

# MINIMUS 4G DATA SHEET



## Minimus 4G

COMPACT GPS TRACKER CAT1/4G/GNSS/BLUETOOTH

Model: FMC920-QJIB0 Part Number: 52-1173

### KEY FEATURES

- **4G Cat 1**  
Reliable 4G (LTE Cat 1) connectivity.
- **Bluetooth Connectivity**  
For low energy sensors and beacons.
- **Crash Detection**  
Crash detection functionality working according to accelerometer data.
- **Backup Battery**  
Allows the device to work without an external power source.

The Minimus 4G 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. All of that brings unquestionable value to numerous market segments and societies' budgets and the global economy overall. It can be perfectly adapted to any fleet and any transportation. The far-reaching experience of the Minimus 4G predecessor shows that it is a perfect choice for basic track & trace and fleet management.



## Dimensions



## Specification

FleetMotus Minimus Tracking Device		Part Number: 52-1173
Product	Model	FMC-920-QJIB0
	Technology	LTE Cat1/GSM/GPRS/GNSS/BLUETOOTH® LE
GNSS	GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
	Receiver	33 channel
	Tracking sensitivity	-165 dBm
	Position accuracy	< 3.0 m
	Hot start	1 s
	Warm start	< 25 s
	Cold start	< 35 s
Cellular	Technology	LTE Cat 1, GSM
	2G bands	B2/B3/B5/B8
	4G bands	LTE-FDD:B1/B3/B7/B8/B20/B28
	Data transfer	LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL)
		LTE TDD: Max 85.6Mbps (DL)/Max 85.6Mbps (UL)
		GPRS: Max 85.6Kbps (DL)/Max 85.6Kbps (UL)
	Data support	SMS (text/data)
Power	Input voltage range	10 - 32 V DC with overvoltage protection
	Back-up battery	170 mAh Li-Ion, 3.7 V battery (0.63 Wh)
	Power consumption	At 12V < 2 mA (Ultra Deep Sleep)
		At 12V < 3 mA (Deep Sleep)
		At 12V < 8 mA (Online Deep Sleep)
		At 12V < 12 mA (GNSS Sleep)
		At 12V < 28 mA (Nominal )

## Specification continued

<b>Bluetooth Technology</b>	Specification	4.0 + LE
	Supported peripherals	EYE beacon sensor, OBDII dongle, Inateck Barcode Scanner,
		Universal BLUETOOTH® LE sensors support
<b>Physical Specification</b>	Dimensions	79 x 43 x 12 mm (L x W x H)
	Weight	54 g
<b>Operating environment</b>	Operating temperature	-20 °C to +40 °C
	(with battery)	
	Operating temperature	-40 °C to +85 °C
	(without battery)	
	Storage temperature	-40 °C to +85 °C
	(without battery)	
	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
<b>Interface</b>	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	128 MB internal flash memory
<b>Features</b>	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	GNSS, NITZ, NTP
	Fuel monitoring	LLS (Analog), OBDII dongle
	Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM
		(CAN adapters, OBDII dongle)
	Certification & Approvals	CE-RED, UKCA, E-mark, RCM, RCM, REACH, RoHS, TRA, SDPPI (POSTEL)
		SIRIM QAS, TRA