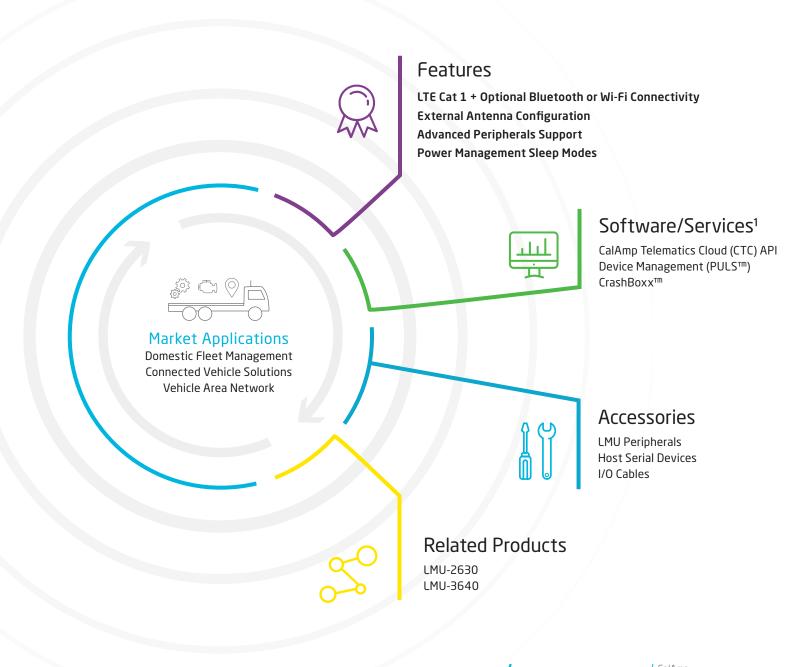


A Full-Featured Telematics Gateway Built for Optimal Flexibility

The LMU-4233[™] is a full-featured telematics gateway designed to support enterprise applications requiring a range of wireless and peripheral connectivity options. Equipped with built-in ECU (Engine Control Unit) vehicle interface technologies for both light and heavy duty vehicles.





cal/Amp°

LMU-4233™ Technical Specifications

Cellular/Network

North American Variant I

1900 (B2)/AWS 1700 (B4)/850 (B5)/700 (B12) MHz LTF Cat 1 HSPA/UMTS

850 (V)/1900 (II) MHz

North American Variant II

LTE Cat 1 AWS 1700 (B4)/700 (B13) MHz

Global Variant

HSPA/UMTS 800 (VI)/850 (V)/900 (VIII)/1800 (III)/1900 (II) MHz GSM/GPRS

850/900/1800/1900 MHz

Americas Variant

HSPA/UMTS 850 (V)/1900 (II) MHz GSM/GPRS 850/1900 MHz

Data Support

SMS, TCP, UDP Packet Data

Satellite Location (GNSS)

Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS) Constellation Support

55 Channel Channels Tracking Sensitivity -162 dBm

-156 dBm (hot start) Acquisition Sensitivity

-148 dBm (cold start)

Location Accuracy ~2.0m CEP Open Sky (GPS SBAS 24 hours static)

Location Update Rate Up to 4 Hz AGPS Location assistance capable

Comprehensive I/O

Ignition Inputs	1 fixed bias
Digital Inputs	7 (high/low selectable 0-30 VDC)
Digital Outputs	5 (open collector relay 150mA)
Current Limited Outputs	2 (20mA)
Analog Inputs	4 (0-30VDC, +/-0.1V accuracy)
Accelerometer	Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection)
1-Wire® Interface	2 (driver ID, temperature sense)
Status LEDs	2 (GPS, cellular)

Certifications

Industry Certifications FCC, CE, IC, PTCRB, RoHS

Cloud/Software Services¹

Monitor, manage, upgrade firmware, configure and troubleshoot devices remotely

CTC Device data stream via RESTful APIs

Edge Intelligence¹

PEG™ Update device functionality or develop new on the edge applications

EdgeApp SDK Write custom embedded app for edge intelligence

CALIFORNIA PROPOSITION 65



This product can expose you to chemicals including Carbon black and Nickel, which are known to the State of California to cause cancer, and including Bisphenol A and 1,3-Butadiene, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Electrical

Operating Voltage 12/24 VDC Vehicle Systems

9-30 VDC (start-up, operating) 7-32 VDC (momentary)

Power Consumption Typical 4mA @ 12V (deep sleep)

> Typical 10mA @ 12V (sleep on network w/ SMS) Typical 20mA @ 12V (sleep on network w/ GPRS)

Typical 70mA @ 12V (active tracking)

Battery Pack

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

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	85% RH @ 50° C non-condensing
Shock and Vibration	U.S. Military Standards 202G, 810F, SAE J1455
ESD	IEC 61000-4-2 (4KV Test)

Physical/Design

4.3 x 3.2 x 0.86" (110 x 81 x 22mm) Dimensions

Weight 4 oz. (113 g)

Connectors/SIM Access

External Cellular	SMC
External GPS	SMA (with tamper monitoring, 3.0v)
Power, Ground, Ignition, A/D	4-Pin Molex
I/O Connection	Two 5-Pin Molex
Cellular Antenna	22-Pin Molex
Wi-Fi Option	RP-SMA
Vehicle BUS	DB-15
SIM Access	Internal (2FF SIM)

Interface Standards

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

Product Options

External antennas (GPS, cellular, combined GPS/cellular)

Serial adapter cable RS-232 8-wire (PPP, AT Commands, NMEA GPS output)

jPOD dongle for truck ECU interface

Connectorized I/O wiring harness

Built-in or external backup batteries

¹ Subscription service enabled. Contact sales rep for additional details