Product Specifications: FMB003

Features		
	Installation	Easy, simple, plug-and-play installation that takes seconds, just plug the tracker into the OBD port and you are good to go!
	Battery	Contains an internal built-in backup battery in case the tracker is removed from the OBD port
	Portal	Real time tracking supported by our own tracking platform
	CAN data	Measure all sorts of CAN data such as fuel consumption or coolant temperature
	Fault code diagnostics	Know when your vehicle needs repair with fault code diagnostics
	Crash detection	Using the inbuilt accelerometer, track your vehicle and be alerted in the event of a crash
	Eco-driving	Monitor how your efficiency with Eco-driving analysis, by measuring acceleration, braking and cornering
	Speeding detection	Keep your vehicle safe by monitoring driver behaviour
	Jamming detection	Disrupt thieves using GNSS jamming to steal from your vehicles
	GNSS Fuel Counter	Measure fuel consumption and the rate of fuel consumption
	Excessive idling	Monitor your vehicles idling times and save money
	Unplug detection	Get an alert if the tracker is removed from its OBD port, which stops tampering with the device and ensuring your protection
	Towing detection	Get alerted if your vehicle is being towed
	Geofencing	Get geofencing alerts using user-defined areas
	Sensors	Accelerometer
	Sleep modes	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep
	Configuration and firmware update	FOTA WEB, FOTA, Teltonika Configurator (USB, Bluetooth®)
	SMS	Configuration, Events, Debug
	GPRS commands	Configuration, Debug
	Time Synchronization	GNSS, NITZ, NTP
	Fuel monitoring	OBD II
	Ignition detection	Accelerometer, External Power Voltage, Engine RPM

Eliot Park Innovation Centre
4 Barling Way, Nuneaton
Warwickshire CV10 7RH
Tel: +44 2476 975 205
E-mail: info@complexus.uk
Web: https://complexus.uk

Module		
	Name	Teltonika TM2500
	Technology	GSM/GPRS/GNSS/BLUETOOTH

GNSS		
	GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
	Receiver	33 tracking channels 99 acquisition channels
	Tracking sensitivity	-165 dBM
	Position Accuracy	< 2.5 m CEP
	Hot start	< 1 s
	Warm start	< 25 s
	Cold start	< 35 s
	Velocity Accuracy	< 0.1 m/s (within +/- 15% error)

Cellular		
	Technology	GSM
	2G bands	Quad-band 850 / 900 / 1800 / 1900 MHz
	Data transfer	GPRS Multi-Slot Class 12 (up to 240 kbps)
	Data support	SMS (text/data)

Power		
	Input voltage range	10–30 V DC with overvoltage and reverse polarity protection
	Internal Back-up battery	¡ 45 mAh Li-Ion battery (0.167 Wh)
	Power consumption	At 12V < 5 mA (Ultra Deep Sleep) At 12V < 7 mA (Deep Sleep) At 12V < 7 mA (Online Sleep) At 12V < 8 mA (GPS Sleep) At 12V < 28 mA (nominal)

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

OBD interface		
	Data reading	Up to 32 vehicle onboard parameters, supported OBD protocols: ISO 9141-2 (5 baud init, 10.4 kbaud) ISO 14230-4 KWP (5 baud init, 10.4 kbaud) ISO 14230-4 KWP (fast init, 10.4 kbaud) ISO 15765-4 CAN (11 bit ID, 250 kbaud) ISO 15765-4 CAN (11 bit ID, 500 kbaud) ISO 15765-4 CAN (29 bit ID, 250 kbaud) ISO 15765-4 CAN (29 bit ID, 500 kbaud)
	Data	K-Line, CAN bus data

Interface		
	Connection	OBDII Socket
	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

Physical specification		
	Weight	30 g
	Dimensions	52.6 x 29.1 x 26 mm (L x W x H)

Operating environment		
	Operating temperature (without battery)	-40 ℃ to +85 ℃
	Storage temperature (without battery)	-40 ℃ to +85 ℃
	Operating humidity	5% to 95% non-condensing
	Ingress Protection Rating	IP41
	Battery charge temperature	0 ℃ to +45 ℃
	Battery discharge temperature	-20 ℃ to +60 ℃

Operating environment		
	Battery storage temperature	-20 °C to +45 °C for 1 month -20 °C to +35 °C for 6 months

Certification & approvals		
	Regulatory	CE/RED, UKCA, E-Mark, EAC, RoHS, REACH, SIRIM QAS, Anatel, SDPPI POSTEL

Product Specifications:
Driver ID Token

Physical specification		
	Weight	10g
	Dimensions	36 x 36 x 5.6 mm (L x W x H)
	On/off switch	Yes
	Chip	nRF52

Power		
	Battery size	CR2032
	Number of batteries	1
	Battery included	Yes
	Battery life	14 months, dependant on settings
	Power range	-30dBm to +4dBM
	Working current	10.5mA

Operating environment		
	Waterproofing	No
	Operating modes	Sleep, Normal, Connected