



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

## FM-Eco4 T

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

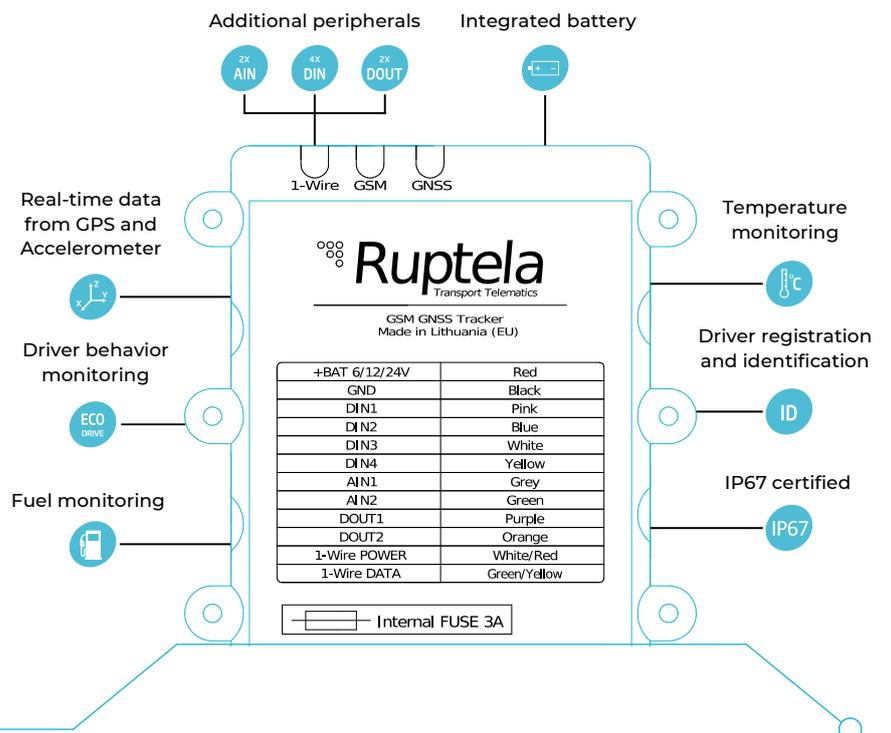
**FM-Eco4 light+ T** is a tracking device (2G) with regular housing, small size and internal battery, antennas.

**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+ E T** 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

<b>FM-Eco4 light T</b>	<b>FM-Eco4 light+ T</b>	<b>FM-Eco4+ T</b>	<b>FM-Eco4+ E T</b>
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## Environmental specifications

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

## Electrical specifications

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

## Power consumption @ 12 V DC

<b>Operating (battery fully charged)</b>	Idle mode: 33 mA Active mode (peak @ GSM): 135 mA Sleep mode: 7 mA Deep sleep mode: 4 mA
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## Connectivity

<b>GSM</b>	Modem: Quectel M95 Antenna: Internal (Quad-band) Frequency band @ GSM: 850/900/1800/1900 MHz
<b>GNSS module</b>	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

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### Interfaces

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

### Features

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

### Certifications and ratings

<b>Certifications</b>	E-mark, CE, RoHS, WEEE, EAC		
<b>IP Rating</b>	–	IP67	

### Physical properties

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

## Ordering information

<b>FM-Eco4 light T</b>	Eco4 light Third Edition without battery
<b>FM-Eco4 light+ T</b>	Eco4 light Third Edition with battery
<b>FM-Eco4+ T</b>	Eco4 Third Edition with battery and IP67 housing
<b>FM-Eco4+ E T</b>	Eco4 Third Edition with battery, IP67 housing and external GNSS antenna

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