

MCX101

LTE CAT1 advanced plug and play tracker with Bluetooth

The Morey MCX101 is an easy OBD-II plug and play tracker with GNSS, 4G LTE and Bluetooth connectivity. It is perfectly suited for light vehicle tracking in applications such as courier delivery service, car rental & leasing, insurance telematics and more where simple integration is a must. The MCX101 also has an additional featurereading OBD-II data from the on-board computer. The device supports firmware and configuration updates via Bluetooth.

MANAGEMENT

- Informative configurator
- Multiple ways to configure
- User-friendly interface

CAPABILITIES

- Enhanced base functionalities
- Advanced functionalities
- Continuous new features

TELEMETRY

- LTE CAT M1 coverage
- Enriched I/O elements
- GNSS satellite support

MCX101 Highlights

Reliable 4G connection with fallback to 3G network

Crash detection functionality via accelerometer data

Bluetooth for exchanging data over short distances

Allows reading of CAN bus data from vehicle ECU

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Optional firmware upgrade allows reading of OEM-specific odometer data

Optional firmware upgrade allows reading of OEM-specific fuel data





GPS, GLONASS, GALILEO,

NMEA, GGA, GGL, GSA, GSV, RMC, VTG

BEIDOU, QZSS

Tracking: 33/99 Acquisition Channels

-165 dBM

< 3 m

< 1 s < 25 s

< 35 s

OBDII Connector

Status LED Micro USB Navigate LED

POWER

Input Voltage Range	10–30 V DC with Overvoltage Protection
Internal Back-up Battery	115 mAh Li-Ion, 3.7 V Battery (0.63 Wh)

BLUETOOTH

Specification	4.0 + LE
Supported Peripherals	BLE Beacon Label, BLE Beacon, BLE Temperature Sensor, BLE Magnetic Sensor, BLE Movement Sensor, Bluetooth Temperature and Humidity Sensor

CELLULAR

GNSS

GNSS

Receiver

Accuracy

Hot Start

Warm Start Cold Start

Protocol Compatible

Tracking Sensitivity

Module	Quectel EG91-NA Quectel EG91-NS
Technology	LTE CAT 1, UMTS
3G Bands	WCDMA: B2/B4/B5
4G Bands	EG91-NA: LTE FDD: B2/ B4/B5/B12/B13
	EG91-NS: LTE FDD: B2/B4/ B5/B12/B13/B25/B26)
Data Transfer	LTE: LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) UMTS: WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)
Data Support	SMS (Text/Data)

PHYSICAL SPECIFICATION

Dimensions	50,7 x 49,6 x 25 mm (L x W x H)
Weight	63 g

OPERATING ENVIRONMENT

Operating Temperature (Without Battery)	-40 °C to +85 °C
Storage Temperature (Without Battery)	-40 °C to +85 °C
Operating Humidity	5% to 95% Non-Condensing
Ingress Protection Rating	IP41
Battery Charge Temperature	0 °C to +45 °C
Battery Discharge Temperature	-20 °C to +60 °C
Battery Storage Temperature	-20 °C to +45 °C for 1 Month -20 °C to +35 °C for 6 Months



INTERFACE

OBDII Connection	K-Line, CAN Bus Data
GNSS Antenna	Internal High Gain
GSM Antenna	Internal High Gain
USB	2.0 Micro-USB
LED Indication	2 Status LED Lights
SIM	Micro-SIM Card
Memory	128MB Internal Flash Memory

FEATURES

Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding Detection, Jamming Detection, GNSS Fuel Counter, Excessive Idling Detection, Unplug Detection, Towing Detection, Crash Detection, Auto Geofence, Manual Geofence, Trip
Sleep Modes	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep
Configuration and Firmware Update	FOTA Web, Morey Configurator
SMS	Configuration, Events, Debug
TCP Commands	Configuration, Debug
Time Synchronization	GNSS, NITZ, NTP
Fuel Monitoring	OBDII (Depends on Vehicle Model)
Ignition Detection	Accelerometer, External Power Voltage, Engine RPM
Optional Firmware Upgrade	Morey Enhanced OBD



