

# **FMM125**

### ADVANCED CAT M1/GSM/GNSS/BLE TERMINAL WITH INTERNAL ANTENNAS, RS485, **RS232 INTERFACES AND BACKUP BATTERY**

FMM125 is small and professional real-time tracking terminal with GNSS and LTE CAT-M1/NB-IoT/ GSM connectivity and backup battery. Device equipped with GNSS/Bluetooth and LTE CAT-M1/NB-IoT modules with fallback to 2G network, internal GNSS, 3G antennas. FMM125 features RS485, RS232 data interface, which gives ability to connect various third-party external devices. It is perfectly suitable for applications where location acquirement of remote objects is needed: fleet management, car rental companies, taxi companies, public transport, logistics companies, personal cars and so on.



## **USE CASES**







**TRAILER TRACKING** 



REFRIGERATED **TRANSPORT** 



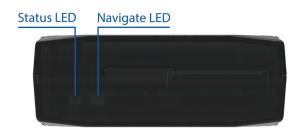
INTERNATIONAL LOGISTICS



CAR **SHARING** 







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Name	Quectel BG96, Teltonika TM2500
Technology	LTE CAT M1/NB-IoT/GSM/GPRS/GNSS/BLUETOOTH

#### **GNSS**

GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver	Tracking: 33
Tracking sensitivity	-165 dBM
Accuracy	< 3 m
Hot start	<1s
Warm start	< 25 s
Cold start	< 35 s

#### Cellular

Technology	LTE CAT M1/NB-IoT/GSM
2G bands	B2/B3/B5/B8
4G bands	LTE FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B28 LTE TDD: B39 (for CAT M1 only)
Data transfer	LTE: Max. 375Kbps (DL)/Max.375Kbps (UL) GPRS: Max. 85.6Kbps (DL)/Max. 85.6Kbps (UL)
Data support	SMS (text/data)

#### **Power**

Input voltage range	10 - 30 V DC with overvoltage protection
Internal Back-up battery	170 mAh Li-lon battery 3.7 V (0.63 Wh)

#### **Bluetooth**

Specification	4.0 + LE
Supported peripherals	Temperature and Humidity sensor, OBDII dongle, Inateck Barcode Scanner, Universal BLE sensors support

#### **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	1
Digital Outputs	1
Analog Inputs	1
CAN Adapter Inputs	1
1-Wire	1
RS232	1
RS485	1
GNSS antenna	Internal High Gain
Cellular antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	2x SIM Card (Dual-SIM)
Memory	128MB internal flash memory

#### **Features**

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Sensors	Accelerometer	
Scenarios	Green Driving, Over Speeding 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	GNSS, NITZ, NTP	
Fuel monitoring	LLS (Analog), Digital LLS (RS232, RS485), LV-CAN200, ALL-CAN300, CAN-CONTROL, OBDII dongle	
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII dongle)	
RS232 Modes	Log Mode, NMEA, LLS, LCD, RFID HID/MF7, Garmin FMI, TCP ASCII/Binary	
RS485 Modes	Log Mode, NMEA, LLS, TCP ASCII/Binary	

