

LTE CAT M1 · DATA SHEET

ATU-1650MB™

Compact, rugged GPS asset tracker with multi-region connectivity



DIMENSIONS

63.5 × 50.8 × 27.9 mm
(2.50 × 2.00 × 1.10 in)

WEIGHT

106 g
(3.7 oz)

Overview

The CalAmp ATU-1650MB delivers accurate GPS tracking, long battery life, and rugged performance in a compact, discreet form factor. It supports standalone or dual-device operation, configurable reporting, and remote management through CalAmp Device Management for vehicle recovery and asset tracking.

Highlights



Up to seven years of battery life at one report per day



Rugged IP66- and IP67-rated weatherproof design



Multi-region connectivity for broad deployment flexibility



Standalone or dual-device operating modes



Bluetooth Low Energy 5.2 connectivity



Remote management through CalAmp Device Management

PHYSICAL DESIGN

Dimensions 63.5 × 50.8 × 27.9 mm
(2.50 × 2.00 × 1.10 in)

Weight 106 g (3.7 oz)

CELLULAR

LTE CAT M1 Bands B1, B2, B3, B4, B5, B8, B12*, B13, B18, B19, B20, B25*, B26, B27, B28, B66*, B85

2G Bands B2, B3, B5, B8

Data Support SMS, UDP Packet Data

GNSS

Constellation Support GPS, GLONASS, Galileo, BeiDou

Tracking Sensitivity -161 dBm

Acquisition Sensitivity -145 dBm (cold start)

Location Accuracy <2.5 CEP open sky

A-GPS Assistance Yes

WIRELESS INTERFACES

Bluetooth BLE 5.2

VEHICLE BUS

Serial Interface USB

ANTENNAS & SIM

Cellular Antenna Internal

GPS Antenna Internal

SIM Access Internal (4FF SIM)

POWER

Battery Capacity 4400mAh

Battery Technology Lithium manganese dioxide (LiMnO2)

Battery Life One report per day: up to 7 years •
Four reports per day: up to 1.5 years •
Report every 5 minutes: up to 10 days

ENVIRONMENTAL

Temperature -25°C to +68°C (operating)

Humidity +25°C to +60°C, 65% RH

Shock & Vibration SAE J1455

ESD IEC 61000-4-2, 4 kV

Environmental Rating IP66 & IP67

I/O

Serial Interface USB: Internal debug & configuration

EDGE INTELLIGENCE

Firmware EdgeCore

Edge Programming PEG2 & EdgeApp SDK

Geofences Locally stored geofence data for real-time geospatial processing

Buffered Messages Up to 20,000

Operating System ThreadX RTOS

CLOUD / SOFTWARE SERVICES

Device Management Manage, configure, and deploy OTA software updates to connected assets at scale

CalAmp Telematics Cloud Stream telematics data into proprietary systems with flexible API integration

CalAmp App Fleet and asset management software for tracking, monitoring, and managing vehicles, equipment, drivers, assets, and cargo.

CERTIFICATIONS

Certifications FCC, PTCRB, CE, CE Cybersecurity, ISED, RoHS 3, E-Mark, Applicable Carriers

ACCESSORIES

Accessories installation bracket sold separately

* Band 12 is a superset of Band 17, Band 25 is a superset of Band 2, and Band 66 is a superset of Band 4.

** Battery life varies based on environmental conditions, installation orientation, update frequency, network availability, and any advanced configurations or optional BLE_x001F_enabled features.