |
| Digital Outputs | 5 (open collector relay 150mA) |
| Outputs | 2 (20 mA current limited) |
| A/D Inputs | 4 (0-30 VDC, +/-0.1 V accuracy) |
| 11-Wire® Interface | 2 (driver ID, temperature sense) |
| Status LEDs | GPS and cellular |

Optional Configurations (with add-in daughter boards)

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

Certifications

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

Environmental Specifications

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|---------------------|--|
| Temperature | -30° C to 70° C (operating) -40° C to 85° C (storage) |
| Humidity | 95% R.H. @ 50° C non-condensing |
| Shock and Vibration | U.S. Military Standard 202G and 810G, SAE J1455 |
| EMC/EMI | SAE J1113 |

Electrical Specifications

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

Physical Specifications

| | |
|------------|--------------------------------------|
| Dimensions | 4.3 x 3.2 x 1.3", (110 x 81 x 33mm) |
| Weight | 4.7 oz, (133 g) (jPOD configuration) |

Connectors, SIM Access

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|--------------------|------------------------------------|
| SIM Access | Internal |
| External Cellular | SMC |
| External GPS | 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 |
| 16-Pin Molex | Expansion port |
| 22-Pin Molex | I/O connection |

Mounting

Tie wraps, 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