

HMU-3640LB™

Advanced Rugged Telematics Gateway



Equipment
Rental



Construction



Oil, Gas
& Mining



Agriculture
& Forestry



• **Dimension:**

178 x 76 x 41 mm
(7.0 x 3.0 x 1.57 in)

• **Weight:**

250 g
(8.8 oz)

Overview

The HMU-3640LB™ is engineered for heavy-duty machinery applications in construction, industrial, oil, mining, and agriculture. This device features a sealed design, certified to withstand the harshest environments like ESD, shock, vibration, and extreme temperature fluctuations.

It offers flexible connectivity to a wide range of equipment types and supports various communication protocols. With dependable network coverage across various carriers and superior durability, it ensures uninterrupted data flow even under the toughest conditions.

Highlights



Global LTE CAT 1 with 3G/2G fallback



IP66 & IP67 Sealed & MIL-STD certified



BLE 5.2 connectivity



Supports Modbus protocol



Multiple I/O interfaces, including RS232/RS485, and dual CAN



Built in accelerometer



Edge programming with PEG & EdgeApp32

HMU-3640LB™

Technical Specifications

Cellular Connectivity	
LTE-FDD	B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66
LTE-TDD	B32/38/39/40/41
WCDMA	B1/2/4/5/6/8/19
TD-SCDMA-GSM-EDGE	B2/3/5/8
Data Support	SMS, UDP Packet Data, TCP, TLS
GPS	
GNSS	Hybrid GPS, GLONASS, SBAS Engine (WAAS, EGNOS, MSAS)
Receiver	55 Channels (with SBAS)
Tracking Sensitivity	-167 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
Anti-Jamming	Supported
AGPS Location Assistance Capable	Supported
I/O	
Ignition Inputs	1 fixed bias
Digital Inputs	1 (high/low bias selectable 0-32 VDC)
Digital Outputs	1 (open collector relay 150mA)
Analog Inputs	1 (external ADC inputs, 0-32 VDC)
Serial Interface	1 (RS232/RS485)
CAN Inputs	2
Status LEDs	4 (GPS, cellular, Wi-Fi/BT, CAN)
Sensors	Accelerometer
Connectors	
Connector	12-Pin Mini-Deutsch Connector
SIM Access	Internal (2FF SIM)
Certifications	
FCC, CE, IC, PTCRB, RoHS	
Electrical	
Operating Voltage	12/24 VDC Vehicle Systems 9-32 VDC (start-up, operating) 7-32 VDC (momentary)
Power Consumption	Typical 300uA @ 12V (deep sleep) Typical 20mA @ 12V (radio-active sleep) Typical 100mA @ 12V (GPS tracking and cell enabled)

Battery Pack	
Battery Capacity	500 mAh
Battery Technology	Nickel-Metal Hydride
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)
Humidity	95% RH @ 50° C non-condensing
Shock and Vibration	US MIL-STD 202G & 810F, SAE J1455
ESD	IEC 61000-4-2 (4KV test)
Ingress Protection Rating	IP66 & IP67
Interface Standards	
Heavy Duty Vehicle	J1939
Serial Interface	RS-232, RS-485, Modbus
Bluetooth	BLE 5.2
Edge Programming	
PEG™	Tailor device functionality to business needs with our no-code scripting.
Geo-Fences	Rectangle or radial zone: 21 Radial zones or vertices: 5400
Buffered Messages	Up to 20,000
EdgeApp32	Develop edge applications with custom features, seamlessly scaling across devices.
Software Services ¹	
Device Management	Manage, configure, and deploy OTA updates to connected assets at scale.
CalAmp Telematics Cloud	Stream and integrate telematics data across any systems and applications with our flexible APIs.
CalAmp Application	Leverage our comprehensive cloud software for real-time insights into connected assets, improving the visibility, safety, and efficiency of your operations.
Accessories	
CBL00018	Cable, Deutsch, 12-Wire, Flying Leads

¹ Subscription service required to access full features. For more information and pricing, please contact a sales representative. Find the most up-to-date information at <https://www.calamp.com/devices/>

