



LTE CAT M1 · DATA SHEET

LMU-2650MB™

Rugged LTE CAT M1 cellular gateway for mobile assets



DIMENSIONS

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

WEIGHT

97 g
(3.4 oz)

Overview

The LMU-2650MB is a rugged, next-generation cellular gateway for trailers, mobile assets, and construction equipment. An upgraded processor, flexible I/O, Bluetooth Low Energy 5.2, and a LiFePO4 backup battery deliver reliable visibility and event reporting during power loss.

Highlights



Global LTE CAT M1 connectivity with 2G fallback



Bluetooth Low Energy 5.2 supports wireless peripherals



Flexible I/O connects sensors and equipment controls



LiFePO4 backup battery supports power-loss resilience



Triple-axis motion sensor detects movement and impact



PEG2 and EdgeApp SDK enable on-device edge logic

PHYSICAL DESIGN

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

Weight 97 g (3.4 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

Data Support SMS, UDP Packet Data, TCP

GNSS

Constellation Support GPS, GLONASS, Galileo, BeiDou, QZSS

GNSS Channels 55 Channels

Tracking Sensitivity -163 dBm

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

Location Accuracy ~2.5m CEP Open Sky

Location Update Rate Up to 5 Hz

A-GPS Assistance Yes

WIRELESS INTERFACES

Bluetooth Bluetooth 5.x

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 <500uA @ 12V (low power sleep)
Typical 25mA @ 12 V (radio-active sleep)
Typical 50mA @ 12 V (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° to +60° C (Operating on Internal Battery)
-20° 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 24-Pin 3mm Pitch

Ignition Inputs 1 fixed bias

Digital Inputs 4 (high/low bias selectable 0-32 VDC)

Digital Outputs 3 (open collector relay 150mA)

Analog Inputs 2 (external ADC input 0-32 VDC)

Serial Interface 1 USB and 2 TTL ports with switched power

DC Power Outputs 1 switched VIN output

1-Wire Interface 1

Status LEDs 3 (GPS, Cellular, BLE)

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

ACCESSORIES

Accessories [Go to CalAmp.com for full accessories.](#)