

FMU125

ADVANCED 3G TERMINAL WITH GNSS AND 3G/GSM CONNECTIVITY, RS485/RS232 INTERFACES AND BACKUP BATTERY

FMU125 is small and professional real-time tracking terminal with GNSS and 3G/GSM connectivity and backup battery. Device equipped with GNSS/Bluetooth and 3G modules, internal GNSS, 3G antennas. FMU125 features RS485/RS232 data interface, which gives ability to connect various third-party external devices. It is perfectly suitable for applications where location acquirement of remote objects is needed: fleet management, car rental companies, taxi companies, public transport, logistics companies, personal cars and so on.



Worldwide 3G network coverage



Double network reliability and multiple network selection



Bluetooth for external devices and Low Energy sensors



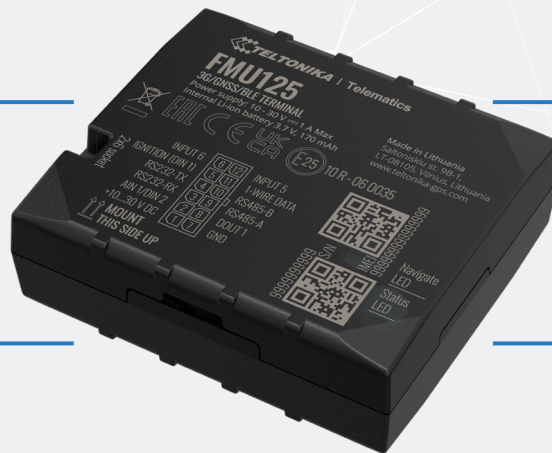
RS232/RS485 serial communication interfaces



CAN data reading from vehicles and specialized transport



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



USE CASES



LIGHT VEHICLES



HEAVY DUTY TRANSPORT



TRAILER TRACKING



REFRIGERATED TRANSPORT



INTERNATIONAL LOGISTICS



CAR SHARING



Module

Name	Quectel UG96, Teltonika TM2500
Technology	3G(UMTS/HSPA)/2G(GSM/GPRS)/GNSS/BLUETOOTH

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS
Protocol compatible	NMEA, GGA, GGL, GSA, GSV, RMC, VTG
Receiver	Tracking: 33/99 acquisition channels
Tracking sensitivity	-110 dBm
Position Accuracy	< 2.5 CEP
Velocity accuracy	< 0.1m/s (within +/- 15% error)
Hot start	< 1 s
Warm start	< 25 s
Cold start	< 35 s

Cellular

Technology	UMTS/HSPA
2G bands	UG96: B5/B8/B3/B2
3G bands	UG96: B6/B5/B8/B2/B1
Data transfer	UG96: HSUPA: Max. 5.76Mbps UMTS: Max. 384Kbps (DL)/Max.384Kbps (UL) GPRS: Max. 107Kbps (DL)/Max.85.6Kbps (UL)
Data support	SMS (text/data)

Power

Input voltage range	10 - 30 V DC with overvoltage protection
Internal Back-up battery	170 mAh Li-Ion, 3.7 V battery (0.63 Wh)

Power Consumption

Ultra Deep Sleep	At 12V < 6mA
Deep Sleep	At 12V < 6.5mA
Online Deep Sleep	At 12V < 7mA
GPS Sleep	At 12V < 12mA
Nominal (with no load)	At 12V < 38mA

Bluetooth

Specification	4.0 + LE
Supported peripherals	Temperature and Humidity sensor, OBDII dongle, Inateck Barcode Scanner, Universal BLE sensors support

Physical specification

Dimensions	65 x 56.6 x 20.6 mm (L x W x H)
Weight	55 g

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 charge temperature	0 °C to +45 °C
Battery discharge temperature	-20 °C to +60 °C
Battery storage temperature	-20 °C to +45 °C for 1 month -20 °C to +35 °C for 6 months

Interface

Digital Inputs	2
Digital Outputs	1
Analog Inputs	1
CAN Adapter Inputs	1
1-Wire	1
RS232	1
RS485	1
GNSS antenna	Internal High Gain
Cellular antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	2x SIM Card (Dual-SIM)
Memory	128MB internal flash memory

Features

Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding detection, Jamming detection, GNSS Fuel Counter, DOUT Control Via Call, Excessive Idling detection, Immobilizer, iButton Read Notification, Unplug detection, Towing detection, Crash detection, Auto Geofence, Manual Geofence, Trip

Sleep modes GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep

Configuration and firmware update FOTA Web, FOTA, Teltonika Configurator (USB, Bluetooth), FMBT mobile application (Configuration)

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, OBDII dongle

Ignition detection Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII dongle)

RS232 Modes Log Mode, NMEA, LLS, LCD, RFID HID/MF7, Garmin FMI, TCP ASCII/Binary, Magnetic card reader

RS485 Modes Log Mode, NMEA, LLS, TCP ASCII/Binary

Certification & Approvals

Regulatory CE/RED (Quectel UG96), E-Mark (Quectel UG96), EAC, RoHS, REACH

