



# FMC130

Advanced LTE terminal with flexible inputs configuration



## 4G CAT 1

Reliable LTE CAT connectivity

## BLUETOOTH CONNECTIVITY

For low energy sensors and beacons

## CONFIGURABLE DIN/AIN

For flexible remote monitoring and control

## 3 AXIS ACCELEROMETER

For driver monitoring and crash detection



**Light vehicles**



**Heavy duty transport**



**Trailer Tracking**



**Refrigerated transport**

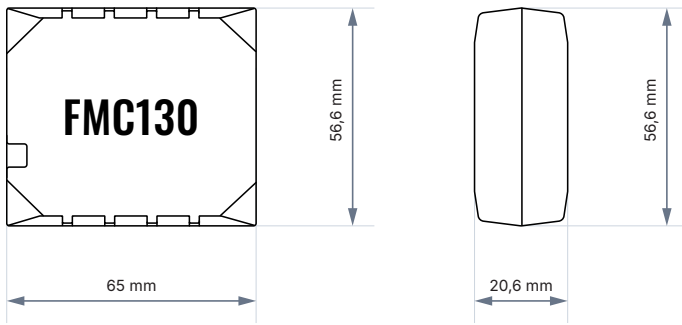


**International logistics**



**Car Sharing**

FMC130-MCIB0 is small and professional real-time tracking terminal with GNSS and LTE/GSM connectivity and backup battery. Device equipped with GNSS/Bluetooth and LTE modules, internal GNSS, 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.



### Module

Name	MeiG SLM320-E, MeiG SLM320-LA, Quectel EC21-EC, Quectel EC21-AU, Quectel EC21-J, Quectel EC21-KL, Teltonika TM2500
Technology	LTE(Cat1)/2G(GSM/GPRS)/GNSS/BLUETOOTH
GNSS	3 A, 125 V
GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver	Tracking: 33
Tracking sensitivity	-165 dBm
Accuracy	< 3 m
Hot start	< 1 s
Warm start	< 25 s
Cold start	< 35 s

### Cellular

Technology	LTE Cat 1, GSM
2G bands (SLM320)	FMC130-ME1: GSM: B2/B3/B5/B8 FMC130-ME3: GSM: B2/B3/B5/B8 FMC130-MCIB0: GSM: B2/B3/B5/B8
2G bands (EC21)	EC21-EC: GSM: B3/B8 EC21-AU: GSM: B2/B3/B5/B8
4G bands (SLM320)	FMC130-ME1: LTE FDD: B1/B3/B5/B7/B8/B20 LTE-TDD: B38/B40/B41 FMC130-ME3: LTE FDD: B1/B3/B7/B8/B20/B28 LTE-TDD: B38/B40/B41 FMC130-MCIB0: LTE FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28 LTE-TDD: B40
4G bands (EC21)	EC21-EC: LTE FDD: B1/B3/B7/B8/B20/B28A EC21-AU: LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28/ LTE TDD: B40 EC21-J: LTE FDD: B1/B3/B8/B18/B19/B26 EC21-KL: LTE FDD: B1/B3/B8/B18/B19/B26

Data transfer (SLM320)	LTE: LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) LTE TDD: Max 8Mbps (DL)/Max 2Mbps (UL) GSM: GPRS: Max 85.6Kbps (DL)/Max 85.6Kbps (UL)
Data transfer (EC21)	LTE: LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) LTE TDD: Max 8.96Mbps (DL)/Max 3.1Mbps (UL) GSM: GPRS: Max 107Kbps (DL)/Max 85.6Kbps (UL)
Transmit power	Class 4 for GSM850/900: 33±2dBm Class 1 for GSM1800/1900: 30±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
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 < 250 mA Max. (with full Load / Peak)	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 < 250 mA 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	65 × 56 × 20,6 mm (L x W x H)
Weight	55 g
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 LTE High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	Micro-SIM or eSIM
Memory	128MB internal flash memory

### 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

### 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, Ground Sense
Sleep modes	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep
Configuration and firmware update	FOTA Web, FOTA, Teltonika Configurator (USB, Bluetooth),
SMS	Configuration, Events, DOUT control, Debug
GPRS commands	Configuration, DOUT control, Debug
Time Synchronization	GPS, NITZ, NTP
Fuel monitoring	LLS (Analog), LV-CAN200, ALL-CAN300, OBDII dongle, CAN-CONTROL, OBDII dongle
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII dongle)