

HARDWIRED ASSET TRACKER

BH2M1

LTE Cat-M1 / NB-IoT Tracker

An LTE Cat-M1 / NB-IoT hardwired GNSS tracker with comprehensive I/O, CAN adapter support, and Bluetooth LE — built for vehicle and fleet telematics deployments requiring rich sensor and vehicle-data integration.



4G

Cat-M1

CAN

BT LE

KEY FEATURES

- ✓ LTE Cat-M1 / NB-IoT connectivity
- ✓ 6-constellation GNSS for fast, accurate fixes
- ✓ Bluetooth LE 4.0 for sensors & peripherals
- ✓ CAN adapter support for vehicle bus data
- ✓ 3× digital inputs / 3× digital outputs
- ✓ 2× analog inputs
- ✓ 1-Wire interface for external sensors
- ✓ Green driving & crash detection
- ✓ Towing & unplug detection
- ✓ Immobilizer & iButton support
- ✓ Auto & manual geo-fencing
- ✓ FOTA & remote configuration

APPLICATIONS

Vehicle & Fleet Telematics

CAN Bus Data Monitoring

Driver Behavior & Green Driving

Fuel Monitoring via CAN or Analog

Immobilizer & Stolen Vehicle Recovery

iButton Driver Identification

Temperature & Humidity Monitoring via BLE Sensors

BH2M1 — Full Technical Specifications

NETWORK / OPERATING BAND

LTE FDD Cat-M1	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B27/B28/B66/B85
LTE DL / UL	588 / 1119 Kbps
Tx Power	Class 3 — 23 ±2.7 dBm (FDD & TDD)
Protocol	SMS (text/data)

GNSS SPECIFICATIONS

Constellation	GPS + GLONASS + Galileo + BeiDou + QZSS + AGPS
Receiver	33 tracking / 99 acquisition channels
Tracking Sens.	-165 dBm
Accuracy (CEP)	< 2.5 m
Velocity Acc.	< 0.1 m/s
Hot TTFF	< 1 s
Warm TTFF	< 25 s
Cold TTFF	< 35 s

POWER, PHYSICAL & I/O

Weight	69 g (2.4 oz)
Dimensions	77 × 62 × 20 mm (3.03" × 2.44" × 0.79")
Backup Battery	Li-Ion 170 mAh / 3.7V
Operating Voltage	10V – 30V DC
Operating Temp.	-20°C to +85°C (-4°F to +185°F)
Ingress Protection	IP41
SIM	Micro-SIM
Digital Inputs	3 (incl. 1 negative, 2 impulse)
Digital Outputs	3
Analog Inputs	2
CAN Adapter	1 (LV-CAN200, ALL-CAN300, CAN-CONTROL)
1-Wire	1

POWER CONSUMPTION

Ultra Deep Sleep	< 3 mA @ 12V
Deep Sleep	< 5 mA @ 12V
Online Deep Sleep	< 11 mA @ 12V
GPS Sleep	< 18 mA @ 12V
Nominal	< 34 mA @ 12V
Peak / Full Load	< 2 A @ 12V

INTERFACES & CONNECTIVITY

USB	2.0 Micro-USB
GNSS Antenna	Internal high gain
Cell Antenna	Internal high gain
LED Indicators	2 status LEDs
Memory	128MB internal flash
Bluetooth	BLE 4.0 + LE
BLE Peripherals	Temp/humidity sensor, OBDII dongle, barcode scanner, universal BLE

FEATURES & SCENARIOS

Sensors	Accelerometer
Sleep Modes	Ultra Deep Sleep, Deep Sleep, Online Deep Sleep, GPS Sleep
Ignition Det.	Digital Input, Accelerometer, Ext. Power, Engine RPM (CAN/OBD)
Fuel Monitor	LLS (Analog), LV-CAN200, ALL-CAN300, CAN-CONTROL, OBDII dongle
Time Sync	GNSS, NITZ, NTP
Config / FOTA	FOTA Web, Teltonika Configurator (USB / BLE)
SMS Commands	Config, events, DOUT control, debug
Scenarios	Green driving, speeding, idling, immobilizer, iButton, towing, crash, geofence, trip

CERTIFICATIONS

FCC

IC

PTCRB

AT&T

RoHS