## LMU-2600™ GPRS/CDMA/HSPA Series

FLEET TRACKING UNIT WITH LEADING TECHNOLOGIES





The LMU-2600 fleet tracking unit offers leading edge technology including a 3-axis accelerometer for measuring driver behavior and vehicle impacts while offering the high reliability fleet customers demand.

### Competitive Price, Competitive Technology, Competitive Edge

The LMU-2600 is a robust, affordable fleet device you can count on for AVL applications. The LMU-2600 incorporates GSM/GPRS, CDMA 1xRTT, or HSPA wireless communication along with extra-sensitive GPS, a powerful processing engine, and a 3-axis accelerometer that detects and acts on hard braking, aggressive acceleration, or vehicle impacts. Internal or external antenna options enables the device to be mounted virtually anywhere for easy, inexpensive installations.

#### **Flexibility**

The LMU-2600 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. This behavior can be programmed by CalAmp before shipment, at a customer's facility, or over-the-air once the unit has been fielded. With PEG, your unique application will meet demanding customer requirements and give you a distinct advantage over your competition.

#### Over-the-Air Serviceability

The LMU-2600 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 1xRTT, or HSPA configurations
- Internal or external cellular and GPS antenna options for easy installation
- High sensitivity GPS
- 3-axis precision accelerometer for driver behavior and impact detection
- 20,000 buffered message log
- 32 geo-fence capability
- 5 inputs/3 outputs/1-wire® interface for driver ID, temperature sensors, and more
- Dual serial ports
- Garmin® FMI support
- Power management sleep modes
- Automatic, over-the-air configuration and firmware download



## **LMU-2600 Specifications**

**General Specifications** 

Communication Modes GPRS/EDGE/HSPA and CDMA 1xRTT packet

data, UDP and SMS

Location Technology 50-channel GPS
Operating Voltage 12 and 24 volt vehicle systems

**GPS Specifications** 

Location Technology 50-channel GPS (with SBAS)

SBAS: WAAS, EGNOS, MSAS, GAGAN

2.0 meter CEP (with SBAS)

Location Accuracy Tracking Sensitivity

-162 dBm

Acquisition Sensitivity
AGPS Capable

-147 dBm

**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 Inputs 5 (2 fixed bias low, 3 fixed bias high)

Digital Outputs 3 relay driver (150 mA)

Serial Interfaces 2 (1 TTL serial, 1 switched power TTL)

Analog Inputs 2 (1 internal VCC monitor, 1 external A/D input)

1-Wire® Interface Driver ID, temperature sense

Status LEDs GPS and cellular

Certifications

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

**Environmental Specifications** 

Operating Temperature -30° to +75° C Storage Temperature -40° to +85° C

Humidity 95% R.H. @ 70° C non-condensing Shock and Vibration U.S. Mil. Std. 202G and 810F, SAE J1455

EMC/EMI: SAE J1113

**Electrical Specifications** 

Operating Voltage 6-32 VDC

Power Consumption 3 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 Specifications** 

Dimensions  $2 \times 4 \times 0.85$ ",  $(51 \times 102 \times 22 \text{ mm})$ Weight 74 g (external), 85 g (internal)

Connectors, SIM Access

Connection Type 20-pin Molex-type fused power harness

GPS Antenna External SMA (w/ tamper monitoring, 3V) or internal

Cellular Antenna External SMC or internal

SIM Access Internal (GSM/GPRS or HSPA variant only)

Mounting

Tie-wrap, adhesive, or Velcro Screw mounting bracket

**Optional Features/Functions** 

Driver ID with 1-wire® protocol

■ Temperature sensing via 1-wire® protocol

Backup battery

External GPS and cellular antennas

Internal GPS and cellular antennas

NMEA data via serial

External A/D input

Serial cables

jPOD™ truck ECU interface

■ Garmin® FMI compatible interface cable

■ Piezo speaker, panic button, and privacy button

Power harness with two (2) 3A fuses

**Development Support Options** 

Customized hardware and software development available on request

Air Superiority™







