FMC150

GNSS/LTE CAT 1/GSM/TRACKER WITH INTEGRATED CAN ADAPTER AND INTERNAL GNSS/GSM ANTENNAS AND INTERNAL BATTERY

4G CAT 1   4.0   CAN

4G CAT 1

Reliable 4G (LTE Cat 1) connection with fallback 2G (GSM) network

CAN DATA FOR EV VEHICLES

CAN module allows data reading from electric vehicles (EV)

INTEGRATED CAN DATA PROCESSOR

Allows to monitor real fuel consumption and level, full mileage, engine temperature and more

NEGATIVE INPUT

Allows easier installation of accessories

ELECTRIC VEHICLES   LIGHT VEHICLES   TRUCKS   BUSES

FMC150 is an ADVANCED 4G CAT 1/GSM/GNSS/BLUETOOTH®LE tracker with integrated CAN data processor. It is compact 2 in 1 solution: GPS tracker and CAN adapter inside! Device allows to read CAN data from a wide range of various vehicles, including light & electric vehicles, trucks and buses. With the current software version FMC150 can be used in advanced applications as logistics, delivery services, utility transport, car sharing and more. For now, one SW option is available to fulfil your business demands:

A default FMC150 software version with LV-CAN parameters, including fuel level, consumption, odometer, CAN speed, pedal position, Supported vehicle types: light vehicles, electric vehicles, trucks and buses.

56,6 mm

20,6 mm

65,0 mm

Module

Name	FMC150-QJIB0: Quectel EG915U-EU with Teltonika TM2500
	FMC150-QKIB0: Quectel EG915U-LA with Teltonika TM2500
Technology	LTE Cat 1/GSM/GPRS/GNSS/BLUETOOTH® LE

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver	Tracking: 33
Tracking sensitivity	-165 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	LTE CAT 1, GSM
2G bands	FMC150-QJIB0: GSM: B2/B3/B5/B8
	FMC150-QKIB0: GSM: B2/B3/B5/B8
4G bands	FMC150-QJIB0: LTE FDD: B1/B3/B7/B8/B20/B28
	FMC150-QKIB0: LTE FDD: B2/B3/B4/B5/B7/B8/B28/ B66
Data transfer	GPRS Multi-Slot Class 12 (up to 240 kbps), GPRS Mobile Station Class B
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)

BLUETOOTH® technology

Specification	4.0 + LE
Supported periprherials	Temperature and Humidity sensor, Headset, OBDII dongle, Inateck Barcode Scanner, Universal Bluetooth® LE sensors support

Physical specification

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

Interface

Digital Inputs	FMC150-QJIB0: 3 FMC150-QKIB0: 2
Negative Inputs	FMC150-QJIB0: 1 (Digital Input 2) FMC150-QKIB0: -
Impulse Inputs	FMC150-QJIB0: 2 (Digital Input 1, Digital Input 2) FMC150-QKIB0: 1 (Digital Input 1)
Digital Outputs	FMC150-QJIBO: 2 FMC150-QKIBO: 3
Analog Inputs	FMC150-QJIB0: 2 FMC150-QKIB0: 1
CAN interfaces	2
1-Wire	1 (1-Wire data)
GNSS antenna	Internal High Gain
GSM antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	3 status LED lights
SIM	Micro-SIM or eSIM
Memory	128MB internal flash memory

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

Features

CAN Data	Fuel Level (Dashboard), Total fuel consumption, Vehicle speed (wheel), Vehicle driven distance, Engine speed (RPM), Accelerator pedal position
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® wireless technology), FMBT mobile application (Configuration)
SMS	Configuration, Events, DOUT control, Debug
GPRS commands	Configuration, DOUT control, Debug
Time Synchronization	GPS, NITZ, NTP
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM

Certification & Approvals *

Regulatory	CE/RED, E-Mark, RCM, RoHS, REACH

* in progress