





**Product**

Model name FMC650-MBX50

**Module**

Name MeiG SLM320-PE2C

Technology LTE(Cat1)/ 2G(GSM/GPRS)

**GNSS**

Module Name Airoha AG3335MB  
 GNSS GPS, GLONASS, GALILEO, BEIDOU, QZSS  
 Receiver L1 and L5 dual-band GNSS receiver  
 Tracking sensitivity -165 dBm  
 Position accuracy < 2.5 CEP  
 Hot start 1 s  
 Warm start < 25 s  
 Cold start < 32 s

**Cellular**

Technology LTE Cat 1, GSM  
 2G bands B2/B3/B5/B8  
 4G bands LTE-FDD:B1/B3/B7/B8/B20/B28  
 LTE-TDD:B38/B40/B41  
 Data transfer LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) LTE TDD Max 8Mbps (DL)/Max 2Mbps (UL) GPRS: Max 85.6Kbps (DL)/Max 85.6Kbps (UL)  
 Data support SMS (text/data)

**Power**

Input voltage range 8 - 32 V DC with overvoltage (compatible with pulse 5a and pulse 5b) and reverse polarity protection  
 Internal Back-up battery 550 mAh Ni-Mh, 8,4 V battery  
 2 W max. Current consumption at 12 V  
 At 12V < 4 mA (Deep Sleep)  
 At 12V < 11 mA (Online Deep Sleep)  
 At 12V < 32 mA (GPS Sleep)  
 At 12V < 45 mA (nominal with no load)  
 At 12V < 0.25 A Max. (with full Load / Peak)

2 W max.	At 24V < 2,9 mA (Deep Sleep)
Current consumption at 24 V	At 24V < 7 mA (Online Deep Sleep)
	At 24V < 17 mA (GPS Sleep)
	At 24V < 35 mA (nominal with no load)

### BLUETOOTH® technology

Name	Blue NRG232
Specification	5.0 + LE
Supported peripherals	Temperature and Humidity sensor, Universal BLUETOOTH® LE sensors support

### Physical specification

Dimension	104,1 x 76,8 x 31,5 mm (L x W x H)
Weight	197 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 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 (L1+L5)
GSM antenna	External High Gain
USB	2.0 Mini-USB — device can be powered by USB for easier device configuration
LED indication	2 status LED lights
SIM	2x SIM Card (Dual-SIM) or 1x eSIM
Memory	16 MB internal flash memory and external Micro SD card up to 32GB
Switchable CAN terminators	Supported on CAN1 and CAN2 lines

### Features

Movement detection	Accelerometer
Scenarios	Green/Eco Driving, Over Speeding detection, Jamming detection, Excessive Idling detection, Towing detection, Crash detection, Immobilizer, iButton Read Notification

Functionalities	Auto Geofencing, Manual Geofencing, Trip detection, Odometer, DDD download and Tacho online data, Offline tracking
Supported peripherals	Garmin, RFID RS232, RFID 1-Wire, iButton 1-Wire, Temperature 1-Wire, LV-CAN200, ALL-CAN300, CAN FMS (J1939, J1708), K-line data, Continental tire pressure measurement sensor, Iridium SBD (Iridium Edge/TSM232), Carrier freezer, Log Mode, NMEA, TCP ASCII/Binary, Temperature and humidity sensor, Universal BLE sensors support
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, CAN FMS, Ultrasonic level sensor
Ignition detection	Digital Input, Accelerometer, External Power Voltage
RS485 input voltage range on A or B pin (common-mode voltage)	-7V to +12V

### Certification & Approvals

Regulatory	CE-RED, UKCA, E-mark, RCM, Pulse 5a, SIRIM QAS, ICASA, CITC
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