

# FMC920

SMALL AND SMART GPS TRACKER WITH A  
4G CAT 1 CONNECTIVITY



## 4G CAT 1

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

## BLUETOOTH® TECHNOLOGY

Bluetooth® LE for external devices and sensors

## CRASH DETECTION

Crash detection functionality working according accelerometer data

## BACKUP BATTERY

Allows device to work without external power source



LIGHT  
VEHICLES



MOTORBIKES



INSURANCE  
TELEMATICS



COURIER  
DELIVERY  
SERVICES



RENTAL AND  
LEASING

The FMC920 is a small and smart tracker with Bluetooth® connectivity, internal High Gain GNSS and GSM antennas and an integrated backup battery. The 4G Cat 1 technology offers much higher bandwidth, lower latency and improved spectrum efficiency.

The model is compact, reliable, accurate and enduring. All the interfaces it has are more than enough for basic tracking. Digital Input can be used for ignition, door or alarm button status monitoring, while vehicle remote immobilizing may be achieved by using the Digital Output of the device. At the same time, Analog Input extends device usage scenarios with temperature, humidity, liquid level monitoring and many more.

It can be perfectly adapted to any fleet and any transportation. The far-reaching experience of the FMC920 predecessor shows that it is a perfect choice for basic track & trace and fleet management.



#### Module

Name	FMC920-QJIB0: Quectel EG915U-EU with Teltonika TM2500 FMC920-QKIB0: Quectel EG915U-LA with Teltonika TM2500
Technology	LTE Cat 1/GSM/GPRS/GNSS/BLUETOOTH® LE

#### GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
Receiver	33 channel
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	FMC920-QJIB0: GSM: B2/B3/B5/B8 FMC920-QKIB0: GSM: B2/B3/B5/B8
4G bands	FMC920-QJIB0: LTE FDD: B1/B3/B7/B8/B20/B28 FMC920-QKIB0: LTE FDD: B2/B3/B4/B5/B7/B8/B28/ B66
Data transfer	LTE: LTE FDD : Max 10Mbps (DL)/Max 5Mbps (UL) LTE TDD: Max 85.6 Mbps (DL)/Max 85.6 Mbps (UL) GSM: GPRS: Max 85.6Kbps (DL)/ Max 85.6Kbps (UL)
Data support	SMS (text/data)

#### Power

Input voltage range	10 - 30 V DC with overvoltage protection
Back-up battery	170 mAh Li-Ion battery (0.63 Wh)
Power consumption	At 12V < 2 mA (Ultra Deep Sleep) At 12V < 3 mA (Deep Sleep) At 12V < 8 mA (Online Sleep) At 12V < 12 mA (GNSS Sleep) At 12V < 28 mA (Nominal)

**Physical specification**

Dimensions	79 x 43 x 12 mm (L x W x H)
Weight	54 g

**Interface**

Digital Inputs	1
Digital Outputs	1
Analog Inputs	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
Memory	128MB internal flash memory

**Operating environment**

Operating temperature (with battery)	-20 °C to +40 °C
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	IP54
Battery charge temperature	0 °C to +45 °C
Battery discharge temperature	-20 °C to +60 °C
Battery storage temperature	-20 °C to +35 °C for 1 month -20 °C to +30 °C for 6 months

**Features**

Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding detection, GNSS Fuel Counter, DOUT Control Via Call, Excessive Idling detection, 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)
SMS	Configuration, Events, DOUT control, Debug
GPRS commands	Configuration, DOUT control, Debug
Time Synchronization	GPS, NITZ, NTP
Fuel monitoring	LLS (Analog), OBDII dongle
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (OBDII dongle)

**Certification & Approvals**

Regulatory	FMC920-QJIB0: CE/RED, CITC, E-Mark, RCM, REACH, RoHS, TRA, SDPPI (POSTEL), SIRIM QAS, TRA FMC920-QKIB0: Anatel, REACH, RoHS
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