

FMT100 General description

[Main Page](#) > [Fast & Easy Trackers](#) > [FMT100](#) > [FMT100 Manual](#) > **FMT100 General description**

FMT100 is a tracking terminal with GNSS and GSM connectivity, which is able to collect device coordinates and transfer them via GSM network to server. This device is perfectly suitable for applications, which need location acquirement of remote objects.

□

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 FMT100 device is supplied to the customer in a cardboard box containing all the equipment that is necessary for operation. The package contains:

- Already implemented FMT100 device;
- Top and bottom device cover parts;
- Li-ion battery.

Basic characteristics

GSM / GPRS / GNSS features:

- Teltonika TM2500 multi-band module (GSM 850 / 900 / 1800 / 1900 MHz);
- GPRS class 12;
- SMS (text, data);
- Integrated GNSS receiver;
- Up to -165 dBm GNSS receiver sensitivity.

Hardware features:

- Built-in movement sensor;
- Built-in Bluetooth 4.0;
- Internal High Gain GNSS antenna;
- Internal High Gain GSM antenna;
- 128MB internal flash memory;
- 170 mAh Li-ion rechargeable 3.7 V battery.

Interface features:

- Power supply: 10 ÷ 30 V;
- USB port;
- 2 LEDs indicating device status.

Special features:

- Fast position fix;
- High Quality track even in high density urban canyon;
- Small case;
- High gain internal GNSS and GSM antennas;
- 2 LED status indication;
- Real-time tracking;
- Smart data acquisition based on:
 - Time;
 - Angle;
 - Distance;
 - Ignition or any other I/O event.
- Sending acquired data via GPRS;
- GPRS and SMS I/O events;
- Virtual odometer;
- Jamming detection;
- Configurable using Secured SMS Commands;
- Spy call;
- Overvoltage protection.

Description	Voltage	Duration
Normal operation	+10 ... +30 V	Unlimited
Protection turns on, device turns off	34 V	Unlimited
Maximum voltage	<70 V	Unlimited
Maximum voltage impulse	90 V	5 ms

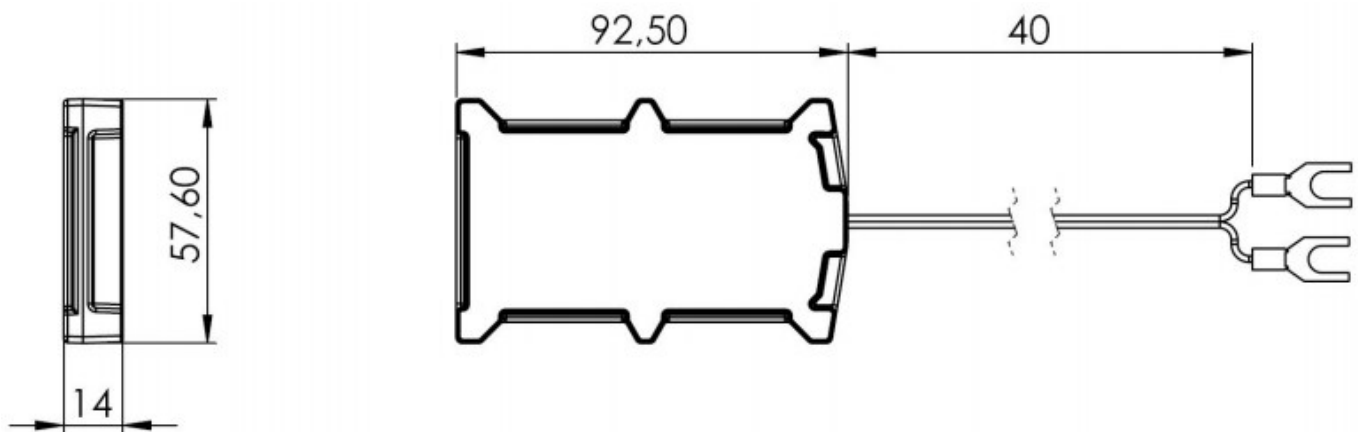
Technical features

Part name	Physical specification
Navigation indication	LED
Modem indication	LED
USB	Micro USB socket
GNSS	Internal GNSS antenna
GSM	Internal GSM antenna

Technical details

2 W max.	GPRS: average 6.5 mA
Current consumption at 12 V (Power supply 10...30 V DC)	Nominal: average 24.41 mA
	GNSS sleep: average 5.48 mA
	Deep Sleep: average 3.21 mA
	Online Deep Sleep: average 3.75 mA
	Ultra Deep Sleep: average 1.47 mA
Battery charge current	Average 120 mA
Rated current	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	3A, 125V
Power Cable + Device + case + battery weight	80 g

Dimension drawing (tolerance $\pm 2\text{mm}$):



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

Absolute maximum ratings

Characteristic description	Value			Unit
	Min.	Typ.	Max.	
Supply Voltage (Absolute Maximum Ratings)	-30		+30	V