

TMT250 General description

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TMT250 is a tracking terminal with GNSS and GSM connectivity, which is able to collect device coordinates and transfer them via GSM network to a server. This device is perfectly suitable for applications, which require the location acquirement of remote objects.

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Package contents

The TMT250 device is supplied to the customer in a cardboard box containing all the equipment that is necessary for operation. The package contains:

- TMT250 device;
- 3.8 V 800 mAh rechargeable Li-ion battery;
- USB magnetic cable.

Basic characteristics

GSM / GPRS / GNSS features:

- Teltonika [TM2500](#) quad band module (GSM 850 / 900 / 1800 / 1900 MHz);
- GPRS Multi-Slot class 12 (Up to 85.6 kbps);
- 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;
- 800 mAh Li-ion rechargeable 3.8 V battery.

Special features:

- Fast position fix;
- High Quality track even in high density urban canyon;
- Ultra small case;
- Ready for harsh environment;
- Easy to mount in limited access areas;
- Firmly fasten;
- LED status indication;
- Real time tracking;
- Smart data acquisition based on:
 - Time;
 - Distance;
 - Angle;
 - Speed;
 - Movement or any other I/O event;
- Sending acquired data via GPRS;
- GPRS and SMS I/O events;

Technical features

Part name	Physical specification
Status indication	RGB LED
USB	Magnetic USB cable
USB	Magnetic USB socket
Button	2 configurable buttons

Technical details	
2 W max.	Data sending/gathering every 5 sec. in performance mode:
Current consumption at 4.2 V	103.40 mA
	Data sending/gathering every 30 sec. in performance mode::
	64.72 mA
	Data sending/gathering every 60 sec. In Low Power Mode on movement: 59.00 mA
	Data sending/gathering every 120 sec. In Low Power Mode on movement: 34.94 mA
	Data sending/gathering every 60 sec. In Low Power Mode on stop: 20.55 mA
	Data sending/gathering every 120 sec. In Low Power Mode on stop: 15.10 mA
	GNSS sleep: average 12.96
	Deep Sleep: average 3.59 mA
	Online Deep Sleep: average 4.24 mA
	Ultra Deep Sleep: average 1.70 mA
Battery charge current	Average 425 mA
Operating temperature	Charging 0..+45 °C
	Discharging -20..+58
Storage temperature	-20..+45 °C
Storage relative humidity	5..95% (no condensation)
Device + case + battery weight	40 g
Dimensions	44 x 43 x 20 mm (L x W x H)

TMT250 working time

GNSS/GPRS reporting Working mode Movement TMT250 working time

0 min	Ultra-Deep Sleep	No	400 hours
0 min	Deep Sleep	No	190 hours
0 min	Online Deep Sleep	No	160 hours
0 min	GNSS Sleep	No	50 hours
5 sec	Performance mode	Yes	6 hours
10 sec	Performance mode	Yes	8 hours
1 min	Performance mode	Yes	10 hours
1 min	Low power mode	No	32 hours
2 min	Low power mode	No	44 hours
10 min	Low power mode	No	85 hours
1 min	Low power mode	Yes	10 hours
2 min	Low power mode	Yes	18 hours
10 min	Low power mode	No	36 hours

Room temperature: 20-25°C

Good GSM signal level

Good connection with a server

Testing conditions

Number of visible satellites at least: 15

Number of used satellites at least: 10

Firmware: 55.02.01 Rev:00

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	3.8	800	3.04	0 to +45	-20 to +58	-20 to +45 for >3 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.

CAUTION: INCREASED RISK OF SHORTING MAGNETIC CABLES - THE MAGNETIC

- ⊗ CHARGING CABLES POSE OF COMING TOGETHER WHEN CHARGING MULTIPLE DEVICES WITHIN CLOSE PROXIMITY.

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			
	Min.	Typ.	Max.	Unit
Supply Voltage from USB:				
Supply Voltage (Recommended Operating Conditions)	+4.5	+5	+5.5	V