Cal/Amp®

LMU-4350LB™

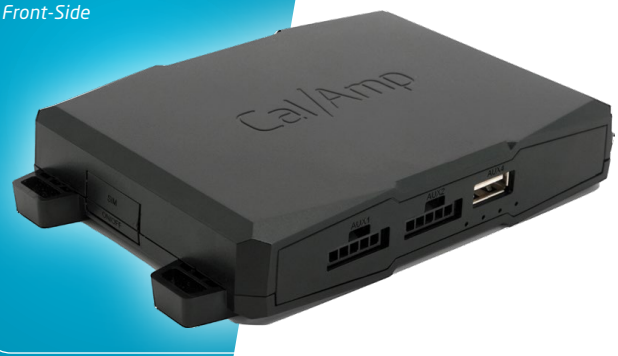
Advanced Telematics Gateway

Light Duty

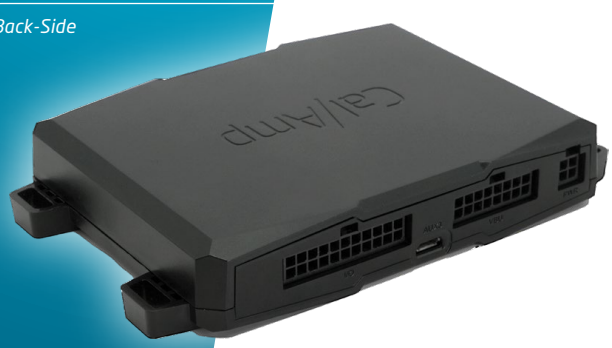
Heavy Duty

School Bus

Front-Side



Back-Side



- **Dimensions:**
  138 x 89 x 22 mm
  (5.43 x 3.5 x 0.87 in)
- **Weight:**
  5.7 oz (163g)

Overview

The LMU-4350LB is a powerful telematics gateway with global LTE CAT 1 connectivity, 3G/2G fallback, BLE 5.2 for wireless peripherals, and extensive I/O interfaces. These features enable sensor fusion, seamlessly integrating wired and wireless inputs for versatile fleet and asset management.

Powered by a high-performance multithreaded RTOS with PEG2™ intelligent logic programming and EdgeApp SDK for building customized apps, the LMU-4350LB is a versatile platform for commercial fleet, trucking, government, logistics, K-12, field services, and utilities.

Highlights

- ★ Global LTE CAT 1 with 3G/2G fallback
- ★ BLE 5.2 connectivity
- ★ Dual CAN bus for Light or Heavy Duty vehicle support
- ★ Dual 1-Wire interfaces
- ★ Multiple I/O interfaces
- ★ Built in 3-axis accelerometer & gyroscope
- ★ Edge programming with PEG2 & EdgeApp SDK

Cal/Amp®

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Cellular Connectivity

LTE CAT-1 Bands	1, 2, 3, 4, 5, 7, 8, 9, 12, 13, 14, 18, 19, 20, 25, 26, 28
3G Bands	1, 2, 4, 5, 6, 8, 19
2G Bands	2, 3, 5, 8

GNSS

GNSS Constellations	Hybrid GPS, GLONASS, BeiDou, Galileo
Receiver	55 Channels
Tracking Sensitivity	-161 dBm
Acquisition Sensitivity	-145 dBm (cold start) -156 dBm (hot start)
Location Accuracy	5.0m CEP-50
Location Update Rate	5 Hz
Anti-Jamming Detection	Supported
AGPS Location Assistance	Supported

I/O Interfaces

Ignition Inputs	1 fixed bias
Digital Inputs	7 (high/low bias selectable 0-30 VDC)
Digital Outputs	5 (open collector relay driver outputs, 200mA)
Analog Inputs	5 (general purpose, 0-30VDC, +/-250mV accuracy)
1-Wire Interface	2 (1-Bit Bus)
DC Power Output	1 switched VIN (1A fused), 2 switched 3.3V (200mA each), 1 switched LED driver (20mA)
Serial Interface	2 TTL (5-pin)
Status LEDs	4 (GPS, cellular, BT, VBU)
Sensors	3-Axis Accelerometer, Gyroscope

Connectors & Antennas

Cellular Antenna	Internal
GPS Antenna	Internal
BLE Antenna	Internal
Auxiliary	AUX1: 5-pin Molex AUX2: 5-pin Molex AUX3: USB Micro AUX4: USB Type A Host
Power, Ground, IGN, ADC	4-Pin Molex
General I/O, Switched Power	22-Pin 3mm Pitch
Vehicle BUS I/F	16-Pin 3mm Pitch
SIM Access	4FF externally accessible

Electrical

VIN Operating Voltage	12/24 VDC Vehicle Systems 9-32 VDC (start-up, operating) 7-35 VDC (momentary)
Power Consumption	Typical 800µA @ 12V (deep sleep) Typical 10mA @ 12V (radio-active sleep) Typical 90mA @ 12V (GPS tracking and cell enabled)

Certifications

FCC, CE, IC, PTCRB, RoHS, BT SIG, RCM

Battery Pack

Battery Capacity	1100 mAH
Battery Technology	Lithium-Iron Phosphate (LiFePO4)
Charging Temperature	0° to +45° C
Certifications	IEEE 1725-2011, UL 1624, UN 38.3, IEC 62133

Environmental

Temperature	-40° to +75° C (connected to primary power) -20°C to +60°C (operating on internal battery) -20° to +25° C ≤ 6 months (long term storage with battery)
Humidity	≤ 85% RH @ +55° C non-condensing
Vibration	SAE J1455, MIL-STD-810F
Shock	SAE J1455, MIL-STD-202G (30G)
ESD	IEC 61000-4-2 (4KV)

Interface Standards

Light Duty Vehicle	J1850 PWM, J1850 VPW, SW-CAN, ISO 9141-2, KWP 2000, ISO 15765 CAN
Heavy Duty Vehicle	J1939, J1708
Serial Interface	TTL: 5 Pin Molex
Bluetooth	BLE 5.2

Edge Programming

Operating System	ThreadX RTOS
Firmware	EdgeCore
PEG2	Programmable device behavior logic for intelligent event processing
EdgeApp SDK	Develop custom applications and features on the edge
Onboard Geo-Fences	Locally stored geofence data for real-time geospatial processing Rectangle or radial zones: 21 Radial zones or vertices: 5400
Buffered Messages	Up to 20,000

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

Accessories

- 5C888: Power cable (4-pin)
- 5C889: I/O harness (22-pin)
- 134364-Ser: TTL (5-pin) to DB9 connector
- 5C734M-2: OBD-II connector (2m)
- 5C709M: J1939 Type 2 connector (2m)
- 5C970M-2: J1708 connector (2m)
- 5C744-275: RP1226 connector (2.75m)

This device supports additional cables and accessories to accommodate various installation needs for light-, medium-, and heavy-duty vehicles. For a comprehensive list of compatible cables and connectors, please contact a CalAmp representative.