

LMU-3641™

LTE CAT-M1 | External Antenna



Robust Telematics Gateway Built for Dynamic Flexibility

The LMU-3641™ LTE CAT-M1 is a next-generation telematics gateway designed to support enterprise applications requiring a robust set of fleet features. It is equipped with external antennas for Cell and GPS, Bluetooth Low Energy (BLE) 5.0 capability and a built-in ECU (Engine Control Unit) vehicle interface for both light and heavy duty vehicles.

Market Applications

Enterprise Fleet
Transportation & Logistics
Vehicle Monitoring &
Maintenance

Features

LTE CAT-M1 + BLE 5.0 Connectivity
Global 2G GSM/GPRS Support
Advanced peripherals support
Power Management Sleep Modes
Dual-vehicle bus interface

Software/Services¹

CalAmp Telematics Cloud (CTC) API
Device Management (PULS™)
CrashBoxx™
iOn™ Tag

Accessories

Heavy Duty VBUS Cables
OBD-II VBUS Cables
I/O Cables

Related Products

LMU-3640 LTE CAT-M1
LMU-3640
TTU-3640
MDT-7P



L3641MBQ221DS V5-B

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¹ Subscription service enabled. Contact sales rep for additional details.

Cal/Amp®

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LMU-3641™ LTE CAT-M1 | External Antenna Technical Specifications

Cellular/Network

| | |
|------------------------------|---|
| Global Variant LTE CAT-M1 | 2100 (B1)/1900 (B2)/1800 (B3)AWS 1700 (B4)/850 (B5/ B26)/900 (B8)/700 (B12/B13/B28)/800 (B18/B19/ B20)/1900 (B39/B25) MHz |
| GSM/GPRS | 850/900/1800/1900 MHz |

Data Support

SMS, UDP Packet Data, TCP

Satellite Location (GNSS)

| | |
|----------------------------------|--|
| Constellation Support | Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS) |
| Channels | 55 Channel |
| Tracking Sensitivity | -162 dBm |
| Acquisition Sensitivity | -156 dBm (hot start) -148 dBm (cold start) |
| Location Accuracy | ~2.0m CEP Open Sky (SBAS 24 hours static) |
| Location Update Rate | Up to 4 Hz |
| AGPS Location assistance capable | |

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) |
| Analog Inputs | 2 external ADC inputs |
| Accelerometer | Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection) |
| 1-Wire® Interface | 1 (driver ID/temperature sense) |
| Power Output | 1 switched VIN, 2 switched 3.3V |
| Status LEDs | 4 (GPS, cellular, VBUS, LAN) |
| Serial Interface | 2 (1 TTL, 1 RS-232) |
| Integrated Buzzer | Programmable audible alert |

Certifications

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

Cloud/Software Services¹

| | |
|-------|--|
| PULS™ | 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

Electrical

| | |
|-------------------|--|
| Operating Voltage | 12/24 VDC Vehicle Systems 9-30 VDC (start-up, operating) 7-32 VDC (momentary) |
| Power Consumption | Typical 600uA @ 12V (deep sleep) Typical 15mA @ 12V (radio-active sleep) Typical 90mA @ 12V (active tracking w/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 | 85% RH @ 50° C non-condensing |
| Shock and Vibration | U.S. Military Standards 202G |
| ESD | IEC 61000-4-2 (4KV test) |
| Load Dump | SAEJ1455 |

Physical/Design

| | |
|------------|-------------------------------------|
| 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 (2FF SIM) |

Interface Standards

| | |
|-------------------------|---|
| Bluetooth | Bluetooth Low Energy (BLE) 5.0 capable |
| Heavy Duty Truck Data | J1939, J1708 |
| Light Duty Vehicle Data | J1850 PWM, J1850 VPW, SW-CAN ISO 9141-2, KWP 2000, ISO 15765 CAN |

Wireless Interfaces

| | |
|------------------|---------------|
| BLE Antenna | Internal |
| Cellular Antenna | External, SMC |
| GPS Antenna | External, SMA |

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WARNING:

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

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