



## FM-Eco4 light S

FM-Eco4 light S is a compact GPS tracker designed for vehicle tracking. The device has an internal GPS & GSM antenna and therefore, it fits easily anywhere in the vehicle and makes installation much easier. Moreover, it has 2x configurable (invertible) DINs that help to simplify device installation.

FM-Eco4 light is also available with an integrated battery – FM-Eco4+ S.

## FM-Eco4+ S

FM-Eco4+ S is a standard GPS tracker for vehicle tracking. The device is IP67 certified and can successfully operate in harsh conditions and resist external damage sources.

FM-Eco4+ S is available with internal (FM-Eco4+ S) or external (FM-Eco4+ E S) antenna.

## Key features

- Real-time data from GPS and accelerometer
- Driver behaviour monitoring (Eco-Drive)
- Driver identification
- Temperature monitoring
- Remote ignition blocking
- Internal geozones
- Jamming detection
- Commands and configuration via SMS
- Supports additional sensors

	FM-Eco4 light S	FM-Eco4 light+ S	FM-Eco4+ S	FM-Eco4+ E S
<b>Environmental specifications</b>				
Temperature	Operating: -30 to +60 °C Storage: -40 to +65 °C	Operating: Battery charging: Battery discharging: Storage:	-20 to +60 °C 0 to +45 °C -20 to +60 °C -20 to +60 °C	
Relative humidity	5 % to 95 % Non-condensing			
<b>Electrical specifications</b>				
Power supply range	6 ÷ 31.5 V DC			
Power supply voltage	6 / 12 / 24 V DC			
Maximum current rating	400 mA @ 6 V DC	500 mA @ 6 V DC		
Internal battery	–	LiPo 3.7 V 190 mAh		
Protections	Battery short circuit protection (devices with internal battery only) Reverse polarity protection Overcurrent protection on 1-Wire power line			
<b>Power consumption @ 12 V DC</b>				
Operating	Idle mode: Active mode: Sleep mode: Deep sleep mode:	29.5 mA 46.4 mA 6.1 mA 4.1 mA		
Operating while charging battery	–	Idle mode: Active mode: Sleep mode: Deep sleep mode:	100.1 mA 122.3 mA 74.1 mA 71.5 mA	
<b>Connectivity</b>				
GSM	Modem: Quectel MC60 Antenna: Internal (Quad-band) Frequency band: 850/900/1800/1900 MHz			
GNSS (GPS, GLONASS) module	Modem: Quectel MC60 Antenna: Internal or External Frequency: 1575.42 MHz (GPS); 1601.71 MHz (GLONASS) Channels: 33 tracking, 99 acquisition, 210 PRN Acquisition sensitivity: -149 dBm Tracking sensitivity: -167 dBm Reacquisition sensitivity: -161 dBm Cold start duration: < 35 s			

	FM-Eco4 light S	FM-Eco4 light+ S	FM-Eco4+ S	FM-Eco4+ E S
<b>Interfaces</b>				
4 x Digital inputs (DIN1/DIN2/DIN3/DIN4)	Voltage range: 0 - 30 V DC Voltage threshold: 4 V DC			
2 x Invertible digital inputs (DIN3/DIN4)	Invertible via configuration Voltage threshold: 250 mV DC			
2 x Analog inputs (AIN1/AIN2)	Voltage range: 0 - 30 V DC Resolution: 12 bit			
2 x Digital outputs (DOUT1/DOUT2)	Maximum voltage: 32 V DC Maximum current: 1 A			
1-Wire interface	Power output: 80 mA @ 4.1 V DC Maximum cable capacitance: 4 nF			
User interfaces	Mini USB interface 3 x Indication LEDs			
<b>Features</b>				
Internal storage	4 MB (max. 30000 records)			
Accelerometer	3-axis; g-force up to 4 g			
<b>Certifications and ratings</b>				
Certifications	E-mark, CE, RoHS			
IP Rating	-		IP67	
<b>Physical properties</b>				
Dimensions	64.5 x 61 x 22 mm		95 x 76.4 x 28.8 mm	
Weight	59 ± 5 g	65 ± 5 g	148 ± 5 g	185 ± 5 g
Housing	Plastic			

## Ordering information

<b>FM-Eco4 light S</b>	Eco4 light Second Edition
<b>FM-Eco4 light+ S</b>	Eco4 light Second Edition with battery
<b>FM-Eco4+ S</b>	Eco4 Second Edition with battery and IP67 housing
<b>FM-Eco4+ E S</b>	Eco4 Second Edition with battery, IP67 housing and external GNSS antenna

## Warnings

All internal components including the battery must be replaced only by the manufacturer! Any self-willed attempt to repair or change any components will void the warranty.



Caution! The devices are shipped to the users with partially charged batteries. After the first power up the device must not be used with the battery. It must be connected to an external power source until the battery is fully charged. Once charging is complete, the device can begin its normal operation.



Caution! There is a risk of explosion if the battery is replaced with a battery of an incorrect type. Dispose of used batteries according to environmental requirements.



Waste equipment should not be disposed of with your other household waste. The product must be taken to separate collection points at the product's end-of life.



## Document application

Given parameter values and various characteristics within this document apply only to the most recent device hardware version.

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