FMC13A

ADVANCED LTE TERMINAL WITH FLEXIBLE INPUTS CONFIGURATION

4G | 3 DIN | 3 DOUT

TELTONIKA | Telematics

FMC13A
LTE/GNSS/BLE TERMINAL
Power supply: 10 - 30 V ⎓ 2 A Max
Internal Li-ion battery 3.7 V, 170 mAh
Made in Lithuania
Saltoniskiu st. 9B-1, LT-08105, Vilnius, Lithuania
www.teltonika-gps.com

S/N
9999999999

IMEI
99999999999999

INPUT 6	6	12	INPUT 5
IGNITION (DIN 1)	5	11	1-WIRE DATA
DIN 2-N/AIN 1	4	10	1-WIRE POWER
DIN 3/AIN 2	3	9	DOUT 2
DOUT 3	2	8	DOUT 1
+10...30 V DC	1	7	GND

2x6 socket

MOUNT THIS SIDE UP

Navigate LED

Status LED

FLEXIBLE DIN/AIN
Configurarable DIN/AIN for flexible remote monitoring and control

4G NETWORK
Global-band LTE CAT 1 Module, which ensure reliable connection with a fallback to 3G network.

NEGATIVE INPUT
Allows easier installation of accessories

IMPULSE INPUTS
Suitable for fuel flow meters data reading

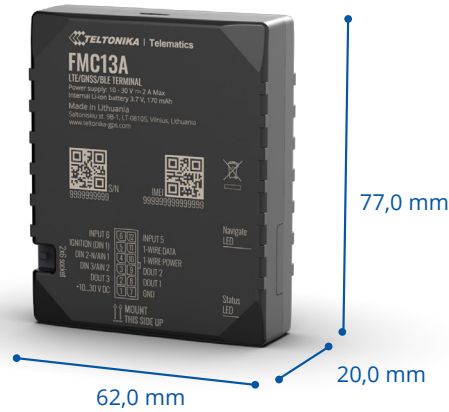LIGHT VEHICLES | HEAVY DUTY TRANSPORT | TRAILER TRACKING | REFRIGERATED TRANSPORT | INTERNATIONAL LOGISTICS

FMC13A is small and professional real-time tracking terminal with GNSS and LTE CAT1 connectivity and backup battery. Device equipped with GNSS/Bluetooth and LTE CAT1 module, internal GNSS and LTE antennas, configurable digital, analogue inputs and digital outputs, negative input, impulse inputs. 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.

77,0 mm

20,0 mm

62,0 mm

Module

Name	FMC13A-QBIB0: Quectel EG91-NA with Teltonika TM2500
Technology	LTE (CAT1) / UMTS / GNSS / Bluetooth

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver	Tracking: 33
Tracking sensitivity	-165 dBM
Position Accuracy	< 2.5 CEP
Velocity Accuracy	< 0.1 m/s (within +/- 15% error)
Hot start	< 1 s
Warm start	< 25 s
Cold start	< 35 s

Cellular

Technology	LTE CAT1, UMTS
3G bands	WCDMA: B2/B4/B5
4G bands	LTE FDD: B2/B4/B5/B12/B13
Data transfer	LTE: LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) UMTS: WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)
3 A, 125 V	Class 4 for GSM850/900: 23±2dBm Class 1 for GSM1800/1900: 20±2dBm Class 3 for LTE-TDD: 23±2.7dBm Class 3 for LTE-FDD: 23±2.7dBm
Data support	SMS (text/data)

Power

Input voltage range	10 - 30 V DC with overvoltage protection
Internal Back-up battery	170 mAh Li-Ion battery 3.7 V (0.63 Wh)
Internal fuse	3 A, 125 V
Power consumption	At 12V < 3 mA (Ultra Deep Sleep) At 12V < 5 mA (Deep Sleep) At 12V < 16 mA (Online Deep Sleep) At 12V < 18 mA (GPS Sleep) At 12V < 33 mA (nominal with no load) At 12V < 2A Max. (with full Load / Peak)

Bluetooth

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

Physical specification

Dimensions	77 x 62 x 20 mm (L x W x H)

Operating environment

Operating temperature (without battery)	-20 °C to +85°C
Storage temperature (without battery)	-20 °C to +85 °C
Operating temperature (with battery)	-20 °C to +40 °C
Storage temperature (with battery)	-20 °C to +45 °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	3
Negative Inputs	1 (Digital Input 2)
Impulse Inputs	2 (Digital Input 1, Digital Input 2)
Digital Outputs	3
Analog Inputs	2
CAN Adapter Inputs	1
1-Wire	1
GNSS antenna	Internal High Gain
Cellular antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	Micro-SIM + eSIM
Memory	128MB internal flash memory

Features

Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding 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), LV-CAN200, ALL-CAN300, CAN-CONTROL, OBDII dongle
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII dongle)

Certification & Approvals *

Regulatory	FCC, PTCRB, IC, AT&T approval

* in progress