

FMM80A General description

[Main Page](#) > [Fast & Easy Trackers](#) > [FMM80A](#) > [FMM80A Manual](#) > **FMM80A General description**

FMM80A is a tracking terminal with GNSS and LTE CAT M1 connectivity, which is able to collect device coordinates and transfer them via LTE CAT M1 network to a server.

□

Contents

- [1 Package contents](#)
- [2 Basic characteristics](#)
- [3 Technical features](#)
- [4 Technical information about internal battery](#)
- [5 Electrical characteristics](#)
- [6 Absolute maximum ratings](#)

Package contents

The FMM80A device is supplied to the customer in a cardboard box containing all the equipment that is necessary for operation. The package contains:

- FMM80A device;
- Top and bottom device cover parts.

Basic characteristics

LTE CAT M1 / GNSS features:

- Modem Quectel BG95-M1 (LTE FDD (CAT M1): B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85);
- Technology LTE CAT M1/GNSS/BLE/BT;
- SMS (text, data);
- Integrated GNSS receiver;
- Up to -165 dBm GNSS receiver sensitivity.

Hardware features:

- Built-in movement sensor;
- Built-in Bluetooth® 3.0;
- Built-in Bluetooth® 4.0;
- Internal High Gain GNSS antenna;
- Internal High Gain GSM antenna;
- 128 MB Flash (422 400 Records);
- 115 mAh Li-ion rechargeable 3.7 V battery.

Interface features:

- Power supply: +10...+30 V;
- Connection: OBDII socket;
- USB: 2.0 USB Micro B;
- 2 LEDs indicating device status.

Technical features

Part name	Physical specification
Navigation indication	LED
Modem indication	LED
OBD-II	Standard OBD-II connector
USB	Micro USB socket

Technical details

2 W max. Current consumption at 12 V	Ultra Deep Sleep: 6.5 mA
	Deep Sleep: 8 mA
	Online Deep Sleep: 13 mA
	GPS Sleep: 16.3 mA
	Nominal with no load: 31 mA
	With full Load / Peak: 0.25A Max.
Operating temperature (without battery)	-40 ... +85 °C
Storage temperature (without battery)	-40 ... +85 °C
Storage relative humidity	5 ... 95% (no condensation)
Internal fuse	3 A, 125 V
Weight	63 g

Dimension drawing:



Technical information about internal battery

Internal back-up battery	Battery voltage (V)	Nominal capacity (mAh)	Power (Wh)	Charge temperature (°C)	Discharge temperature (°C)	Storage temperature (°C)
--------------------------	---------------------	------------------------	------------	-------------------------	----------------------------	--------------------------

Li-ion rechargeable battery	3.75□3.90	115	0.43 - 0.45	0 to +45	-20 to +60	-20 to +45 for 1 month -20 to +35 for 6 months
-----------------------------	-----------	-----	-------------	----------	------------	---

Batteries are covered by 6 month [warranty](#) support.

- ✖ CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Battery should not be disposed of into general household waste.

- ✖ Bring damaged or worn-out batteries to your local recycling center or dispose them into a battery recycle bin commonly found in supermarkets.

Electrical characteristics

Characteristic description	Value			Unit
	Min.	Typ.	Max.	
Supply Voltage:				
Supply Voltage (Recommended Operating Conditions)	+10		+30	V

Absolute maximum ratings

Characteristic description	Value			Unit
	Min.	Typ.	Max.	
Supply Voltage (Absolute Maximum Ratings)	-32		+32	V