FMC800 General description

FMC800 is a tracking terminal with GNSS and LTE/GSM connectivity, which is able to collect device coordinates and transfer them via LTE/GSM networks to a server. FMC800 is a LTE CAT 1 device. The main feature of FMC800 is it's easy installation via OBD port. It is a perfect tracker for a wide range of use cases – including fleet management of light commercial vehicles, driver log-book, insurance telematics (UBI), car rental & leasing and more.

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Contents

Package contents

The FMC800 device is supplied to the customer in a cardboard box containing all the equipment that is necessary for operation. The package contains:

- FMC800 device;
- Top and bottom device cover parts;
- OBD II power supply adapter.

Basic characteristics

GSM / GPRS / GNSS features:

- FMC800-QJIB0: Quectel EG915U-EU with Teltonika TM2500;
- Technology LTE CAT 1/GSM/GPRS/GNSS/BLUETOOTH;
- SMS (text, data);
- Integrated GNSS receiver;
- Up to -165 dBm GNSS receiver sensitivity.

CELLULAR:

Technology	Supported bands
2G bands	FMC800-QJIB0: GSM: B2/B3/B5/B8 850/900/1800/1900
4G bands	FMC800-QJIB0: LTE FDD: B1/B3/B7/B8/B20/B28
Data transfer (Quectel)	LTE: LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) GSM: GPRS: Max 85.6Kbps (DL)/Max 85.6Kbps (UL)

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);
- 170 mAh Li-ion rechargeable 3.7 V battery.

Interface features:

- Power supply: +10...+30 V;
- USB port;
- OBD II;
- 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	GPRS: max 50 mA Nominal: average 35 mA GPS sleep: average 12 mA Deep Sleep: average 4.5 mA
Battery charge current	Average: 140 mA Rated: 250 mA
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
Device + case + battery 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	170	0.64 – 0.66	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
Input voltage (Recommended Operating Conditions)	0		Supply voltage	V

Absolute maximum ratings

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