



# ENAiKOON capacitive fuel-level sensor

#### **Product Summary**

The ENAiKOON capacitive fuel-level sensor is the perfect solution for monitoring the fuel level and fuel consumption of trucks, stationary tanks, construction equipment, generators, etc.

The sensor works independent of the vehicle electronics, therefore it can detect and report a fuel theft in real-time by sending an alert even when the vehicle is switched off.

On top of detecting fuel-theft, it also allows real-time fuel monitoring and calculation of the remaining mileage based on the content of the tank.

The ENAiKOON capacitive sensor consists of a tube like sensor and the required cabling as well as the ENAiKOON fuel-tracker plugin, an extension of inViu pro (ENAiKOON's highly secure telematics web portal).

The current tank fuel-level is measured and recorded directly by the sensor. This data is then sent along with the GPS data from the ENAiKOON locate-06 to the ENAiKOON M2M-commserver, where it is then processed to display on your computer, tablet or mobile phone web browser.

This solution is proudly "Made in Germany".









#### **Key features**

- length:
  - 70 cm (27.5 in)
  - 100 cm (39.5 in)
  - 150 cm (59 in)
  - 200 cm (79 in)

(can be shortened)

- installation:
  - a hole is drilled into the top of the tank and then the tube of the sensor is inserted into this hole and the sensor is screwed to the tank
  - draining of the tank is not required
  - no moving parts
- no calibration is required by the end user
- the device can be removed and placed into a different tank
- waterproof sensor and connectors
- output: 0 20 V
- configurable for all different types of liquid fuel (no water)
- measurement filtering
- measures the fuel levels from the bottom up to the top of the tank; lowest 20 mm cannot be measured
- low power consumption
- Molex connectors for the power supply and interface
- connection cable 7 m
- rugged plastic enclosure



# **Technical specifications**

Fuel level measurement		
Maximum depth	200 cm	
Minimum depth	2 cm	
Absolute accuracy	1%	For standard diesel at 25 °C
Resolution	12 bit	
Measurement period	1 sec.	
Power supply		
External power supply	7-45 V	
External 24 Volt power supply current	0.6-0.9 W	
1/0		
Analogue output range	0 → 20 V DC	5 V represents 0 mm depth 20 V represents max depth Resolution 12 bit
Analogue output resistance	2,000 Ohms	
Physical		
Sensor length		70 cm (27.5 in) / 150 cm (59 in) / 200 cm (79 in)
Sensor cable length	6 m	
Temperature range without the battery	-60 °C to 85 °C	
Waterproofing	Sensor and extension cable (connectors)	waterproof IP67



# **Products and prices**

Product	Part no.	Product description		Price		
			1-9 units	> 25 units	>100 units	
ENAiKOON fuel-tracker capacitive sensor		Capacitive sensor for monitoring the tank level of stationary tanks				
	711P 15 02	<ul> <li>including cable, 7 m</li> <li>for connection to telematics module ENAiKOON locate-06</li> <li>length can be shortened (the sensor must be recalibrated after shortening)</li> <li>for recalibration the FLS adjustment module is required</li> </ul>	€ 209,00	€ 189.00	€ 169.00	
	ZUB-15-03 ZUB-14-06 ZUB-14-07	length 70 cm (27.5 in) length 150 cm (59 in) length 200 cm (79 in)	€ 209.00 € 279.00 € 399.00		€ 249.00 € 279.00	
FLS adjustment module	ZUB-15-04	FLS adjustment module calibration of capacitive sensors after shortening  UNU device  power supply adapter 220 V / 15.5 V DC  cables			€ 109	

### Software

Product	Part no.	Product description	Monthly Fee		ee
			1-9 units	> 25 units	>100 units
inViu pro web service		Internet based software for the management and monitoring of trackables			
		any time access to the web portal			
		OpenStreetMap <sup>®</sup> is used			
		establishment of main and sub-accounts with separate management			
		• creation of geofences in main and sub-accounts			
		• report generator for evaluations			
		detailed online manual			
		automatic sending of reports			
		• use of the ENAiKOON M2M-commserver			
	EFC-04-48	minimum contractual duration: 48 months	€ 19.90	€ 17.90	€ 14.90
	EFC-04-24	minimum contractual duration: 24 months	€ 24.90	€ 22.90	€ 19.90
ENAiKOON fuel-tracker		Enhancement of inViu pro by ENAiKOON fuel-tracker			
	EFT-10-48	minimum contractual duration: 48 months	€ 7.90	€ 6.90	€ 5.90
web service	EFT-10-24	minimum contractual duration: 24 months	€ 9.90	€ 8.90	€ 7.90



## Additional hardware

Product	Part no.	Product description		Price		
			> 5 pcs.	> 25 pcs.	>50 pcs.	
ENAiKOON locate-06 complete package	LOC-07-06	Basic device GPS / GPRS  GSM / GPS window antenna and connection cable (power suppy and I/O)  camera connector backup battery 560 mA/h  1-wire connector for ENAiKOON driver-id configurable	€ 249.00	€ 229.00	€ 199.00	
ENAiKOON device setup	M2M-03-01	Device setup  activation and unlocking of the SIM card insertion of the SIM card into the device software configuration and installation on device production of harness according to customer needs device configuration registration with the ENAiKOON M2M-commserver registration with inViu pro / web full functional test of the device full functional test with inViu pro / web (must be ordered along with the device)	€ 99.00	€ 89.00	€ 79.00	