# LMU-3030™ Series

## OBD-II Tracking Units for the Connected Car Market

The LMU-3030 series provides a range of easy-to-install cost optimized vehicle tracking devices designed to meet the needs of the growing connected car market. The LMU-3030 series delivers access to the vehicle diagnostics interface ideal for insurance applications, driver behavior management, auto rental and automotive applications in passenger or light-duty vehicles.

### COMPETITIVE TECHNOLOGY, COMPETITIVE EDGE

The LMU-3030 series from CalAmp features devices with a compact form factor, high-sensitivity GPS for reliable location and tracking, an Onboard Diagnostic interface (OBD-II) for access vehicle diagnostic data, and patented triple-axis accelerometer motion sensing technology for detecting aggressive driving maneuvers such as harsh acceleration, braking and cornering, and high-impact events.

### SMART VEHICLE TECHNOLOGY

The LMU-3030 family of devices are enabled with PEG™, CalAmp's proprietary programmable event generator to continuously monitor the vehicle operating environment and respond instantly to pre-defined and configurable threshold conditions such as motion, location, geo-zone crossings and custom parameters.

### OVER-THE-AIR SERVICEABILITY

LMU-3030 series incorporates PULS™, CalAmp's industry leading over-the-air device management and maintenance software. With PULS, customers can manage devices individually or by groups and configure parameters including PEG scripts and firmware remotely. PULS offers out-of-the-box, hands-free configuration and automatic post-installation upgrades to monitor device health status to quickly identify issues before they become expensive problems.

## Experience The Advantage

> Optimized for a diverse range of applications

> Reliable self-installation ideal for connected car applications

> Superior cellular and GPS performance

> OBD-II connector to read vehicle bus data

> Patented triple-axis accelerometer for driver behavior capabilities and impact detection

> Low power sleep modes for longer life

> Optional Bluetooth 4.0 dual mode interface

## GENERAL

| | |
|---|---|
| Communication Modes | GPRS, CDMA, HSPA and LTE Cat 1 options |
| Location Technology | 50+ channel GPS (with SBAS) |
| Messages | 20,000 buffered messages |
| Geo-Fence | 32 PEG-Zones (rectangular/circular) |
| | 1024 Geo-Zones (polygon/circular - 5400) |
| Configuration | Automatic over-the-air firmware and configuration updates via PULS |

## GPS

| | |
|---|---|
| Location Technology | GPS |
| Enhancement Technology | SBAS: WAAS, EGNOS, MSAS, GAGAN |
| Tracking Sensitivity | -162 dBm |
| Acquisition Sensitivity | -148 dBm |
| Location Accuracy | 2.0m |
| AGPS capable | |

## CELLULAR

| | | |
|---|---|---|
| Data Support | UDP, TCP/IP and SMS packet data | |
| Operating Bands (MHz band) | | |
| GSM/GPRS | 850/900/1800/1900 | |
| CDMA/1xRTT | 850/1900 | |
| HSPA/UMTS | 800(VI)/850(V)/900(VIII)/1700(IV)/1900(II)/2100(I) | |
| LTE Cat 1 | ATT: | Bands 2, 4, 5, 12, and 13; plus HSPA fallback (Bands 2 and 5) |
| | Verizon: | Bands 2, 4, and 13 |

| | |
|---|---|
| HSPA data rates | 5.6 Mbps up / 7.2 Mbps down |
| LTE Cat 1 Data Rates | 5 Mbps up / 10Mbps down |
| HSPA Fallback | EDGE/GPRS/GSM quad band |

## CERTIFICATIONS

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

## DEVELOPMENT SUPPORT OPTIONS

Customized hardware and software development available on request

## MOUNTING

Via built-in OBD-II connector
Self-adhesive mounting with OBD-II extender cable

## CONNECTORS, SIM ACCESS

| | |
|---|---|
| SIM Access | Internal |

Built-in OBD-II/EOBD-II interface via J1962 compliant connector

## COMPREHENSIVE I/O

| | |
|---|---|
| OBD-II Interface | OBD-II interface: J1850 PWM, J1850 VPW, ISO-9141-2, ISO-14230, KWP 2000, ISO-15765 CAN |
| Outputs | None |
| Communications Status | LED's: OBD, Cellular and GPS |
| Serial Port | 2-wire TTL Serial Interface (optional fit) |
| Bluetooth | Bluetooth 4.0 Dual Mode (optional fit) |

## ENVIRONMENTAL

| | |
|---|---|
| Temperature* | -30° to + 75° C (connected to primary power) |
| | -40° to + 85° C (storage) |
| | Except Battery* |
| Humidity | 95% R.H. @ 50° C non-condensing |
| Shock and Vibration | SAE J1455 |
| EMC/EMI | CE, GCF, eMark |
| RoHS Compliant | |

## PHYSICAL

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|---|---|
| Dimensions | 1.5 x 2.5 x 0.98" (43 x 64 x 25mm) |
| Weight | 1.83oz / 52g (with battery) |
| Enclosure | Rugged textured plastic enclosure |

## ELECTRICAL

| | |
|---|---|
| Operating Voltage | 9-16 VDC Vehicle Systems |
| Sleep Mode | 4.9mA @ 13V (deep sleep ) |
| | 83mA @ 13V (normal operation) |
| | 66mA @ 13V (SMS+UDP connection, GPS off) |
| | 114mA @ 13V (continuous transmit) |

## OBD DATA EXTRACTION

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|---|---|
| Detection | Automatic detection of vehicle interface services |
| Extraction | Transmission of standard OBD-II codes, plus manufacturer specific codes which are made available by the embedded OBD firmware stack |
| Scripts | Download of vehicle specific diagnostic scripts dependent on vehicle model variant |

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