

FMC250

WATER-RESISTANT GNSS/LTE CAT 1/GSM/BLUETOOTH TRACKER WITH INTEGRATED CAN ADAPTER, INTERNAL GNSS/GSM ANTENNAS AND INTERNAL BATTERY

Product page



CAT 1 IP67 4.0



IP67 CASING

Reliable tracking in harsh conditions

4G CAT 1

Reliable 4G (LTE Cat 1) connection with fallback 2G (GSM) network

CAN DATA FOR EV VEHICLES

CAN module allows data reading from electric vehicles (EV)

INTEGRATED CAN DATA PROCESSOR

Allows to monitor real fuel consumption and level, full mileage, engine temperature and more



The FMC250 is a water-resistant IP67-rated advanced 4G CAT 1/GSM/GNSS/BLUETOOTH® LE device. It combines a GPS tracker and CAN adapter into a compact 2-in-1 solution, specifically designed for challenging environments. Its rugged construction and IP67 rating ensure reliable performance in harsh environments, providing protection against water and dust ingress. Featuring an integrated CAN data processor, the FMC250 allows effortless reading of CAN data from a wide range of vehicles, including light vehicles, electric vehicles, trucks, and buses. This enables real-time monitoring of essential vehicle parameters such as fuel level, consumption, odometer readings, CAN speed, and pedal position. The device's advanced software provides extensive functionality, making it suitable for advanced applications such as logistics, delivery services, utility transport, and car sharing. Its water-resistant IP67 rating ensures durable performance in challenging outdoor conditions, making it a reliable choice for demanding applications.



Product

Model name FMC250-QJIB0 (EU)

Module

Name FMC250-QJIB0: Quectel EG915U-EU with Teltonika TM2500

Technology LTE Cat 1/GSM/GPRS/GNSS/BLUETOOTH® LE

GNSS

GNSS GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS

Receiver Tracking: 33

Tracking sensitivity -165 dBm

Position accuracy < 2.5 CEP

Velocity accuracy < 0.1m/s (within +/- 15% error)

Hot start < 1 s

Warm start < 25 s

Cold start < 35 s

Cellular

Technology LTE CAT 1, GSM

2G bands FMC250-QJIB0: GSM: B2/B3/B5/B8

4G bands FMC250-QJIB0: LTE FDD: B1/B3/B7/B8/B20/B28

Data transfer GPRS Multi-Slot Class 12 (up to 240 kbps), GPRS Mobile Station Class B

Data support SMS (text/data)

Power

Input voltage range 10 - 30 V DC with overvoltage protection

Back-up battery 170 mAh Li-Ion battery 3.7 V (0.63 Wh)

Bluetooth

Specification 4.0 + LE

Physical specification

Dimensions	70,5 x 67,0 x 25,6 mm (L x W x H) 85,0 x 67,0 x 25,6 mm (L x W x H) (length with connector socket)
Weight	73.5 g

Interface

Digital Inputs	3
Negative Inputs	1 (Digital Input 2)
Impulse Inputs	2 (Digital Input 1, Digital Input 2)
Digital Outputs	2
Analog Inputs	2
CAN interfaces	2
1-Wire	1 (1-Wire data)
GNSS antenna	Internal High Gain
GSM antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	3 status LED lights
SIM	Micro-SIM or eSIM
Memory	128MB internal flash memory

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	IP67
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

Features

CAN Data	Fuel Level (Dashboard), Total fuel consumption, Vehicle speed (wheel), Vehicle driven distance, Engine speed (RPM), Accelerator pedal position
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, FOTA, Teltonika Configurator (USB, Bluetooth), FMBT mobile application (Configuration)
SMS	Configuration, Events, DOUT control, Debug
GPRS commands	Configuration, DOUT control, Debug
Time Synchronization	GPS, NITZ, NTP

Ignition detection Digital Input 1, Accelerometer, External Power Voltage, Engine RPM

Certification & Approvals *

Regulatory CE/RED, E-Mark, RCM, RoHS, REACH

* in progress