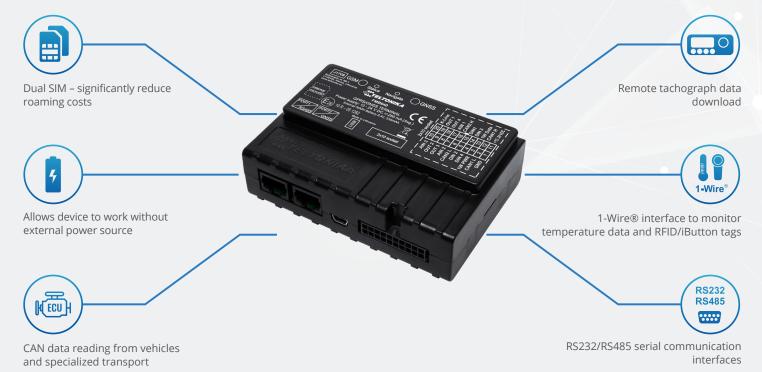# FMB640

LEADING GNSS/GSM/BLUETOOTH TERMINAL FOR PROFESSIONAL APPLICATIONS

Teltonika FMB640 is GNSS, GSM and Bluetooth terminal for PROFESSIONAL applications. FMB640 is designed for complex solutions, where one device can do multiple tasks. FMB640 features like FMS CAN data (J1939), fuel CAN data (J1708), tachograph live data (K-line), remote tachograph file download, various third party RS232 or RS485 devices support and Dual-SIM will maximize your fleet efficiency. Terminal is suitable for applications like international logistics, refrigerated transport, agriculture, construction & mining, security & emergency services and even more. Device supports temperature/humidity sensors, hands-free, firmware and configuration update via Bluetooth.

Dual SIM – significantly reduce roaming costs

Allows device to work without external power source

CAN data reading from vehicles and specialized transport

Remote tachograph data download

1-Wire® interface to monitor temperature data and RFID/iButton tags

RS232/RS485 serial communication interfaces

USE CASES

CONSTRUCTION AND MINING

HEAVY DUTY TRANSPORT

PUBLIC SAFETY SERVICES

REFRIGERATED TRANSPORT

INTERNATIONAL LOGISTICS

AGRICULTURE TRANSPORT

Port 1 Port 2

Mini-USB 2x10 socket

GNSS antenna socket GSM antenna socket

Navigate LED Status LED J1708 port

Module

Name	Teltonika TM2500
Technology	GSM/GPRS/GNSS/BLUETOOTH

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS
Receiver	33/99 acquisition channels
Tracking sensitivity	-165 dBM
Accuracy	< 3 m
Hot start	< 1 s
Warm start	< 25 s
Cold start	< 35 s

Cellular

Technology	GSM/GPRS
2G	Quad-band 850/900/1800/1900 MHz
GPRS	GPRS Mobile Station Class B
Data transfer	GPRS Multi-Slot Class 12 (up to 240 kbps)
Data support	SMS (text/data)

Power

Input voltage range	10 - 30 V DC with overvoltage protection
Internal Back-up battery	550 mAh Ni-Mh, 8.4 V battery

Physical specification

Dimensions	104.1 x 76.8 x 31.5 mm (L x W x H)
Weight	197 g

Bluetooth

Specification	4.0 + LE
Supported peripherals	Headset

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 storage temperature	-20 °C to +45°C

Interface

Digital Inputs	4
Digital Outputs	4
Analog Inputs	4
1-Wire	1
RS232	2
RS485	1
CAN J1939	2
J1708	1
K-line	1
GNSS antenna	External High Gain
GSM antenna	External High Gain
USB	2.0 Mini-USB
LED indication	2 status LED lights
SIM	2x SIM Card (Dual-SIM)
Memory	2 MB internal flash memory and external Micro SD card

Features

Sensors	Accelerometer
Scenarios	Green/Eco Driving, Over Speeding detection, Jamming detection, Excessive Idling detection, Towing detection, Crash detection, Immobilizer, iButton Read Notification, Auto Geofencing, Manual Geofencing, Trip detection, Odometer, Fuel counter, GNSS Unplug Detection, DDD download and Tacho online data, Offline tracking, Voice call
Supported peripherals	RFID RS232, RFID 1-Wire, iButton 1-Wire, Temperature 1-Wire, Continental tire pressure measurement sensor
Sleep modes	GPS Sleep, Online Deep Sleep, Deep Sleep
Configuration and firmware update	FOTA Web, FOTA, Teltonika Configurator
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, CAN FMS (J1939, J1708), Ultrasonic level sensor
Ignition detection	Digital Input, Accelerometer, External Power Voltage
RS232 Modes	Log Mode, NMEA, LLS, LCD, RFID HID/MF7, Garmin FMI, TCP ASCII/Binary, TCP ASCII/Binary (Buffered), Rec to LCD, Atol Tachograph, UL202-2 Fuel Sensor, TSM232 Sattelite backup, Carrier Freezer
RS485 Modes	Silent, Log Mode, NMEA, LLS, TCP ASCII/Binary, TCP ASCII/Binary (Buffered)

Certification & Approvals

Regulatory	CE/RED, E-Mark, EAC, RoHS, REACH