

HMU-3640LB

LTE CAT-1 with 3G/2G fallback

Cal/Amp®

Hardened, Next-Generation Gateway for Industrial IoT



Dimensions

7.0" x 3.0" x 1.57"

178 mm x 76 mm x 41 mm

Weight

8.8 oz. (250 g)

The Right Solution for Harsh Conditions

HMU-3640LB is the ideal IoT solution for industrial equipment manufacturers and asset fleet operators in construction, agriculture, mining, and more. Shock resistance, extreme operating temperature support, IP67 rating, and a durable harness ensure reliability in tough conditions.

With upgraded Bluetooth and wired connectivity and more processing power, the HMU-3640LB delivers the right data to help you reduce costs, inform critical decision-making, and propel your business.

Flexible Application Options

Integrate CalAmp telematics data into your internal systems and mobile app or rely on CalAmp app to manage all of your assets.

Capture Critical Insights to Do More

Improve Maintenance

Employ preventive maintenance, remote troubleshooting, and equipment OTA updates to avoid downtime and minimize cost.

Inform Design and Testing Decisions

Avoid guesswork by analyzing utilization, location, maintenance and diagnostics, and warranty-related details. Amplify data by integrating 3rd party sensors with Bluetooth 5.x and wired connectivity options.

Use Precision Location Tracking

Rely on GNSS capability, reverse geocoding, and geofence support with alerts for theft avoidance and mitigation, proof of equipment delivery, increased productivity (not hunting for equipment), and proof of service.

Boost Asset Utilization

Track hours of operation, distance traveled, idle time, and more to avoid underutilization and unnecessary equipment rentals.

Impact Revenue and Cash Flow

Trigger timely customer offers based on specific usage and maintenance events. Map functionality to tiered pricing (e.g., boom lift can only reach a certain height at a lower price). Derate systems to compel payment for equipment used by delinquent accounts.

Track Equipment Operators

Document performance indicators (e.g., engine RPMs, hydraulic pressure, and oil temperature) to identify training and coaching needs, reduce maintenance costs, and improve safety.

HMU-3640LB, LTE CAT-1

Cellular/Network	
Global Cat 1 with 3G/2G Fallback	
FDD-LTE Bands	1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 25, 26, 28
TDD-LTE Bands	38, 39, 40, 41
WCDMA Bands	1, 2, 4, 5, 6, 8, 19
GSM Bands	2,3,5,8

Data Support
SMS, TCP, UDP

Satellite Location (GNSS)	
Constellation Support	Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS)
Tracking Sensitivity	-164 dBm
Acquisition Sensitivity	-147 dBm
Location Accuracy	~2.0m CEP Open Sky (SBAS 24 hours static)
Location Update Rate	Up to 4 Hz
AGPS Location Assistance Capable	Yes

Comprehensive I/O	
Ignition Inputs	1 fixed bias
Digital Inputs	1 (high/low bias selectable 0-32 VDC)
Digital Outputs	1 (open collector relay 150mA)
Accelerometer	Built in, triple-axis (driver behavior, impact detection, motion sensing, tilt detection)
Analog Inputs	1 (external ADC inputs, 0-32 VDC)
Status LEDs	4 (GPS, cellular, BT, CAN)

Interface Standards		
BLE	CAN	Serial
5.x	two 250/500 KB CAN bus	RS232 or RS485 HD mode; selectable

Form Factor	
Dimensions	7.0"x 3.0" x 1.57" 178 mm x 76 mm x 41 mm
Weight	8.8 oz. (250 g with 500mAh Battery)

Certifications	
Industry Certifications	FCC, IC, PTCRB, RoHS®

Electrical	
Operating Voltage	12/24 VDC Vehicle Systems 9-32 VDC (start-up, operating) 7-32 VDC (momentary)
Power Consumption	Typical 500uA @ 12V (deep sleep) Typical 20mA @ 12V (radio-active sleep) Typical 100mA @ 12V (GPS tracking and cell idle)

Battery Pack	
Battery Capacity	500 mAh
Battery Technology	Nickel-Metal Hydride, NiMH
Charging Temperature	0° to +40° C

Environmental	
Temperature	-30° to +75° C (connected to primary power) 0° to +50° C (operating on internal battery) -20° to +25° C ≤ 6 months (long term storage with battery)
Shock and Vibration	Shock: 3 axis, 50g Vibration: Sinusoidal 15 to 2KHz, 3 axis, 8 hr duration, 39m/s ²
ESD	IEC 61000-4-2 (4KV test)
Ingress Protection Rating	IP67

Connectors/SIM Access	
VBUS I/F Power, I/O	12-Pin Mini-Deutsch Connector
SIM Access	Internal (2FF SIM)

Edge Intelligence	
Scripting	PEG™
Memory	Up to 200KB for script and hosted app

Application Options	
CalAmp Application	
CalAmp Telematics Cloud	

Cables	
Cable Assembly Harness	CBL00018

For full tech specs visit calamp.com

Contact sales rep for additional details.

