

LMU-3640™ HSPA

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

- HSPA network technology
- Optional Bluetooth or Wi-Fi and Bluetooth connectivity
- Integrates both heavy duty or light duty vehicle ECU interfaces
- 2 serial ports with switched power
- 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
- 32 built-in geo-fences, plus any combination of circle or polygon zones, up to 5400 points
- 200 or 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 system can be used to monitor unit health status across your fleets to identify issues before they become expensive problems.

LMU-3640™ Specifications

General

Network Technology	HSPA/UMTS
Location Technology	55 channel GPS (with SBAS)
Operating Voltage	12/24 VDC Vehicle Systems

GPS

Location Technology	GPS, GLONASS
Enhancement Technology	SBAS: WAAS, EGNOS, MSAS, GAGAN
Tracking Sensitivity	-167 dBm
Acquisition Sensitivity	-156 dBm (hot start) -148 dBm (cold start)
Location Accuracy	2.0m CEP, (SBAS 24 hours static)
AGPS capable	
Location update rate	Up to 4 Hz

Cellular/Bands

Operating Bands (MHz)	800(B19)/850(B5)/900(B8)/1900(B2)/2100(B1)
3G UMTS/HSPA	850(B5)/900(B8)/1800(B3)/1900(B2)
2G GSM Fallback	SMS, UDP, TCP
Data Support	

Comprehensive I/O

Ignition Input	1 (fixed bias)
Digital Inputs	4 (high/low bias selectable 0-30 VDC)
Digital Outputs	3 (open collector relay 150mA)
A/D Inputs	2 External ADC Inputs
1-Wire® Interface	1 (driver ID, temperature sense)
Power Output	1 switched VIN
Status LEDs	4 (GPS, cellular, VBUS, LAN)
Serial Interface	2 TTL Ports
External ADC Inputs	2 (Reference Voltage - 3.3V)

Certifications

FCC, IC, PTCRB

Electrical

Operating Voltage	9-30 VDC (start-up, operating) 7-32 VDC (momentary)
Power Consumption	Typical 500uA @ 12 V (deep sleep) Typical 15mA @ 12 V (radio-active sleep) Typical 100mA @ 12 V (active tracking with GPS and cell enabled)

Battery Pack

Battery Capacity	Up to 1000 mAh
Battery Technology	Lithium-Ion
Charging Temperature	0° to +45° C

Environmental

Temperature	-30° to +60° C (connected to primary power) -10° to +60° C (operating on internal battery) -20° to +25° C ≤ 6 months (long term storage with battery)
Humidity	95%RH @ 50° C non-condensing
Shock and Vibration	U.S. Military Standards 202G, SAE J1455
ESD	SAEJ1113-13 (4KV Limit)

Physical

Dimensions	5.7 x 2.1 x 1.3" (145 x 53 x 33 mm)
Weight	5 oz (142 g) (w/1000mAh Battery)

Connectors, SIM Access

Vehicle BUS I/F	16-Pin 3mm Pitch
Power, I/O	24-Pin 3mm Pitch
SIM Access	Internal

Interface Standards

Bluetooth	Classic Bluetooth v2.1+EDR and BLE v4.0
Wi-Fi	802.11 a/g/b/n client mode
Heavy Duty Truck Data	J1708, J1939
Light Duty Vehicle Data	J1850 PWM, J1850 VPW, SW-CAN ISO 9141-2, KWP 2000, ISO 15765 CAN

Product Options

RS-232 on Aux 2
I/O wiring harness
200, 1000 mAh Lithium-Ion backup battery
Integrated Buzzer (optional)
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, or LinkedIn, Twitter, YouTube or CalAmp Blog.

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