



FM-Eco4 light T
 FM-Eco4 light+ T
 FM-Eco4+ T FM-
 Eco4+ E T

FM-Eco4 ES



FM-Eco4 light T is a tracking device (2G) without an internal battery and with regular housing, small size and internal antennas.

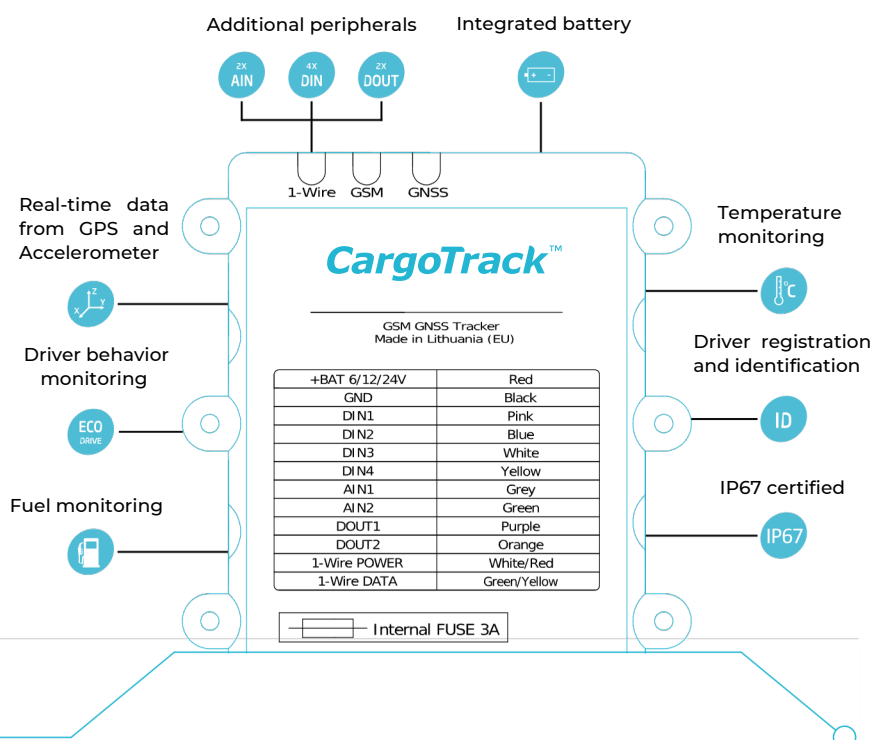
FM-Eco4 light+ T is a tracking device (2G) with regular housing, small size and internal battery, antennas.

FM-Eco4+ T is a tracking device (2G) with rugged IP67 certified housing that can be installed outside the cabin and successfully resist environmental factors such as water and dirt.

FM-Eco4+ ES is a tracking device (2G) with rugged IP67 certified housing and an external antenna, which allows the device to be installed in areas that are hard to find and access.

Applications

- Safety & security
- Driver behaviour monitoring
- Fuel monitoring
- Fleet management
- Logistics
- Automotive OEM
- Trailer tracking
- Rental and leasing
- Corporate fleets



Detailed specifications

FM-Eco4 light T

FM-Eco4 light+ T

FM-Eco4+ T

FM-Eco4+ ES

Environmental specifications

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

Electrical specifications

Power supply range	6 ÷ 31.5 V DC
Maximum current rating	500 mA @ 6 V DC
Internal battery	- LiPo 3.7 V 190 mAh
Protections	Battery short circuit protection (not applicable for FM-Eco4 light T) Reverse polarity protection Overcurrent protection on 1-Wire power line 2 amp fuse on the power line

Power consumption @ 12 V DC

Operating (battery fully charged)	Idle mode: 33 mA Active mode (peak @ GSM): 135 mA Sleep mode: 7 mA Deep sleep mode: 4 mA
--	---

Connectivity

GSM	Modem: Quectel M95 Antenna: Internal (Quad-band) Frequency band @ GSM: 850/900/1800/1900 MHz (GPRS multi-slot class 12)
GNSS module	Module: U-blox EVA-M8M Antenna: Internal or external (FM-Eco4+ E T only) Positioning systems: GPS, GLONASS, Galileo Augmentation systems: QZSS, SBAS (WAAS, GAGAN, EGNOS, MSAS) Aided start services: AssistNow Online Frequency: 1575.42 MHz (GPS, Galileo); 1602 MHz (GLONASS) Tracking sensitivity: -154 to -164 dBm Reacquisition sensitivity: -152 to -160 dBm Cold start duration: < 30 s Aided start duration: As low as 3 s Navigation update rate: 10 Hz Horizontal position accuracy: 2.5 m (CEP, 50%, 24 hours static, -130 dBm, > 6 SVs)

Detailed specifications

FM-Eco4 light T	FM-Eco4 light+ T	FM-Eco4+ T	FM-Eco4+ ES
-----------------	------------------	------------	-------------

Interfaces

4 x Digital inputs	Voltage range: 0 - 30 V DC Voltage threshold: 4 V DC Invertible inputs: 2 (DIN3/DIN4) Voltage threshold when inverted: 250 mV DC
2 x Analog inputs	Voltage range: 0 - 30 V DC Resolution: 12 bit Maximum voltage: 32 V DC
2 x Digital outputs	Maximum current: 1 A @ 25 °C Power output: 0 mA @ 5 V DC
1-Wire interface	Power output: 100 mA @ 4.67 V DC Maximum cable capacitance: 4 nF
User interfaces	Mini USB interface 3 x Indication LEDs

Features

Internal storage	4 MB (max. 30000 records)
Accelerometer	Built-in 3-axis (auto-calibrating, impact detection, motion sensing, tilt detection, g-force up to 4 g)

Certifications and ratings

Certifications	E-mark, CE, RoHS, WEEE, EAC		
IP Rating	–	IP67	

Physical properties

Dimensions	65 x 61 x 22 mm		95 x 77 x 29 mm	
Weight	59 ± 5 g	65 ± 5 g	148 ± 5 g	185 ± 5 g
Housing	Plastic			

Ordering information

FM-Eco4 light T	Eco4 light Third Edition without battery
FM-Eco4 light+ T	Eco4 light Third Edition with battery
FM-Eco4+ T FM-	Eco4 Third Edition with battery and IP67 housing
Eco4+ ES	Eco4 Third Edition with battery, IP67 housing and external GNSS antenna