

# FMM250

WATER-RESISTANT GNSS/LTE CAT M1/GSM/  
BLUETOOTH TRACKER WITH INTEGRATED CAN  
ADAPTER, INTERNAL GNSS/GSM ANTENNAS AND  
INTERNAL BATTERY

Product page



CAT M1 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



ELECTRIC  
VEHICLES



LIGHT  
VEHICLES



TRUCKS



BUSES

The FMM250 is a water-resistant IP67-rated advanced 4G CAT M 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 FMM250 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.



**Module**

Name	FMM150-Q3IB0: Quectel BG95-M3 with Teltonika TM2500
Technology	LTE Cat M1/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 M1, GSM
2G bands	BG95-M3: B2/B3/B5/B8
4G bands	Cat M1: B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/ B20/B25/B26/B27/ B28/B66/B85 Cat NB2: B1/B2/B3/B4/B5/B8/ B12/B13/B18/B19/ B20/B25/B28/B66/ B71/B85
Data transfer	BG95-M3: LTE: Max. 588Kbps (DL)/Max.1119Kbps (UL) GPRS: Max. 107Kbps (DL)/Max. 85.6Kbps (UL)
Transmit power	Class 4 for GSM850/900: 23±2dBm Class 1 for GSM1800/1900: 20±2dBm Class 3 for LTE-TDD: 23±2.7dBm Class 3 for LTE-FDD: 23±2.7dBm

**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
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**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
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\* In progress