BCE

BALTIC CAR EQUIPMENT

Why Baltic Car Equipment?

Since 2006 Lithuanian company Baltic Car Equipment has become one of the largest manufacturers of telemetry equipment in the Baltic States. Constant investments into R&D have allowed the company to present international markets with advanced equipment in telemetry and automotive security field. Employing over 50 professionals, Baltic Car Equipment controls every stage of its products - from initial design and manufacturing to installation and support.

Core businesses of Baltic Car Equipment are:
- Manufacturing of GPS/GLONASS/GSM tracking equipment
- Manufacturing of vehicle security systems
- Providing electronic manufacturing services (EMS)
- Providing fleet management services in territory of Lithuania
- Developing various telemetry solutions and applications

Fleet management market becomes more and more demanding, therefore reliability and functionality are the most important success factors. For more than 8 years Baltic Car Equipment manufactures advanced hardware, which satisfies the needs of the most demanding customer in fleet management field and is compatible with various software platforms.

Well evaluated by companies worldwide, this equipment has become a key to partnerships in more than 30 countries. Constant development of functionality and high quality at competitive price level makes this product a wise choice.

Our aim is to provide products and services of highest quality, ensuring control and reliability to our customers worldwide.

MADE IN LITHUANIA

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Applications

FM-500 Light is a reliable economy class tracking unit, with fuel control, driver ID, temperature measurement, remote output control and FOTA capabilities.

FM-500 Light applications:

- Track & trace
- Geofencing and overspeeding
- Fuel level sensors (analog and frequency)
- Fuel flow meters
- Driver identification
- Temperature/humidity sensors

Main advantages:

Advantages of hardware series FM-500:

- Wide and dynamic configuration options via GPRS and USB.
- Mass firmware and settings updates.
- Efficient data transfer algorithm. Significant GPRS traffic economy.
- Device protection from power impulses.
- GSM jamming, power cut-off registration to event log.
- Wide variety of available accessories.

FM-500 Light. Technical parameters

General	
Interfaces	1-Wire
Inputs	4x digital (frequency, impulse counter, ON/OFF modes)
	2x analogue, 11 bit, 0-36V
Outputs	3x digital, (-)
Power supply	8 – 36V
	Protection from impulses up to 120V
	Consumption at 12V: active: <50mA, sleep: <8 mA
	Registration of power cut-off to device event log
	Internal battery 700 mAh (optional)
Internal memory	4 MB, up to 150.000 entries
Accelerometer	3 axis digital accelerometer
Internal odometer	+
Operational temperature range	from -40 to +85 C°
Dimensions	26x80x55 mm
Weigh	Tracker – 62 g, set – 141 g

GSM	Internal antenna
GSM/GPRS class	10 (up to 85,6 kbit), class B
Detection of GSM jamming	+

GPS / GLONASS	External antenna
Sensitivity	-162 dBm
Acquisition	Cold <30 s, hot 1 s

FM-500 Light+ is the right tracking solution when monitoring parameters from external equipment is required. In addition to standard tracker features, device is equipped with serial ports RS-232, EIA-485 and 1-Wire interface. Together with flexible logic of device configuration, it allows to fulfill complex scenarios required by the customers at reasonable costs.

Applications

FM-500 Light+ applications:
- Track & trace
- Geofencing and overspeeding
- Fuel level sensors (analog, frequency and digital)
- Fuel flow meters
- Driver identification
- Temperature/humidity sensors
- CAN-log support
- Remote output control and immobilization

FM-500 Light+. Technical parameters

General

Interfaces	1-Wire
	RS-232
	EIA-485
Inputs	4x digital (frequency, impulse counter, ON/OFF modes)
	3x analogue, 11 bit, 0-36V
Outputs	3x digital, (-)
Power supply	8 – 36V
	Protection from impulses up to 120V
	Consumption at 12V: active: <50mA, sleep: <8 mA
	Registration of power cut-off to device event log
	Internal battery 700 mAh (optional)
Internal memory	4 MB, up to 150.000 entries
Accelerometer	3 axis digital accelerometer
Internal odometer	+
Operational temperature range	from -40 to +85 C°
Dimensions	26x80x55 mm
Weight	Tracker – 64 g, set – 160 g

GSM

	Internal antenna
GSM/GPRS class	10 (up to 85,6 kbit), class B
Detection of GSM jamming	+

GPS / GLONASS

	External antenna
Sensitivity	-162 dBm
Acquisition	Cold <30 s, hot 1 s

Applications

FM-500 Blue supports CAN bus data from most types of vehicles without any adapters, allowing monitoring of important vehicle parameters including, but not limited to odometer, RPM, fuel and more. With digital and analog inputs, digital outputs for remote control of vehicle equipment and robust power supply, FM-500 Blue is a balanced solution for fleet management today.

FM-500 Blue applications:
- Track & trace
- CAN-bus support
- Geofencing and overspeeding
- Fuel level sensors (analog and frequency)
- Fuel flow meters
- Remote output control and immobilization

FM-500 Blue. *Technical parameters*

■ **Contactless CAN reader**

General	
Interfaces	FMS CAN (protocol J1939)
	OBDII (diagnostic protocol of light vehicles, SAE-1979 w/o adapters)
	CAN protocols of light vehicles (without adapters)
Inputs	4x digital (frequency, impulse counter, ON/OFF modes)
	3x analogue, 11 bit, 0-36V
Outputs	3x digital, (-)
Power supply	8 – 36V
	Protection from impulses up to 120V
	Consumption at 12V: active: <50mA, sleep: <8 mA
	Registration of power cut-off to device event log
	Internal battery 700 mAh (optional)
Internal memory	4 MB, up to 150.000 entries
Accelerometer	3 axis digital accelerometer
Internal odometer	+
Operational temperature range	from -40 to +85 C°
Dimensions	26x80x55 mm
Weight	Tracker – 64 g, set – 160 g

GSM	
	Internal antenna
GSM/GPRS class	10 (up to 85,6 kbit), class B
Detection of GSM jamming	+

GPS / GLONASS	
	External antenna
Sensitivity	-162 dBm
Acquisition	Cold <30 s, hot 1 s

FM-500 Blue+ is an advanced tracking device supporting most CAN-bus protocols including J1708 Volvo/Renault. Serial ports, 1-Wire and Wiegand 26 interfaces allow to implement complex fleet management solutions.

FM-500 Blue+ applications:

- Track & trace
- CAN-bus support
- Geofencing and overspeeding
- Fuel level sensors (analog, frequency and digital)
- Driver identification
- RFID support
- Temperature/humidity sensors
- Remote output control and immobilization

FM-500 Blue+. *Technical parameters*

■ *Contactless CAN reader*

General parameters

Interfaces	FMS CAN (protocol J1939)
	Volvo/Renault CAN (protocol J1708, without adapters)
	OBDII (diagnostic protocol of light vehicles, SAE-1979 w/o adapters)
	CAN protocols of light vehicles (without adapters)
	1-Wire
	RS-232
	EIA-485
Inputs	4x digital (frequency, impulse counter, ON/OFF modes)
	3x analogue, 11 bit, 0-36V
Outputs	3x digital, (-)
Power supply	8 – 36V
	Protection from impulses up to 120V
	Consumption at 12V: active: <50mA, sleep: <8 mA
	Registration of power cut-off to device event log
	Internal battery 700 mAh (optional)
Internal memory	4 MB, up to 150.000 entries
Accelerometer	3 axis digital accelerometer
Internal odometer	+
Operational temperature range	from -40 to +85 C°
Dimensions	26x80x55 mm
Weight	Tracker – 64 g, set – 160 g

GSM	Internal antenna
GSM/GPRS class	10 (up to 85,6 kbit), class B
Detection of GSM jamming	+

GPS / GLONASS	External antenna
Sensitivity	-162 dBm
Acquisition	Cold <30 s, hot 1 s

FM-500 Tacho is a new generation fleet manage-ment device, equipped with a rich pack of inter-faces (2 simultaneous CAN-bus interfaces, RS-232, EIA-485, 1-Wire, Wiegand-26). Full ran-ge of CAN-bus data, remote tachograph data download and a wide variety of available acces-sories makes this device a powerful tool for satis-fying the needs of the most demanding customer in fleet management field.

FM-500 Tacho applications:

- Track & trace
- Remote tachograph data download
- 2 simultaneous CAN-bus data channels support
- Geofencing and overspeeding
- Fuel level sensors (analog, frequency and digital)
- Driver identification
- RFID support
- Temperature/humidity sensors
- Remote output control and immobilization
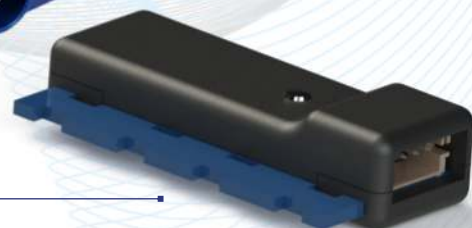
■ *Contactless CAN reader*

FM-500 Tacho. *Technical parameters*

General

Interfaces	Remote tachograph data download
	FMS CAN (protocol J1939)
	Volvo/Renault CAN (protocol J1708, without adapters)
	OBDII (diagnostic protocol of light vehicles, SAE-1979 w/o adapters)
	CAN protocols of light vehicles (without adapters)
	1-Wire
	RS-232
	EIA-485
Inputs	3x digital (frequency, impulse counter, ON/OFF modes)
	3x analogue, 11 bit, 0-36V
Outputs	2x digital, (-)
Power supply	8 – 36V
	Protection from impulses up to 120V
	Consumption at 12V: active: <50mA, sleep: <8 mA
	Registration of power cut-off to device event log
	Internal battery 700 mAh (optional)
Internal memory	4 MB, up to 150.000 entries
Accelerometer	3 axis digital accelerometer
Internal odometer	+
Operational temperature range	from -40 to +85 C°
Dimensions	26x80x55 mm
Weight	Tracker – 64 g, set – 160 g

GSM	Internal antenna
GSM/GPRS class	10 (up to 85,6 kbit), class B
Detection of GSM jamming	+

GPS / GLONASS	External antenna
Sensitivity	-162 dBm
Acquisition	Cold <30 s, hot 1 s