

# 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 feature-reading 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



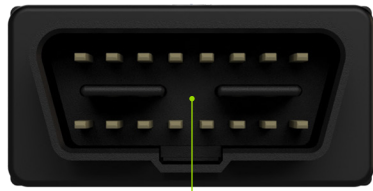
Crash detection functionality working according accelerometer data



Bluetooth for exchanging data over short distances



Allows reading CAN bus data from vehicle ECU



OBDII Connector


 Status LED  
 Micro USB  
 Navigate LED

### GNSS

<b>GNSS</b>	GPS, GLONASS, GALILEO, BEIDOU, QZSS
<b>Protocol Compatible</b>	NMEA, GGA, GGL, GSA, GSV, RMC, VTG
<b>Receiver</b>	Tracking: 33/99 Acquisition Channels
<b>Tracking Sensitivity</b>	-165 dBm
<b>Accuracy</b>	< 3 m
<b>Hot Start</b>	< 1 s
<b>Warm Start</b>	< 25 s
<b>Cold Start</b>	< 35 s

### CELLULAR

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

### POWER

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

### BLUETOOTH

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

### PHYSICAL SPECIFICATION

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

### OPERATING ENVIRONMENT

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

## INTERFACE

OBDSII 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	OBDSII (Depends on Vehicle Model)
Ignition Detection	Accelerometer, External Power Voltage, Engine RPM