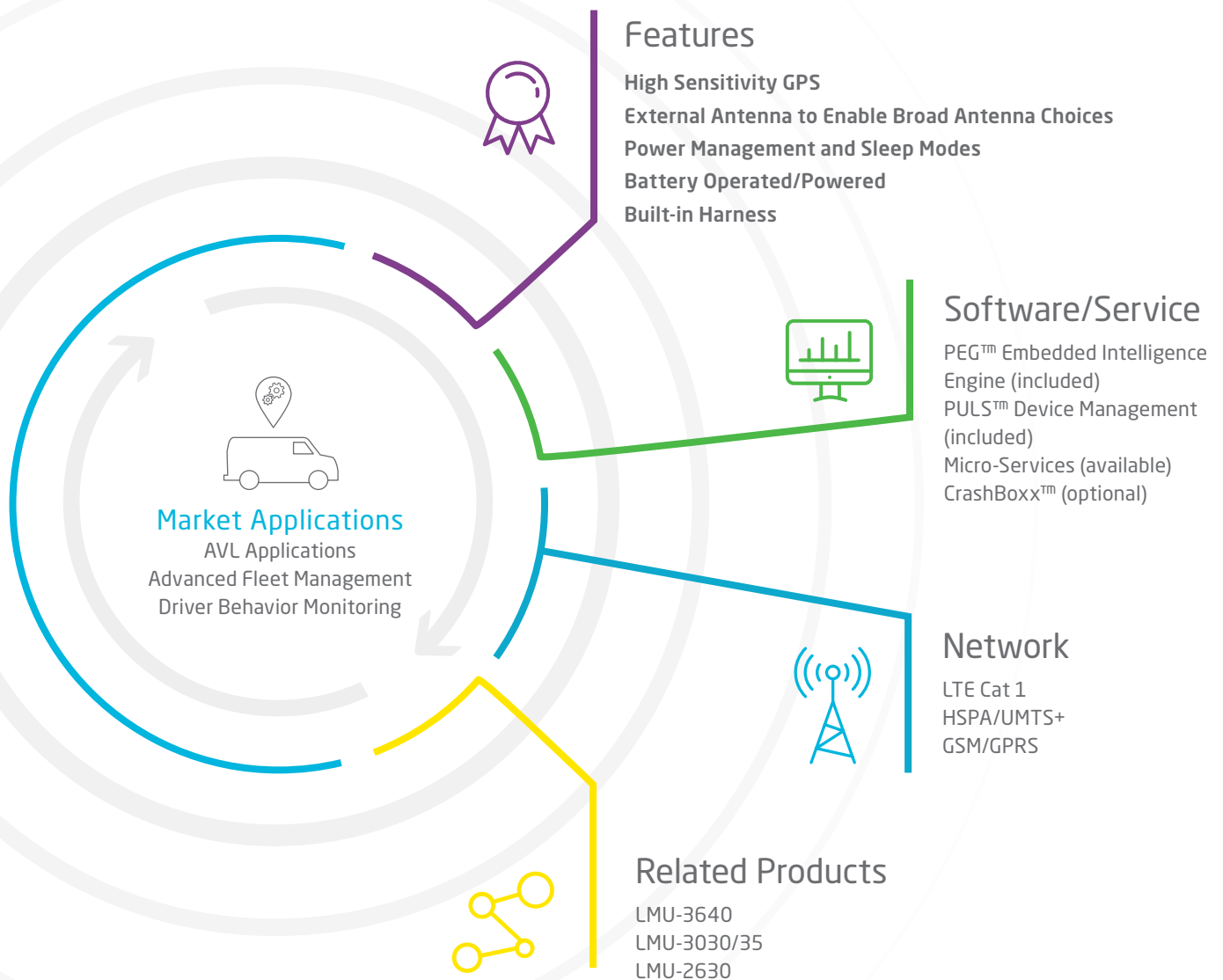


LMU-2631™



Leading Edge Fleet Tracker for Advanced Fleet Management with Extensive Capabilities and External Antenna

The LMU-2631™ is a fleet tracking device incorporating a powerful processing engine, LTE Cat 1 network connectivity and built-in triple-axis accelerometer for measuring driver behavior and vehicle impact with a versatile external antenna design.



LMU-2631™ Technical Specifications

Cellular/Network

North American Variant I	
LTE Cat 1	1900 (B2)/AWS 1700 (B4)/850 (B5)/700 (B12) MHz
HSPA/UMTS	850 (V)/1900 (II) MHz
North American Variant II	
LTE Cat 1	AWS 1700 (B4)/700 (B13) MHz
Americas Variant	
HSPA/UMTS	850 (V)/1900 (II) MHz
GSM/GPRS	9000/1900 MHz
Global Variant	
GSM/GPRS	850/900/1800/1900 MHz

Data Support

SMS, UDP Packet Data, TCP, CalAmp Telematics Cloud API

Satellite Location (GNSS)

Constellation Support	Hybrid GPS, SBAS Engine (WAAS, EGNOS, MSAS)
Channels	31 Channel
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-156 dBm (hot start) -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	4 (high/low bias selectable 0-32 VDC)
Digital Outputs	3 (open collector relay 150mA)
Analog Inputs	1 (external ADC input 0-32 VDC)
Accelerometer	Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection)
Serial Interface	2 TTL Ports
DC Power Output	1 (switched 3.3V)
1-Wire® Interface	1 (driver ID/temperature sense)
Status LEDs	2 (GPS, cellular)

Certifications

Industry Certifications FCC, IC, PTCRB, RoHS

Electrical

Operating Voltage	12/24 VDC Vehicle Systems 9-30 VDC (start-up, operating) 7-32 VDC (momentary)
Power Consumption	Typical <3mA @ 12V (deep sleep) Typical 25mA @ 12 V (radio-active sleep) Typical 50mA @ 12 V (GPS tracking and cell idle)

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	95% 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

Dimensions	3.7 x 2.0 x 0.8" (94 x 53 x 20 mm)
Weight	2.8 oz. (80 g) (w/ 1000 mAh battery)

Connectors/SIM Access

Power, I/O	20-Pin 3mm Pitch
GPS Antenna	External (w/ tamper monitoring, 3V)
Cellular Antenna	External
SIM Access	Internal (2FF SIM)

Embedded Intelligence Engine

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

Device Management

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

Product Options

I/O wiring harness
200 mAh battery
IP66 enclosure
Customized hardware and software development