



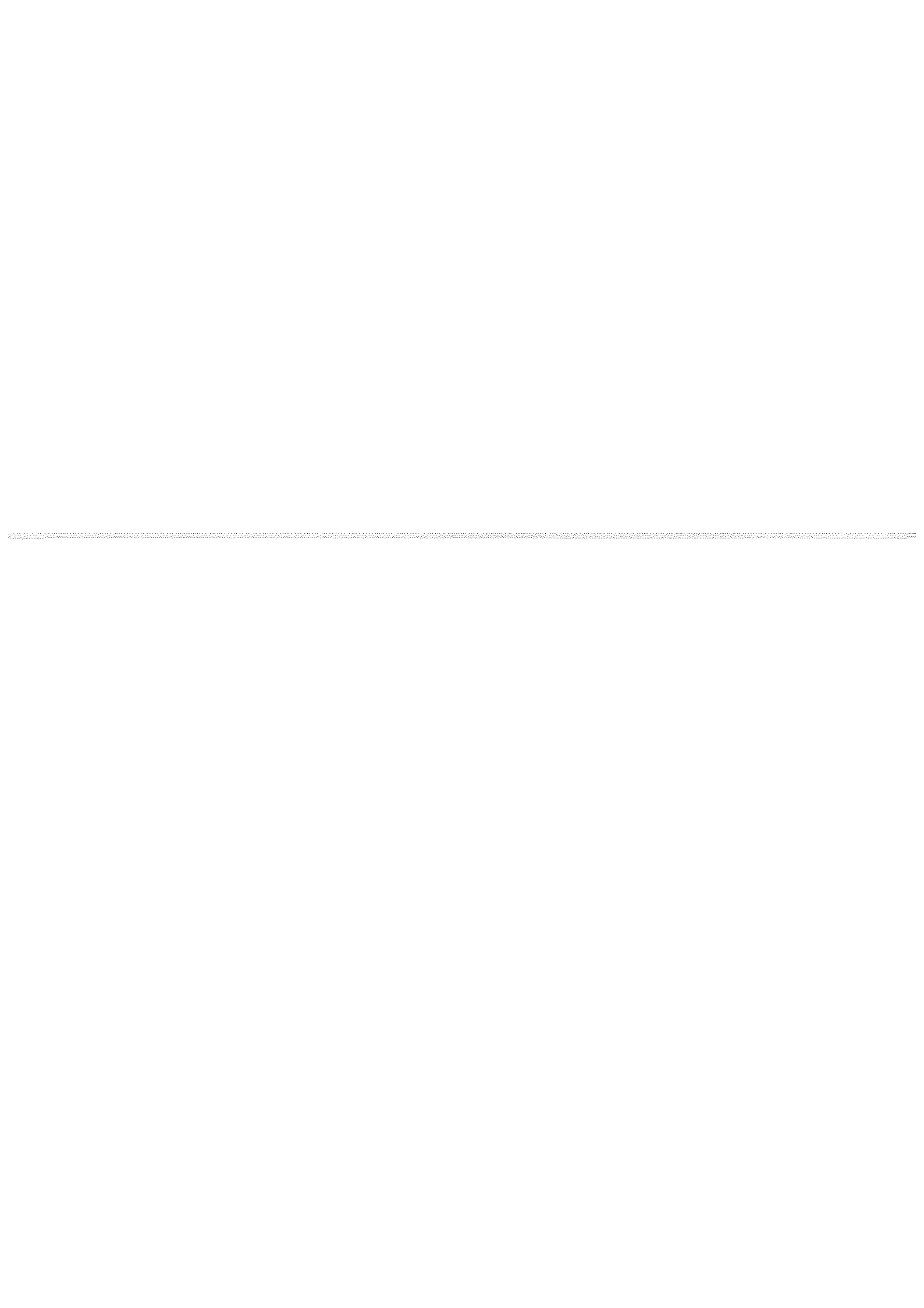
Nr. de înregistrare 15989/27.12.2022

Referitor: Răspuns solicitare de clarificare ADV1338007/22.12.2022

Urmare a solicitării de clarificări din partea unui posibil ofertant referitoare la achizitia directă având ca obiect „Servicii de monitorizare GPS pentru 12 (doisprezece) luni x 64 obiective = 768 de monitorizări”, prin anunț publicitar ADV1338007/22.12.2022

Nr. crt.	CONȚINUT SOLICITARE:	Răspuns:
1.	<p>În vederea participării la procedura de Achiziție directă având ca obiect "Servicii de monitorizare GPS pentru 12 (doisprezece) luni x 64 obiective = 768 de monitorizări" avem rugămintea să ne transmiteți Anexa 1 în care sunt menționate informațiile despre vehiculele flotei respectiv echipamentele GPS instalate în prezent - Serviciile de monitorizare GPS vor fi compatibile cu modulele deja instalate pe obiective, regăsite în ANEXA 1.</p>	<p>Vă transmitem Anexa 1 ce cuprinde informații referitoare la modulele instalate pe obiective.</p>

Întocmit,  
Expert achiziții publice,  
IVAN Ionela





## ANEXA 1

### Module FMB641

Name	Teltonika TM2500
Technology	GSM/GPRS/GNSS

### GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS
Receiver	33/99 acquisition channels
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	GSM/GPRS
2G	Quad-band 850 / 900 / 1800 / 1900 MHz
GPRS	GPRS Mobile Station Class B
Data transfer	GPRS Multi-Slot Class 12(up to 240 kbps)
Data support	SMS (text/data)

### Power

Input voltage range	8 - 32 V DC with overvoltage (pulse 5a and 5b) and reverse polarity protection
Internal Back-up battery	550 mAh Ni-Mh, 8.4 V battery

### Power Consumption

At 12V < 7 mA	<a href="#">Deep Sleep</a>
At 12V < 12 mA	<a href="#">Online Deep Sleep</a>
At 12V < 28 mA	<a href="#">GPS Sleep</a>
At 12V < 65mA	Nominal with no load



At 12V < 120 mA

GPRS

#### Physical specification

Dimensions 104.1 x 76.8 x 31.5 mm (L x W x H)

Weight 197 g **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 storage temperature -20 °C to +45 °C

#### Interface

Digital Inputs 4

Digital Outputs 4

Analog Inputs 4

1-Wire 1

RS232 2

RS485 1

CAN J1939 2

J1708 1

K-line 1

GNSS antenna External High Gain

GSM antenna External High Gain

USB 2.0 Mini-USB - device can be powered by USB for easier device configuration

LED indication 2 status LED lights

SIM 2x SIM Card (Dual-SIM) or 1x eSIM

Memory 2 MB internal flash memory and external Micro SD card up to 32GB

Switchable CAN terminators Supported on CAN1 and CAN2 lines

#### Features





Sensors	Accelerometer
Scenarios	Green/Eco Driving, Over Speeding detection, Jamming detection, Excessive Idling detection, Towing detection, Crash detection, Immobilizer, iButton Read Notification, Auto Geofencing, Manual Geofencing, Trip detection, Odometer, Fuel counter, GNSS Unplug Detection, DDD download and Tacho online data, Offline tracking, Voice call
Supported peripherals	RFID RS232, RFID 1-Wire, iButton 1-Wire, Temperature 1-Wire, Continental tire pressure measurement sensor
Sleep modes	GPS Sleep, Online Deep Sleep, Deep Sleep
Configuration and firmware update	FOTA Web, FOTA, Teltonika Configurator
SMS	Configuration, Events, DOUT control, Debug
GPRS commands	Configuration, DOUT control, Debug
Time Synchronization	GNSS, NITZ, NTP
Fuel monitoring	LLS (Analog), Digital LLS (RS232, RS485), LV-CAN200, ALL-CAN300, CAN-CONTROL, CAN FMS (J1939, J1708), Ultrasonic level sensor
Ignition detection	Digital Input, Accelerometer, External Power Voltage
RS232 Modes	Log Mode, NMEA, LLS, LCD, RFID HID/MF7, Garmin FMI, TCP ASCII/Binary, TCP ASCII/Binary (Buffered), Rec to LCD, Atol Tachograph, UL202-2 Fuel Sensor, TSM232 Sattelite backup, Carrier Freezer
RS485 Modes A or B pin (common-mode voltage)	Silent, Log Mode, NMEA, LLS, TCP ASCII/Binary, TCP ASCII/Binary (Buffered) RS485 input voltage range on -7V to +12V
RS232 input voltage range (common-mode voltage)	+/-15V
RS232 input voltage range (maximum operational voltage)	+/-25V

#### Certification & Approvals

Regulatory	CE/RED, E-Mark in progress!
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#### LV-CAN200

Supported by	FMB1YX, FMU1YX, FMC1YX, FMM1YX, FM36YX, FM6300, FMB640, FMM640, FMC640
Input voltage range	9 - 63 V DC
Power consumption	At 12V < 0.4 mA (Standby) At 12V < 10.6 mA (Working)
Operating temperature range	-40°C to +85°C
Operating humidity	Max 85 % non-condensing
LED indication	1 status LED light
Supported vehicle features*	Total fuel consumption Fuel level (Dashboard) Vehicle mileage Door status Engine speed (RPM) Engine temperature Vehicle speed Accelerator pedal position CNG level Total CNG consumption Engine is working on CNG

\*Number of parameters depends on vehicle model, year and equipment.

Dimensions	41 x 33 x 14.5 mm
Weight	55

DACIA DOKKER	Teltonika FMB120
DACIA DOKKER	Teltonika FMB120
DACIA LODGY	Teltonika FMB120
DACIA LODGY	Teltonika FMB120
DACIA LOGAN	Teltonika FMB120
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GENSET	Teltonika FMB204
HYUNDAI MINIINCARCATOR	Teltonika FMB204
ISUZU	Teltonika FMB120
ISUZU	Teltonika FMB120
IVECO	Teltonika FMB640
IVECO	Teltonika FMB640
IVECO	Teltonika FMB640
JCB 1CX	Teltonika FMB120
JCB 1CX	Teltonika FMB120
JCB 3CX Buldoexcavator	Teltonika FMB120
JCB 3CX Buldoexcavator	Teltonika FMB120
JCB 3CX Buldoexcavator	Teltonika FMB120
MAN	Teltonika FMB640
MAN	Teltonika FMB640
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Mecalac Buldoexcavator	Teltonika FMB120
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Mecalac Multifunctional	Teltonika FMB120
MOSA	Teltonika FMB204
MOSA	Teltonika FMB204
OPEL	Teltonika FMB120
OPEL	Teltonika FMB120
RENAULT	Teltonika FMB640

