# LMU-3641<sup>m</sup>

LTE CAT-M1 | External Antenna

# **Robust Telematics Gateway Built for Dynamic Flexibility**

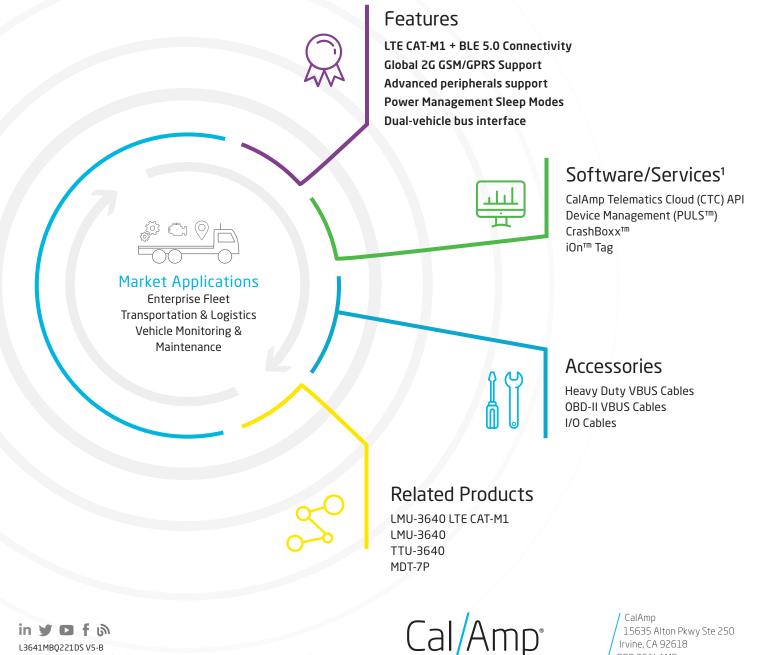


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The LMU-3641<sup>™</sup> LTE CAT-M1 is a next-generation telematics gateway designed to support enterprise applications requiring a robust set of fleet features. It is equipped with external antennas for Cell and GPS, Bluetooth Low Energy (BLE) 5.0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



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# LMU-3641<sup>TM</sup> LTE CAT-M1 | External Antenna Technical Specifications

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Cel	lular/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	l (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 <sup>®</sup> Interface	l (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 Services<sup>1</sup>

PULS <sup>TM</sup>	Monitor, manage, upgrade firmware, configure and troubleshoot devices remotely
СТС	Device data stream via RESTful APIs

#### Edge Intelligence<sup>1</sup>

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

#### 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

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