

# MCX201

## Advanced LTE terminal with flexible inputs configuration

The Morey MCX201 is an advanced asset tracker with internal GNSS & GSM antennas, configurable digital & analogue inputs and digital outputs, negative input, impulse inputs, Bluetooth connectivity and backup battery. It is designed for light vehicle tracking but is also suitable for advanced applications such as logistics, delivery services, utility transport and more. The MCX201's extended input/output set and 1-wire interface make it perfect for refrigerated transport and other special use cases where temperature monitoring is critical.



## Use Cases



Light Vehicles



Heavy Duty Transport



Trailer Tracking



Refrigerated Transport



International Logistics



Car Sharing

## MCX201 Highlights



Reliable 4G connection with fallback to 3G network



Configurable DIN/AIN for flexible remote monitoring and control



Bluetooth for external devices and Low Energy sensors



Impulse inputs for fuel flow meters data reading



1-Wire<sup>®</sup> interface to monitor temperature data and RFID/iButton tags



Negative input will allow easier installation of accessories



2x6 Socket



Status LED

Navigate LED

### GNSS

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

### CELLULAR

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)

### POWER

Input Voltage Range	10–30 V DC With Overvoltage Protection
Removable Back-Up Battery	170 mAh Li-Ion Battery 3.7 V (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, OBDII Dongle

### PHYSICAL SPECIFICATION

Dimensions	65 x 56,6 x 20,6 mm (L x W x H)
Weight	55 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

Digital Inputs	3
Negative Inputs	1 (Digital Input 2)
Impulse Inputs	2 (Digital Input 1, Digital Input 2)
Digital Outputs	3
Analog Inputs	2
CAN Adapter Inputs	1
1-Wire Interface	1
GNSS Antenna	Internal High Gain
Cellular Antenna	Internal High Gain
USB	2.0 Micro-USB
LED Indication	2 Status LED Lights
SIM	Micro-SIM + eSIM
Memory	128MB Internal Flash Memory

## FEATURES

Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding Detection, Jamming Detection, GNSS Fuel Counter, DOUT Control Via Call, Excessive Idling Detection, Immobilizer, iButton Read Notification, 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, DOUT Control, Debug
TCP Commands	Configuration, DOUT Control, Debug
Time Synchronization	GNSS, NITZ, NTP
Fuel Monitoring	LLS (Analog), LV-CAN200, ALL-CAN300, CAN-CONTROL, OBDII Dongle
Ignition Detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII Dongle)