LMU-4200™ GPRS/CDMA/HSPA Series

ENTERPRISE LOCATION MESSAGING UNIT

Competitive Edge

CalAmp's flagship LMU-4200 product has the features, expandability, and flexibility with the intelligence to meet all customer's ever changing needs in fleet management. The LMU-4200 offers a full set of features, comprehensive I/O system and expandable accessories that make it an industry leading value proposition. The LMU-4200 expandability and flexibility lowers the cost of delivering, supporting, and growing fleet management solutions.

Expanded Interface

The LMU-4200 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 optional jPODTM 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.

Flexibility

The LMU-4200 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-4200 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
- Web-based device management diagnostic tools
- Garmin®, MDT, and other advanced peripherals support
- Power sleep modes
- Comprehensive I/O system
- Switched power serial ports

LMU-4200 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

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

Digital Ignition Input	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

Certifications

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

Environmental Specifications

Temperature	-30o to +75o C (operating) -40o to +85o C (storage)
Humidity	95% R.H. @ 50° C non-condensing
Shock and Vibration	U.S. Military Standard202G and 810G, SAE J1455
EMC/EMI	SAE J1113

Electrical Specifications

Operating Voltage	6 - 32V DC
Power consumption	4 mA @ 12VDC (Deep Sleep) 10 mA @ 12VDC (Sleep on Network (SMS)) 20 mA @ 12VDC (Sleep on Network (GPRS)) 70 mA @ 12VDC (Active Tracking)

Physical Specifications

Dimensions	4.3 x 3.2 x 0.86”, (110 x 81 x 22mm)
Weight	4 oz, (113 g)

Connectors, SIM Access

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)
- Serial adapter cable RS-232 8-wire (PPP, AT commands, NMEA GPS output)
- jPOD dongle for truck ECU interface
- Connectorized I/O wiring harnesses
- Built-in or external backup batteries

Development Support Options

- Customized hardware and software development available on request

jPOD™ Vehicle Bus Adapter

Air Superiority™

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