

# LMU-2700™ GPRS/CDMA/HSPA Series

Fleet tracking Unit with Leading Technologies

# EXPERIENCE THE ADVANTAGE

- GSM/GPRS, CDMA 1xRTT, or HSPA configurations
- Internal or external cellular and GPS antenna options for easy installation
- 3-axis precision accelerometer for driver behavior and impact detection
- 1000 mAh internal back-up battery
- 5 inputs/3 outputs/1-wire® interface for driver ID, temperature sensors, and more
- 20,000 buffered message log
- Garmin® FMI and MDT support
- · Highly configurable
- Dual serial ports
- Power management sleep modes
- Over-the-air configuration and firmware updates
- · 32 geo-fence capability

The LMU-2700 fleet tracking unit offers leading edge technology including a new 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-2700 is a robust fleet device you can count on for AVL applications. The LMU-2700 incorporates GSM/GPRS, CDMA 1xRTT or HSPA wireless communication along with extra sensitive GPS technology in an affordable package. High sensitivity GPS and either internal or external antenna options enables the device to be mounted virtually anywhere for easy, inexpensive installations. An integrated 1,000mAh back-up battery allows for short-term or last-gasp tracking when disconnected from main power. The LMU-2700 also features a 3-axis accelerometer to detect and act on hard braking, aggressive acceleration, and vehicle impacts.

## **FLEXIBILITY**

The LMU-2700 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-2700 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-2700 SPECIFICATIONS

#### **GENERAL**

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

data, UDP and SMS

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

**GPS** 

Location Technology 50 channel GPS (with SBAS)

SBAS: WAAS, EGNOS, MSAS, GAGAN

Location Accuracy 2.0 meter CEP (with SBAS)

Tracking Sensitivity **Acquisition Sensitivity** 

-162dBm -147dBm

AGPS Capable

# **CELLULAR**

Data Support

Operating Bands (MHz) GSM/GPRS

CDMA/1XRTT

HSPA/UMTS

Transmitter Power

GSM/GPRS

CDMA/1XRTT

HSPA/UMTS HSPA data rates **HSPA Fallback** 

SMS, GPRS, CDMA 1xRTT or HSPA packet data

850/900/1800/1900

850/1800

800(VI)/850(V)/900(VIII)/ 1700(IV)/1900(II)/2100(I)

32.5 dBm 850/900 29 3 dRm 1800/1900 24 dBm 850 1800 23 dBm

23 dBm (all bands) 5.6 Mbps upload/7.2 Mbps download

EDGE/GPRS/GSM quad band

**EDGE MCS1-MCS9** 3GPP Release 6

#### **COMPREHENSIVE I/O**

Digital Inputs 5 (1 fixed bias low, 4 programmable bias)

**Digital Outputs** 3 relay driver (200 mA)

Serial Interface 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

#### **ENVIRONMENTAL**

Temperature -30° to +75° C (operating)

-40° to +85° C (storage)

Humidity 95%RH @ 50° C non-condensing **Shock and Vibration** 

U.S. Military Standards 202G and 810F, SAE J1455

EMC/EMI SAE J1113; FCC-Part 15B; Industry Canada

**RoHS Compliant** 

# 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, robust and scalable cloud service platform, and targeted software applications streamline otherwise complex machine-to-machine (M2M) deployments. These colutions applies untermore to exting their proportions by called in a contraction. 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.

# **ELECTRICAL**

Operating Voltage 6-32 VDC

Power Consumption 3 mA @ 12V (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 90 x 54 x 20 mm

Weight 74 g (external), 85 g (internal) estimated

### **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)

#### CERTIFICATIONS

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

#### MOUNTING

Tie-wrap, adhesive, or Velcro; Screw mounting bracket

# **KEY FEATURES**

- Packet data (GPRS, CDMA 1xRTT, or HSPA) and SMS-based messaging
- · Internal or external cellular and GPS antennas
- High sensitivity GPS (-162 dBm tracking)
- Low power sleep modes
- Internal or external cellular and GPS
- Internal 1000 mAh back-up battery
- · 3-axis accelerometer for motion, hard braking/acceleration, and impact detection
- Voltage monitoring and low battery notification
- 20,000 buffered messages for data logging during coverage loss • 32 built-in geo-fences
- Dual serial ports
- PEG<sup>™</sup> 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 FEATURES/FUNCTIONS

- Driver ID with 1-wire® protocol
- Temperature sensing via 1-wire® protocol
- Internal or external GPS and cellular antennas
- NMEA data via serial
- External A/D input
- Serial cables
- jPOD™ truck ECU interface
- Garmin® FMI compatible interface
- 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

# CalAmp Corp.

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All specifications are typical and subject to change without notice

