

# LMU-3640™

## Next Generation Telematics Gateway With Heavy and Light Duty Vehicle Interface

Cal/Amp®



The LMU-3640™ is a next generation telematics gateway that includes a range of wireless and peripheral connectivity options and is equipped with CalAmp's purpose built vehicle interface technologies for both light and heavy duty vehicles.

### Experience The Advantage

- LTE cellular configurations
- Optional Bluetooth or Wi-Fi and Bluetooth connectivity
- Integrates both heavy duty or light duty vehicle ECU interfaces
- Serial ports with switched power
- Comprehensive I/O system with 5 inputs, 3 outputs, 2 A/D inputs, and 1 1-Wire™ interfaces
- High performance internal antennas
- Built-in triple-axis accelerometer for driver behavior, motion sensing, hard braking, impact detection
- Dual reporting 20,000 buffered message log
- 21 built-in geo-fences, plus any combination of circle or polygon zones, up to 5400 points
- 1000 mAh back-up battery
- Automatic, over-the-air configuration and firmware download
- MDT-7P Tablet, Magellan®, Garmin®, TomTom® and other advanced peripherals supported
- Low power sleep modes

### Competitive Technology, Competitive Edge

The LMU-3640™ is designed to support enterprise customers requiring full set of fleet features with cellular, Wi-Fi and bluetooth connectivity options, plus a triple-axis accelerometer that detects and acts on hard braking, aggressive acceleration or vehicle impacts. The built-in ECU (Engine Control Unit) interface reads and transmits engine condition and performance data such as engine temperature and fault codes from both heavy duty and light duty vehicles to provide the best possible real-time picture of vehicle health. In addition, it supports separate ARM (Advanced RISC Machine) cortex micro-controller to support hosted application features.

### Smart Vehicle Technology

The LMU-3640™ 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

The LMU-3640™ also leverages CalAmp's management and maintenance system, PULS™ (Programming, Updates, and Logistics System), for over-the-air configuration parameters, PEG rules and firmware. This out-of-the-box hands free configuration and automatic post-installation upgrades can monitor unit health status across your fleets to identify issues before they become expensive problems.

# LMU-3640™ Specifications

## General

Communication Modes	LTE
Location Technology	50+ channel GPS (with SBAS)
Configuration	Automatic over-the-air firmware and configuration updates via PULS™

## GPS

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

## Cellular/Bands

Operating Bands (MHz)	
North America Variant I:	
4G LTE CAT-1	1900 (B2)/AWS (B4) /850 (B5)/ 700 (B12)
3G UMTS/HSPA	1900 (B2)/850 (B5)
North America Variant II:	
4G LTE CAT-1	AWS 1700 (B4)/700 (B13)
Data Support	SMS, UDP, TCP

## Comprehensive I/O

Ignition Inputs	1 fixed bias
Digital Inputs	5 (high/low selectable 0-30 VDC)
Digital Outputs	4 (open collector relay 150 mA)
A/D Inputs	2 (0-30VDC, +/-0.1V accuracy)
1-Wire® Interface	1 (driver ID, temperature sense)
Power Output	1 switched V_IN
Status LEDs	4 (GPS, cellular, VBUS, LAN)

## Certifications

FCC, IC, PTCRB, Applicable Carriers

## Electrical

Operating Voltage	9-30 VDC (Start-up, Operating) 7-32 VDC (Momentary)
Power Consumption	7 mA @ 12V <500 uA (deep sleep) 20 mA @ 12V (idle on network) 150 mA @ 12V (active tracking with VBUS active)

## Environmental

Temperature	-30° to +75° C (connected to primary power) -10° to +60° C (operating on internal battery) -40° to +85° C (storage) 0° to +30° C (long term storage with battery)
Humidity	95% R.H. @ 50° C non-condensing
Shock and Vibration	U.S. Military Standards 202G and 810F, SAE J1455

## Physical

Dimensions	5.7 x 2.1 x 1.3" (145 x 53 x 33 mm)
Weight	5 oz (142 g)
Integrated Buzzer	

## Connectors, SIM Access

Vehicle BUS I/F	16-Pin Molex
Power, I/O	24-Pin Molex
SIM Access	Internal

## Interface Standards

Bluetooth	4.0 Dual-Mode Classic, BLE
Wi-Fi	a/g/b client mode
Heavy Duty Truck Data	J1708, J1939
Light Duty Vehicle Data	J1850 PWM, J1850 VPW ISO 9141-2, KWP 2000, ISO-15765, CAN

## Product Options

RS-232 serial adapter cable  
I/O wiring harness  
1000 mAh Lithium-Ion back up battery  
Customized hardware and software development available on request

## About CalAmp

CalAmp (NASDAQ: CAMP) is a telematics pioneer leading transformation in a global connected economy. We help reinvent businesses and improve lives around the globe with technology solutions that streamline complex IoT deployments and bring intelligence to the edge. Our software applications, scalable cloud services, and intelligent devices collect and assess business-critical data from mobile assets, cargo, companies, cities and people. We call this The New How, powering autonomous IoT interaction, facilitating efficient decision making, optimizing resource utilization, and improving road safety. CalAmp is headquartered in Irvine, California and has been publicly traded since 1983. Lojack is a wholly owned subsidiary of CalAmp. For more information, visit [calamp.com](http://calamp.com), or LinkedIn, Twitter, YouTube or CalAmp Blog.

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