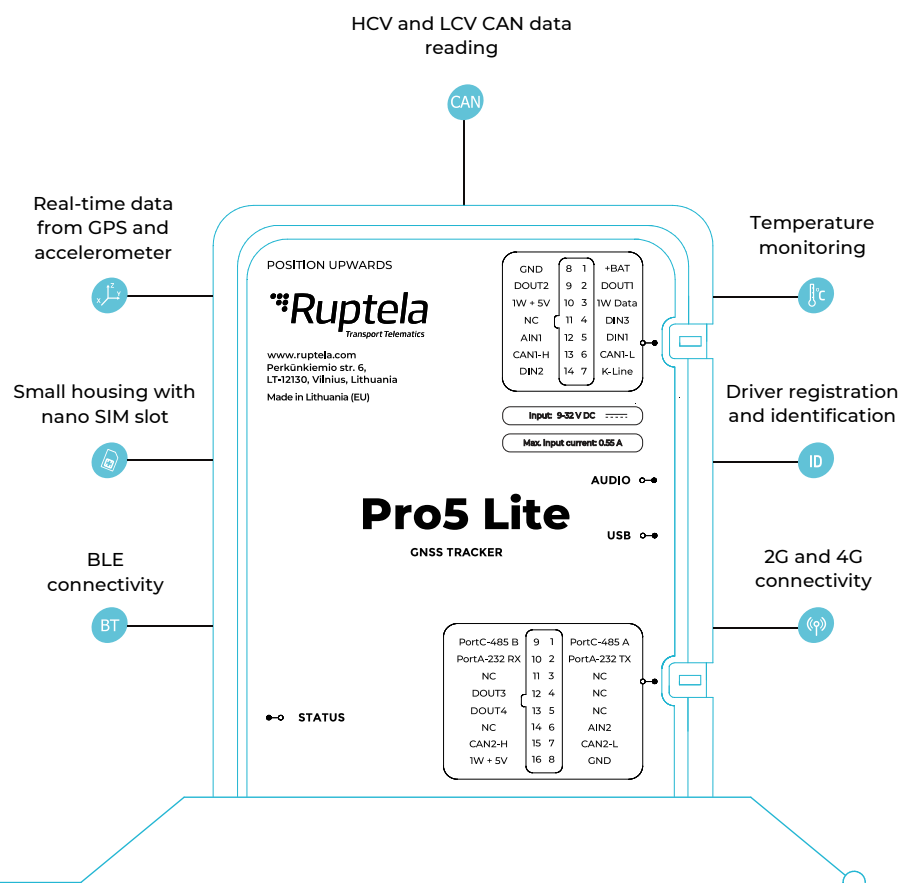# Pro5 Lite

Pro5 Lite is an advanced GPS tracker for Latin America, used in trucks, busses, agriculture, and other specialized machinery. It is designed for vehicle tracking and can perform advanced tasks – read on-board computer data (CAN), monitor driver behavior, manage fuel, etc.

The device is available with LTE CAT1 bis (4G) and GSM (2G) networks.

Applications

- **Real-time monitoring of fleets and cargo**
- **Remote tachograph solution**
- **Fleet efficiency optimization**
- **Driver, vehicle and cargo safety and security**
- **Fuel monitoring**
- **Cargo conditions monitoring**
- **Trailer tracking**
- **Customizable with accessories**

HCV and LCV CAN data reading

Real-time data from GPS and accelerometer

Temperature monitoring

Small housing with nano SIM slot

Driver registration and identification

BLE connectivity

2G and 4G connectivity

Detailed specifications

Environmental specifications

Temperature	Operating:	-20 to +60 °C
	Storage:	-20 to +45 °C
	Battery charging:	0 to +55 °C
	Battery discharging:	-20 to +60 °C
Relative humidity	5% to 95% Non-condensing	

Electrical specifications

Power supply range	9 – 32 V DC
Internal battery	LiPo 3.7 V 1050 mAh
Protections	Battery and a 1-Wire power line short circuit protection
	Reverse polarity protection
	Electrostatic discharge protection on USB, SIM card slot and 1-Wire data line
	Overcurrent protection on 1-Wire power line
	Overvoltage protection on analog inputs
	Charging protection
	2 amp fuse on the power line

Average power consumption @ 12 V DC

Operating (battery charging)	Normal operation (data sending interval ~15 s):	~100 mA
	Normal operation (CAN2 enabled):	~120 mA
	Normal operation (CAN2 & BLE enabled):	~145 mA
Custom sleep	All interfaces disabled:	~30 mA
	Modem sleep, all other interfaces disabled:	~32 mA (average)
	GNSS enabled, all other interfaces disabled:	~43 mA
	BLE enabled, all other interfaces disabled:	~59 mA
Advanced sleep (battery fully charged)	~4 mA	

Connectivity

LTE CAT1 bis/GSM	Antenna: Internal
	Bands (LTE FDD): B1/B2/B3/B4/B5/B7/B8/B28/B66
	Bands (GSM): 850/900/1800/1900 MHz
GNSS module	Antenna: Internal
	Positioning systems: GPS, GLONASS, Galileo
	Augmentation systems: QZSS, SBAS (WAAS, GAGAN, EGNOS, MSAS)
	Aided start services: AssistNow Online (A-GPS)
	Tracking sensitivity: -167 to -168 dBm
	Reacquisition sensitivity: -160 dBm
	Cold start duration: < 30 s
	Aided start: As low as 1 s
	Navigation update rate: 10 Hz
	Horizontal position accuracy: 1.5 m (CEP, 50%, 24 hours static, -130 dBm, > 6 SVs for each GNSS system)
BLE module	BLE version: 5.0 Low energy

Detailed specifications

Interfaces

3 x Digital inputs	Voltage range: Voltage threshold: Voltage threshold when inverted:	0 - 30 V DC 4 V DC 250 mV DC
2 x Analog inputs	Voltage range: Resolution:	0 - 30 V DC 12 bit
4 x Digital outputs*	Maximum voltage: 32 V DC Maximum current: 1 A @ 25 °C	
2 x CAN interfaces	High-speed CAN interfaces: 2 FMS, J1939, HCV CAN, LCV CAN, OBD (including proprietary manufacturer data) and tachograph data reading	
Switchable serial port	RS232 (DFS, RFID) OR RS485 (DFS, J1708 data reading)	
1-Wire interface	Power output: 300 mA @ 4.5 V DC iButton DS1990A, DS1971, DS1982 up to 4 DS18B20 temperature sensors	
User interfaces	Micro USB interface 3.5 mm audio jack Indication LED	

* – only available from hardware version FMP5-34-42130 and above. Older versions will include only 2 x digital outputs.

Features

Internal storage	16 MB
Accelerometer	Built-in 3-axis (auto-calibrating, impact detection, motion sensing, tilt detection, g-force up to 16 g)

Certifications and ratings

Certifications	FCC, WEEE, ANATEL

Physical properties

Dimensions	101 x 74 x 23 mm
Weight	120 ± 1 g
Housing	Plastic

Ordering information

Pro5-Lite-LTE-LA	Pro5 Lite with LTE CAT1 bis and BLE