LMU-2700™ GPRS/CDMA/HSPA Series

FLEET TRACKING UNIT WITH LEADING TECHNOLOGIES

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.

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

LMU-2720 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
Location Accuracy	2.0 meter CEP (with SBAS)
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-147 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 Inputs	5 (1 fixed bias low, 4 programmable bias)
Digital Outputs	3 open collector (200 mA)
Serial Interfaces	2 (1 TTL serial, 1 switched power TTL)
Analog Inputs	2 (1 internal VCC monitor, 1 external ADC input)
1-Wire® Interface	Driver ID, temperature sense
Status LEDs	GPS and cellular

Certifications

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

Environmental Specifications

Temperature	-30° to +75° C (operating) -40° to +85° C (storage)
Humidity	95% R.H. @ 70° C non-condensing
Shock and Vibration	U.S. Military Standards 202G and 810F, SAE J1455
EMC/EMI:	SAE J1113; FCC–Part 15B; Industry Canada

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	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)

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 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™ 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 cable
- Piezo speaker, panic button, and privacy button
- Power harness with two (2) 3A fuses

Air Superiority™

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