

Item no.: FMC230 FMC230 - Waterproof LTE Cat. 1 Terminal with Flexible Inputs Configuration





Product Description

FMC230 - Waterproof LTE Cat. 1 Terminal with Flexible Inputs Configuration

FMC230 is water and dust resistant real-time tracking terminal with 4G (LTE Cat. 1) network coverage including 2G (GSM) fallback compatibility. It comes equipped with internal GNSS, LTE antennas, configurable digital, analog, negative and impulse inputs, three DOUT outputs, Bluetooth connectivity, and backup battery. The device has an integrated possibility to enable Impulse Input for precise fuel flow meter data reading. Impulse based fuel usage monitoring is much more accurate than a different type of fuel metering sensors and it makes the FMC230 a perfect solution for high fuel usage machines like cranes, construction vehicles, mining machines, agriculture equipment. Additionally, FMC230 device has a IP67 certified casing which provides a total protection against dust and resistance to water in a depth of up to 1 meter for at least 30 minutes. As a result, FMC230 can be used in agriculture, construction and mining or any other fleet where harsh tracking conditions exists.

Module

- Name: FMC230- MBIB0: MeiG SLM320-E with Teltonika TM2500; FMC230- MCIB0: MeiG SLM320-LA with Teltonika TM2500
- Technology: LTE (Cat. 1)/2G (GSM/GPRS)/GNSS/Bluetooth

GNSS

- GNSS: GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS

- GNS5: GFS, GLONDO, GALLEO, CLEEC, J.
 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 Cat. 1, GSM
 2G bands: FMC230-MBIB0: GSM: B2/B3/B5/B8; FMC230-MCIB0: GSM: B2/B3/B5/B8
 4G bands: FMC230-MBIB0: LTE FDD: B1/B3/B7/B8/B20/B28 LTE-TDD: B38/B40/B41; FMC230-MCIB0: LTE FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28 LTE-TDD: B40
 Data transfer: LTE: LTE FDD: Max. 10 Mbps (DL)/max. 5 Mbps (UL); LTE TDD: Max. 8 Mbps (DL)/max. 2 Mbps (UL): GSM: GPRS: Max. 85.6 Kbps (DL)/max. 85.6 Kbps (UL)
- 3 A, 125 V: Class 4 for GSM850/900: 23 ± 2 dBm; Class 1 for GSM1800/1900: 20 ± 2 dBm; Class 3 for LTE-TDD: 23 ± 2.7 dBm; Class 3 for LTE-FDD: 23 ± 2.7 dBm 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
- Prover consumption: At 12 V < 3 mA (Ultra Deep Sleep); At 12 V < 5 mA (Deep Sleep); At 12 V < 16 mA (Online Deep Sleep); At 12 V < 18 mA (GPS Sleep); At 12 V < 33 mA (nominal with no load); At 12 V < 2 A max. (with full load/peak)

Specification: 4.0 + LE
Supported peripherals: Temperature and humidity sensor, OBDII dongle, Inateck barcode scanner, universal BLE sensors support

Physical specification

• Dimensions: 70,5 x 67,0 x 25,6 mm (L x W x H); 85,0 x 67,0 x 25,6 mm (L x W x H, length with connector socket)

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: IP67
 Battery charge temperature: -20°C to +45°C
 Battery discharge temperature: -20°C to +45°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

- 1-wire: 1
 GNSS antenna: Internal high gain

- GNSS anterna: Internal high gain
 Cellular antenna: Internal high gain
 USB: 2.0 Micro-USB
 LED indication: 2x status LED lights
 SIM: Micro-SIM + eSIM
 Memory: 128 MB internal Flash memory

Certification & Approvals*

• Regulatory: CE-RED, E-mark, RCM, Anatel, Reach, RoHS, TRA, CITC

* in progress

Specifications



