

# CargoTrack Platform Devices & Accessories



- HCV5
- PRO5
- LCV5
- FM-Plug4
- FM-Eco4 ES

01.

# HCV5

- HCV5-2G-GL-BT
- HCV5-3G-GL-BT
- HCV5-LTM-GL-BT



Advanced product designed for advanced HCV solutions, remote tachograph download, trailers and refrigerators.

## Values

Versatility – multiple inputs/outputs, interfaces for accessories, Bluetooth 5.1, suitable for both – HCV and OBD

Easy installation – wireless solutions, small size, ergonomic design

Excellent performance – premium GNSS by U-blox, premium components

Easy-to-use – screwless housing, dedicated tools (device center, installation assistant), tailored harnesses

Secure – tamper, jamming detection, back-up battery, TLS1.2

High added value solutions – tachograph, trailers, connected trucks, refrigerators

- GNSS module  
U-blox EVA M8M
- Battery  
LiPo 3.7 V 1050 mAh  
Internal backup battery
- Inputs  
4x digital and 4x analog
- Outputs  
4x digital
- Interfaces  
2x Can, K-Line, 1-Wire
- Bluetooth  
Bluetooth low energy
- CANbus  
J1708, J1939, FMS
- Serial ports  
2x RS232, 1x RS485
- Internal memory  
64 Mbit (up to 32 GB using SD card)
- Accelerometer  
3-axes, auto-calibrating
- Firmware configuration  
SMS/GPRS/USB (FOTA)
- Audio  
3.5mm microphone and audio jack\*
- GNSS antenna  
Internal and external (available as an additional accessory)
- Cellular antenna  
Internal
- Power supply  
9–32V DC
- Operating temperature  
-20 to +60°C
- Size  
101x 74x 23mm

\* Audio jack is not available with 4G (HCV5-LTM-GL-BT version)



2G, 3G and 4G connectivity



Canbus and OBD data reading via 2x CAN interfaces



4xDIN, 4xAIn, 2xDOUT, 3.5mm microphone and audio jack



Remote tachograph data reading



Internal and external antennas



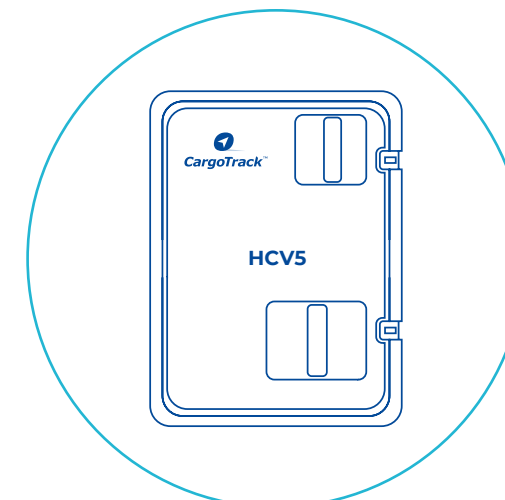
RS232 and RS485 interfaces for accessories



Bluetooth for accessories



Tampering and jamming detection



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



02.

# Pro5

- PRO5-2G-GL-BT
- PRO5-3G-GL-BT
- PRO5-LTM-GL-BT











Advanced product designed for advanced HCV solutions, trailers and various other equipment.

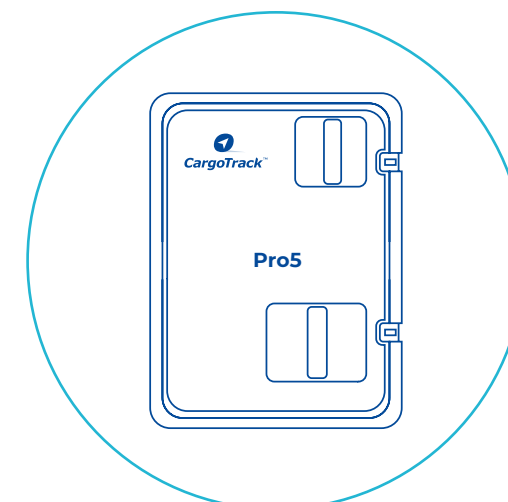
## Values

- Easy-to-use – screwless housing, dedicated tools (device center, installation assistant), tailored harnesses
- Secure – tamper, jamming detection, back-up battery, TLS1.2
- High added value solutions - trailers, connected trucks
- Versatility – multiple inputs/outputs, interfaces for accessories
- Easy installation – wireless solutions, small size, ergonomic design
- Excellent performance – premium GNSS by U-blox, premium components

- GNSS module  
U-blox EVA M8M
- Battery  
LiPo 3.7 V 1050 mAh  
Internal backup battery
- Inputs  
4x digital and 4x analog
- Outputs  
4x digital
- Interfaces  
1xCan, 1-wire
- Bluetooth  
Bluetooth low energy 5.1
- CANbus  
J1708, J1939, FMS
- Serial ports  
2x RS232, 1x RS485
- Internal memory  
64 Mbit (up to 32 GB using SD card)
- Accelerometer  
3-axes, auto-calibrating
- Firmware configuration  
SMS/GPRS/USB (FOTA)
- Audio  
3.5mm microphone and audio jack\*
- GNSS antenna  
Internal and external (available as an additional accessory)
- Cellular antenna  
Internal
- Power supply  
9–32V DC
- Operating temperature  
-20 to +60°C
- Size  
101x 74x 23mm

\* Audio jack is not available with 4G (PRO5-LTM-GL-BT)

 2G, 3G and 4G connectivity	 CANbus reading and 1xCAN interface	 4xDIN, 4xAIn, 2xDOUT, 3.5mm microphone and audio jack
 Fuel monitoring and control	 Internal and external antennas	 RS232 and RS485 interfaces for accessories
 Tampering and jamming detection	 Bluetooth for accessories	



- Real-time monitoring of fleets and cargo
- Fleet efficiency optimization
- Driver behavior monitoring
- Driver, vehicle and cargo safety and security
- Fuel monitoring
- Cargo conditions monitoring
- Trailer tracking
- Customizable with accessories
- Stolen vehicle recovery

03.

# LCV5

- LCV5-2G-GL-BT
- LCV5-3G-GL-BT
- LCV5-LTM-GL-BT











Advanced product optimized for LCV and passenger vehicle fleets with advanced CAN and OBD reading capabilities.

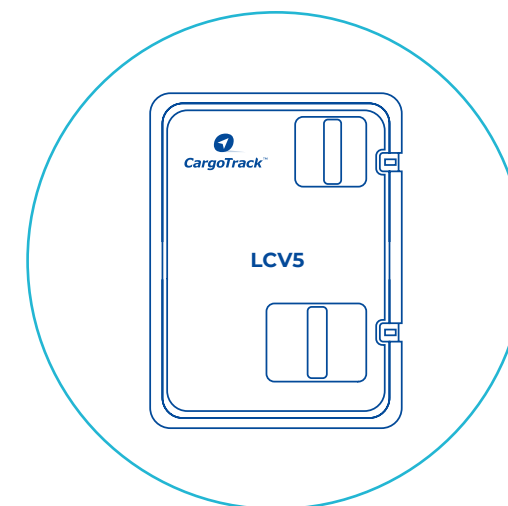
## Values

- Easy-to-use – screwless housing, dedicated tools (device center, installation assistant), tailored harnesses
- Secure – tamper, jamming detection, back-up battery, TLS1.2
- Broad vehicle coverage – proprietary OBD reading, concealed OBD installation, excellent vehicle coverage
- Versatility – multiple inputs/outputs, interfaces for accessories, Bluetooth 5.1
- Easy installation – wireless solutions, small size, ergonomic design, OBD installation
- Excellent performance – premium GNSS by U-blox, premium components

- GNSS module  
U-blox EVA M8M
- Battery  
LiPo 3.7 V 1050 mAh  
Internal backup battery
- Inputs  
4x digital and 4x analog
- Outputs  
4x digital
- Interfaces  
2x CAN, K-Line, 1-Wire
- Bluetooth  
Bluetooth low energy 5.1
- CANbus  
LCV CAN, OBD data reading
- Digital Interfaces  
2x RS232, 1x RS485
- Internal memory  
64 Mbit (up to 32 GB using SD card)
- Accelerometer  
3-axes, auto-calibrating
- Firmware configuration  
SMS/GPRS/USB (FOTA)
- Audio  
3.5mm microphone and audio jack\*
- GNSS antenna  
Internal and external (available as an additional accessory)
- Cellular antenna  
Internal
- Power supply  
9–32V DC
- Operating temperature  
-20 to +60°C
- Size  
101x 74x 23mm

\* audio jack not available with 4G (LCV5-LTM-GL-BT versions)

 2G, 3G and 4G connectivity	 Concealed and quick OBD installation using splitter harnesses	 Wide vehicle model coverage
 Proprietary vehicle data reading via OBDII port or directly from Canbus	 Automatic model detection and configuration	 Basic LCV DTC reading
 Tampering and jamming detection	 Bluetooth for accessories	



- Advanced OBD and CAN reading
- Business and private trips selection
- Driver behavior monitoring and education
- Safety and security
- Driver identification
- Accident detection and reconstruction
- LCV fuel monitoring
- Real-time monitoring of fleets
- Fleet efficiency optimization
- Customizable with accessories
- Stolen vehicle recovery



04.

# FM-Plug4

- FM-Plug4 (without internal battery)
- FM-Plug4+ (with internal battery and basic OBD reading)



FM-Plug4 is a compact tracking device, that connects to the vehicle via OBD2 port. With Plug&Play type installation, the driver can easily install this tracking device during each trip.

## Values

- Easy and quick installation – Plug & Play device, compact size
- Operational cost optimization – driver behavior monitoring (Eco-Drive)
- Track your employees' trips with ease – reliable business/private journeys monitoring with driver identification
- Secure – jamming detection, back-up battery to detect disconnection

- GNSS module  
U-blox EVA M8M
- Battery  
LiPo 3.7 V 190 mAh (FM-Plug4+ only)
- Internal memory  
32 Mb
- Accelerometer  
3-axes, auto-calibrating
- Firmware configuration  
SMS/GPRS/USB (FOTA)
- GNSS antenna  
Internal
- GSM antenna  
Internal
- Interfaces  
Can, K-Line (FM-Plug4+)
- Power supply  
10 ÷ 32 V DC
- Operating temperature  
-35 +60°C
- Size  
63 x 52 x 28 mm



2G connectivity



Plug&Play installation



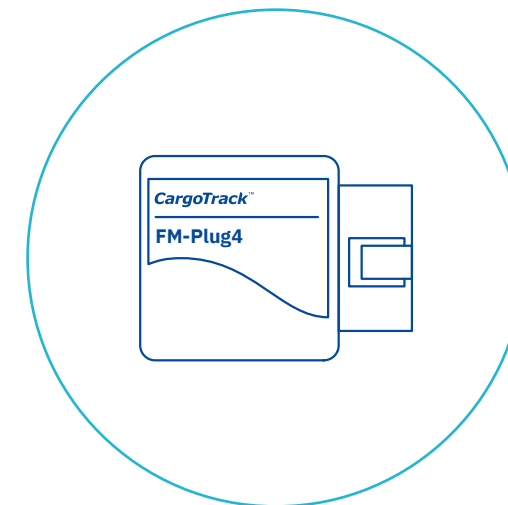
Quick self-installation



Basic OBD data reading (FM Plug4+)



Back-up battery (FM-Plug4+)



- Real-time data
- Driver behaviour monitoring (Eco-Drive)
- Driver registration and identification
- Internal Geozones
- Commands and configuration via SMS/GPRS/USB (FOTA)
- Internal microphone

05.

# FM-Eco4 ES



FM-Eco4 ES series allow to connect digital fuel level sensors for accurate and reliable fuel level monitoring. They also improve safety on the roads: fatigue sensors allow detecting and informing the driver when he is tired, distracted, or not focused on the road. The alcohol sensor will send an alert or block the vehicle if the driver is intoxicated. Also this equipment can be used as a transparent channel for easier accessories integration.

## Values

- Excellent performance and quality – premium GNSS by U-blox, premium components
- Concealed installation – external GNSS antenna, ergonomic design, IP67 housing
- Easy and quick installation – small size, screwless housing, tailored harnesses
- Easy accessories integration - RS232 as a transparent channel
- Reliable solutions for safety and security – vehicle blocking, access control, accident detection, geofencing, alerts, cargo monitoring, alcohol detection, driver fatigue monitoring
- Operational cost optimization – Eco-Drive, fuel monitoring, driver education (Eco-Drive panel)
- Full solution from one hand – GPS tracking device combined with suitable accessories

- GNSS module  
U-blox EVA-M8M
- Battery  
LiPo 3.7 V 190 mAh
- Inputs  
3x Digital and 1x Analog
- Outputs  
2 x digital
- Interfaces  
1-Wire
- Serial Ports  
1xRS232
- Housing  
IP67 certified (option)
- Internal memory  
32 Mb
- Accelerometer  
3-axes, auto-calibrating
- Firmware configuration  
SMS/GPRS/USB (FOTA)
- GNSS antenna  
Internal or external
- Cellular antenna  
Internal
- Power supply  
6 ÷ 31.5 V DC
- Operating temperature  
-20 to +60°C
- Size  
65 x 61 x 22 mm /  
95 x 77 x 29 mm (IP67)



2G and 3G  
connectivity

IP67

IP67 housing



With internal or  
external GNSS  
antenna



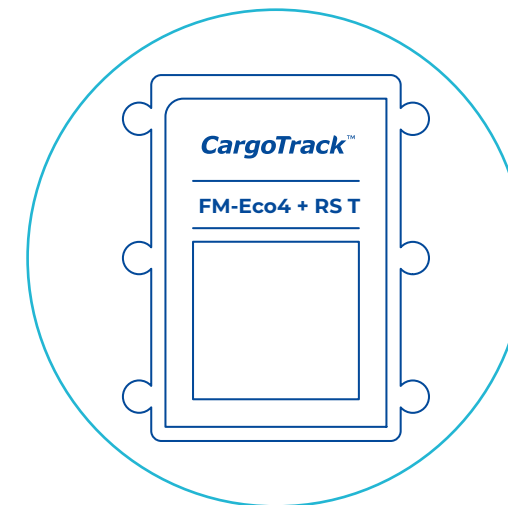
RS232 serial port



3xDIN, 1xAIN,  
2XDOUT, 1-wire  
interface



Small size



- Real-time data
- Driver behaviour monitoring (Eco-Drive)
- Driver registration and identification
- Driver fatigue monitoring
- Accurate Fuel monitoring
- Temperature monitoring
- Remote ignition blocking
- Transparent channel
- Internal Geozones
- Jamming notifications
- Commands and configuration  
via SMS/GPRS/USB (FOTA)



# Wired Accessories



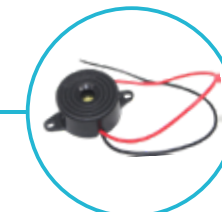
## Driver behavior monitoring

Eco-drive panel



The Eco-Drive panel is a device developed and manufactured by Ruptela for monitoring and education of the drivers in the real-time. The panel informs the driver when his/her driving actions are causing fuel wastage and accelerating vehicle depreciation. Driving information is also sent to the real-time monitoring and control system, which analyses driver behaviour and provides data for the driver performance evaluation.

Buzzer



Buzzer is a small audio signaling device that can alert the driver on various events such as when the driver registration is needed, GPS tracker jamming detection, or can be used for driver behavior monitoring.

## Fuel monitoring

Ruptela PRO and ECO FLS



The fuel level sensor is fully developed and manufactured by Ruptela for universal fuel management – monitoring fuel level, controlling fuel consumption and preventing fuel theft. Pro-digital and Eco-analog fuel level sensor versions are available.

## Cargo condition monitoring

1-wire temperature sensor



Ruptela's temperature sensors are designed for measuring the temperature of the cargo and the refrigerators. The sensors operate with an accuracy of  $\pm 0.5^{\circ}\text{C}$  in a temperature range from  $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$ . The sensor housing is IP67 certified, ensuring its durability despite various harsh working environments.

1-wire temperature and humidity sensor



The Temperature & Humidity Sensor is a high-accuracy cargo condition monitoring sensor with 1-Wire interface for vans and heavy-duty vehicles with a trailer. This sensor collects the temperature and humidity in real-time, collects the data, and sends it to a tracking device.

## EasyCAN

EasyCAN



EasyCAN is used for a fast and safe connection to a vehicle's on-board computer (CANbus). EasyCAN connects a GPS tracking device to the vehicle's onboard computer, without cutting any wires and without violating the manufacturer's warranty. EasyCAN can read data from FMS and J1708 CANbus.

## Driver identification

### Ibutton readers/ Identification key



This accessory can be used when more than one person is using a vehicle or when one person uses several vehicles. It shows who used the vehicle, when, and who was in charge of it. It is possible to block the vehicle's engine and notify the driver by audio signal if the identification is not completed successfully.

### RS232 RFID reader



RFID Readers are small card reading devices designed for driver identification. In many cases, security passes that are already used in the company can be adopted. The reader shows who used the vehicle, when, and who was in charge of it.

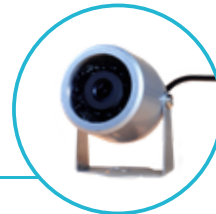
## Safety and security

### Fatigue sensor



The fatigue sensor is a safe driving system designed for commercial fleets that can connect to Ruptela's devices via RS232 interface. The device alarms the driver upon detection of fatigue or distraction. It also provides on-demand image output to the fleet management system when either of the alarms are triggered. These images serve as the evidence to check the driver's real state and other data, it helps the management centers further improve driver safety and performance.

### Indoor or Outdoor Snapshot Camera



Snapshot Cameras will allow you to get snapshots of what was happening at a particular time or event with the vehicle and driver. Indoor or outdoor cameras can automatically take snapshots on set events, such as harsh braking or accelerating, GSM jamming, vehicle towing and others. Snapshot cameras help to ensure vehicle security and provide essential evidence in case of an accident.

### Dräger Alcohol Sensor/ Alcohol sensor (RS232 protocol)



Alcohol sensor is a device used to test the concentration of alcohol from the exhaled air by a person. It enables the control of each ignition, prohibiting the start of vehicle if the driver is intoxicated. The device also prevents cheating if the driver uses a balloon or compressed air to blow.

### Door sensor



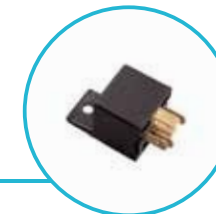
Door sensors record door opening and closing events, which are transmitted to the monitoring system. The device is easily installed, reliable and often used for monitoring opening-closing events in refrigerated semi-trailers. The door sensors are perfectly adapted to protect cargo against the third party actions and natural forces.

### Panic button



Panic Buttons increase the safety of the vehicle, driver and cargo. In case of an emergency, the driver can quickly send an emergency message to the manager. The message is received in the monitoring and control system or by SMS.

### Ignition blocking relay



The engine relay is a device designed to block the engine of a vehicle, offering protection against unauthorised use of the vehicle. Remote activation of the relay is possible through a monitoring and control system or by SMS.

### Push to talk



The handheld transceiver is designed for maintaining voice communication between the driver and the manager. The device does not require an additional SIM card and is simply plugged into the GPS device.

### External GNSS antenna



External GNSS antenna can be connected to the 5th generation advance family devices (HCV5, LCV5, Pro5) for more accurate fleet location especially when it is needed to hide GPS tracker under metal construction in the vehicle. If the external antenna is damaged or disconnected, the internal one will take over and you will get notification that someone is trying to interrupt fleet monitoring or damage the HW device.



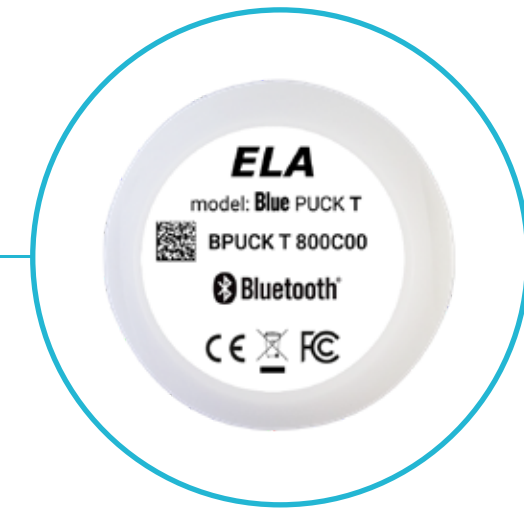
# Bluetooth sensors for wireless solutions

Wireless solutions save time and reduce installation costs.



## Vehicle and cargo condition monitoring

- Temperature sensor
- Temperature and humidity sensor
- Low range temperature and humidity sensor
- sensor Technoton fuel level sensor
- (coming soon) Door sensor (coming soon)
- Weight sensor (coming soon)



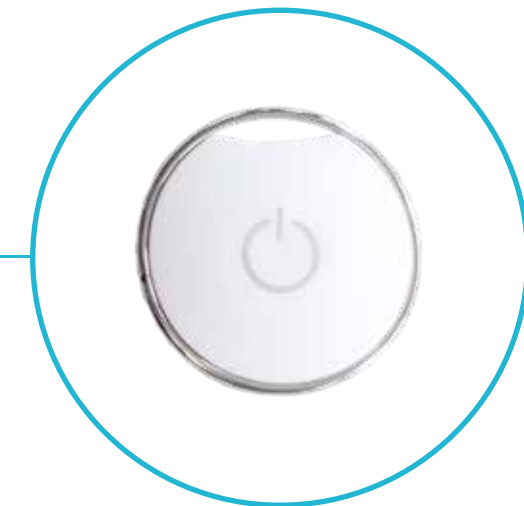
## Trailer identification

- Temperature and humidity sensor



## Driver identification

- Wireless button



Compatible with: HCV5, LCV5, PRO5 BLE GPS Trackers



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