



LTE CAT M1 · DATA SHEET

LMU-2650MB Sealed™

Sealed LTE CAT M1 gateway for sensor-rich asset intelligence



DIMENSIONS

139.1 × 87.9 × 37.1 mm
(5.48 × 3.46 × 1.46 in)

WEIGHT

320 g
(11.3 oz)

Overview

The CalAmp LMU-2650MB Sealed extends telematics to heavy equipment, towables, trailers, and industrial assets in harsh environments. Its IP67-rated housing, expanded I/O, Bluetooth Low Energy 5.2, and LiFePO4 backup battery support utilization monitoring, sensor-driven intelligence, and event reporting during power loss.

Highlights



Global LTE CAT M1 connectivity with 2G fallback



IP67-rated sealed enclosure withstands dust and water exposure



Bluetooth Low Energy 5.2 and expanded I/O support sensors



Triple-axis motion sensor detects impact, movement, and tilt



LiFePO4 backup battery improves power-loss reporting resilience



PEG2 and EdgeApp SDK enable programmable edge intelligence

PHYSICAL DESIGN

Dimensions 139.1 × 87.9 × 37.1 mm
(5.48 × 3.46 × 1.46 in)

Weight 320 g (11.3 oz)

CELLULAR

LTE CAT M1 Bands B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B28, B39

2G Bands B2, B3, B5, B8

GNSS

Constellation Support GPS, GLONASS, Galileo, BeiDou, QZSS

GNSS Channels 55 Channels

Tracking Sensitivity -163 dBm

Acquisition Sensitivity -148 dBm (cold start)
-155 dBm (hot start)

Location Accuracy ~2.5m CEP (Open Sky)

Location Update Rate Up to 5 Hz

A-GPS Assistance Yes

WIRELESS INTERFACES

Bluetooth BLE 5.2

VEHICLE BUS

Serial Interface USB, TTL

ANTENNAS & SIM

Cellular Antenna Internal

GPS Antenna Internal

SIM Access Internal (2FF SIM)

POWER

Operating Voltage 12/24 VDC Vehicle Systems
9-30 VDC (start-up, operating)
7-32 VDC (momentary)

Power Consumption Typical <500µA @ 12V (low power sleep)
Typical 25mA @ 12V (radio-active sleep)
Typical 50mA @ 12V (GPS tracking and cell idle)

Battery Capacity 1100 mAh

Battery Technology Lithium iron phosphate (LiFePO4)

Charging Temperature 0° to 45° C

ENVIRONMENTAL

Temperature -30° to + 60° C (connected to primary power)
-20°C to +60°C (operating on internal battery)
-20°C to +25°C ≤ 6 months (long term storage with battery)

Humidity ≤ 85% RH @ +50°C non-condensing

Shock & Vibration MIL-STD-202G, MIL-STD-810F, SAE J1455

ESD IEC 61000-4-2, 4 kV

Environmental Rating IP67

SENSORS

Motion Sensor 3-axis accelerometer

I/O

Power / I/O Connector 12-wire captured harness

Ignition Inputs Fixed bias (1)

Digital Inputs 0-32 VDC, high/low bias selectable (2)

Digital Outputs 150mA, open collector relay driver outputs (3)

Analog Inputs 0-32 VDC, general purpose (1)

Serial Interface 2-wire TTL Tx/Rx/1 USB (internal)

DC Power Outputs 12/24 VDC, Ground

1-Wire Interface 1-Bit Bus

Status LEDs 2 (GPS, Cellular)

EDGE INTELLIGENCE

Firmware EdgeCore

Edge Programming PEG2 & EdgeApp SDK

Buffered Messages Up to 20,000

Operating System ThreadX RTOS

CLOUD / SOFTWARE SERVICES

Device Management Manage, configure, and deploy OTA software updates to connected assets at scale

CalAmp Telematics Cloud Stream telematics data into proprietary systems with flexible API integration

CalAmp App Fleet and asset management software for tracking, monitoring, and managing vehicles, equipment, drivers, assets, and cargo.

CERTIFICATIONS

Certifications FCC, CE, IC, PTCRB, RoHS