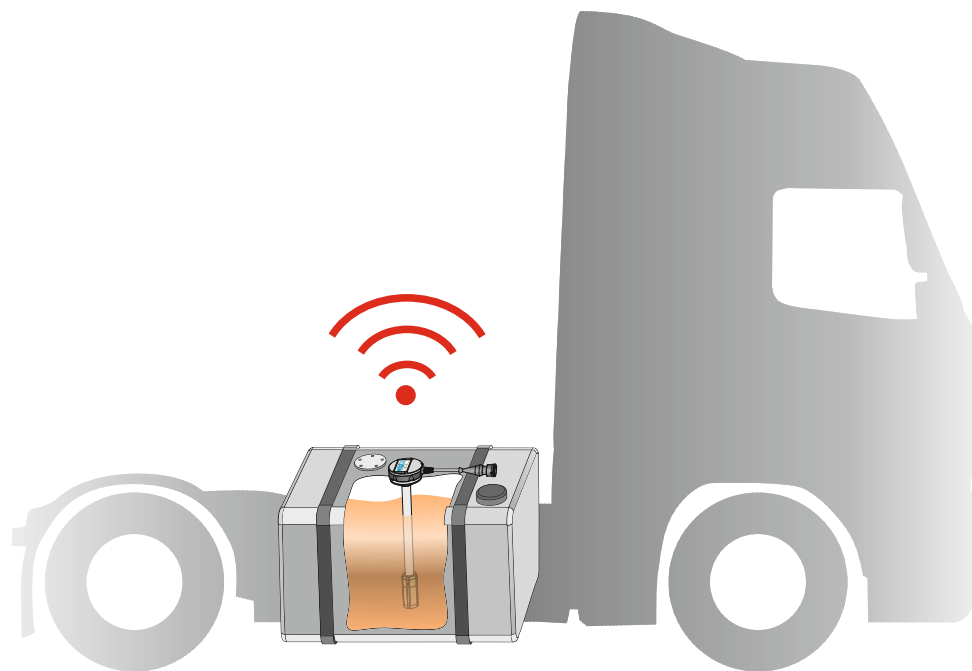




OUT-E GSM

Fuel level sensor



Purpose of use

Areas of application

Tasks

Features

Design

CAN/S6 interface

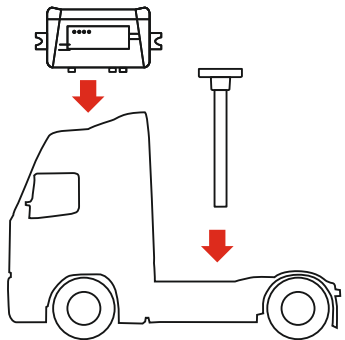
Summary



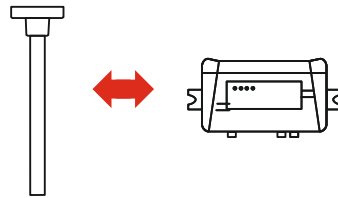
www.jv-technoton.com

Purpose of use/ Challenges

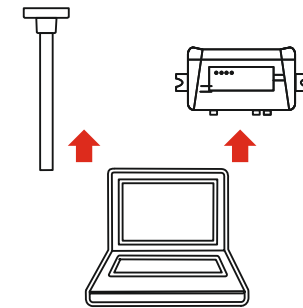
To install regular "FLS + GPS tracker" set it is necessary to:



Mount both devices to vehicle



Interconnect and power both devices with cables



Configure each device and check operability

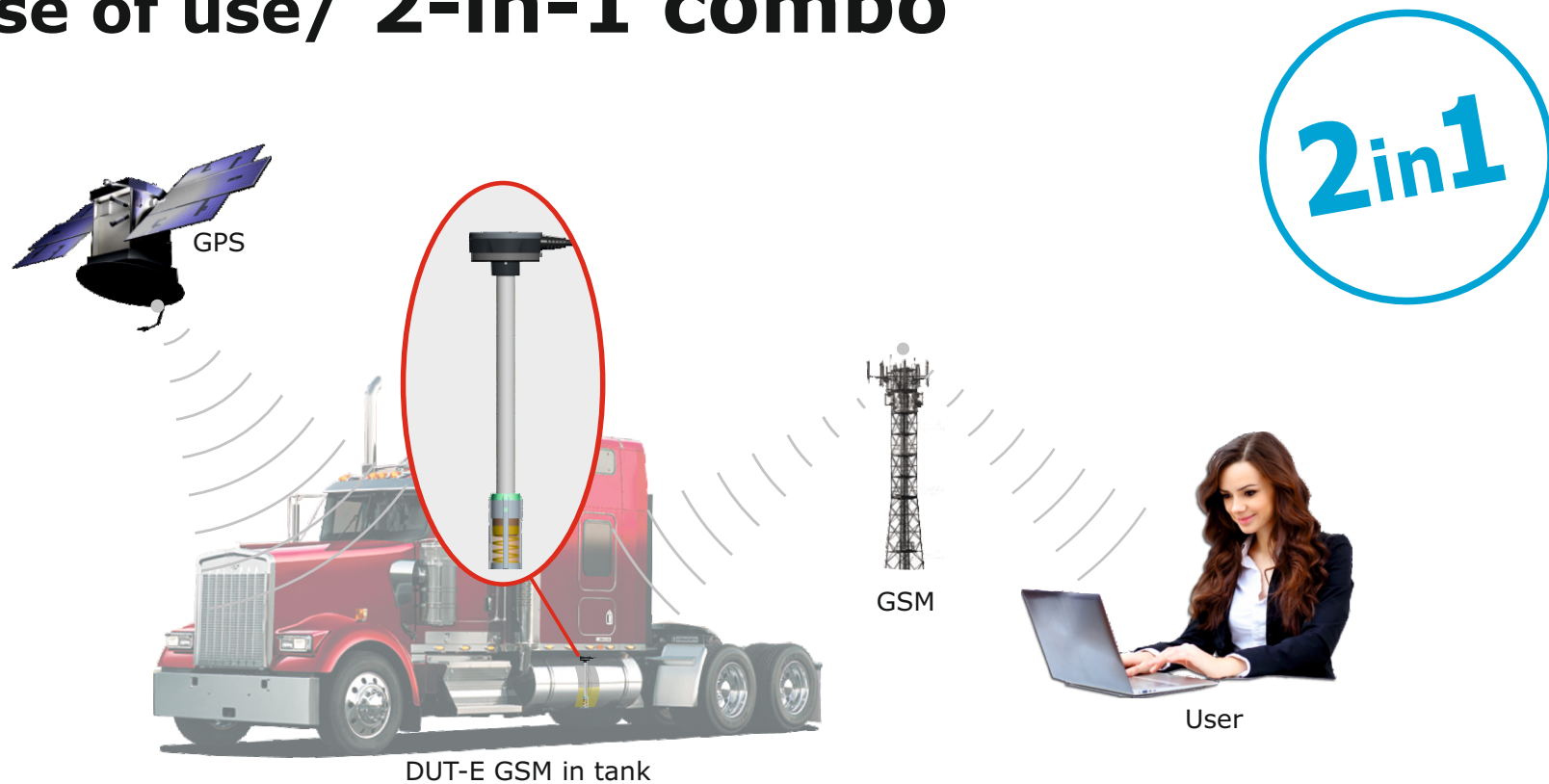
How much time spent?
Is it possible to reconfigure FLS remotely, if necessary?

DUT-E

GSM

Fuel level sensor

Purpose of use/ 2-in-1 combo



Fuel level sensor and GPS tracker in one device.

Tank fuel volume measurement, geolocation and route tracking.

Data transfer to a telematics server, or directly via SMS and by e-mail.

OUT-E

GSM

Fuel level sensor

Tasks



Real-time route tracking



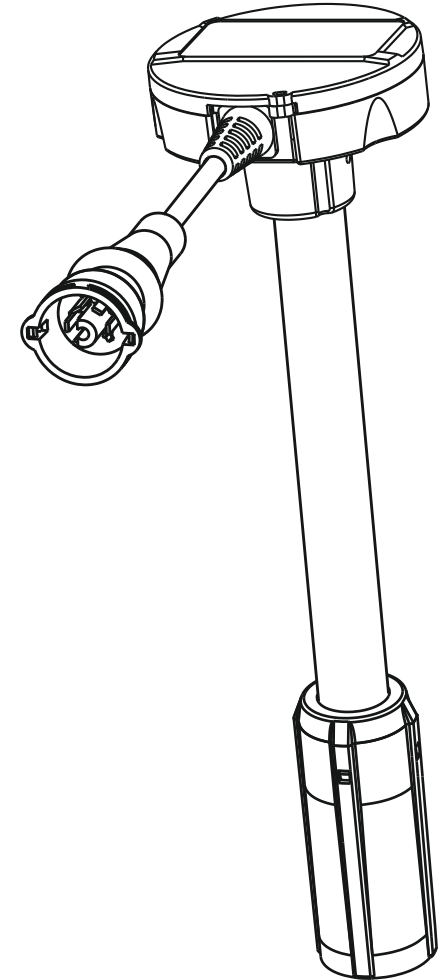
Fuel refill/drain monitoring



Fuel theft prevention



Fuel consumption estimation

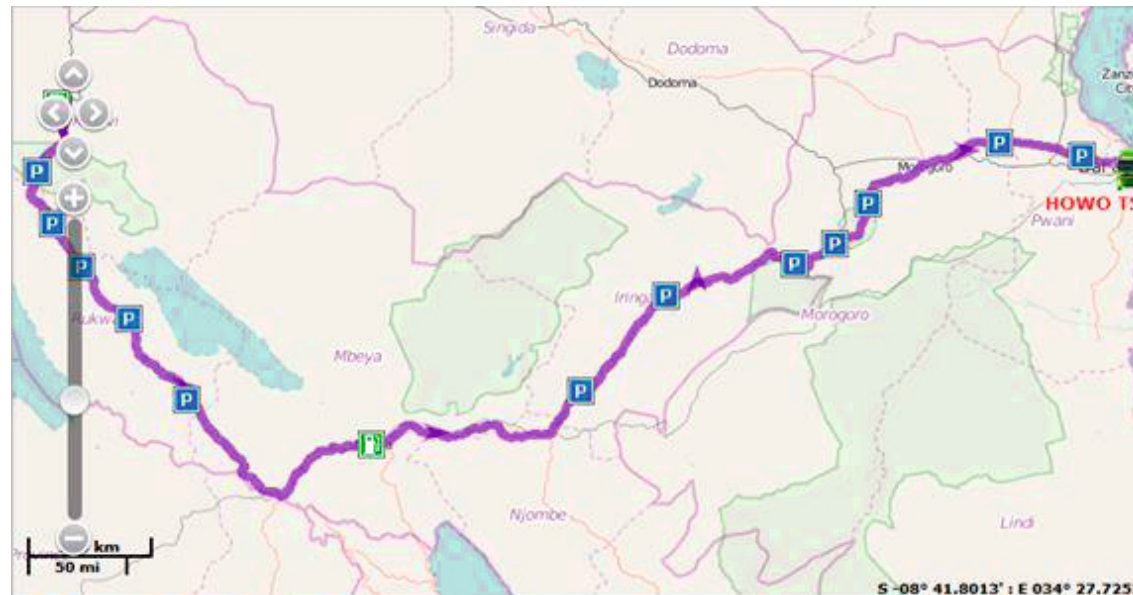


DUT-E

GSM

Fuel level sensor

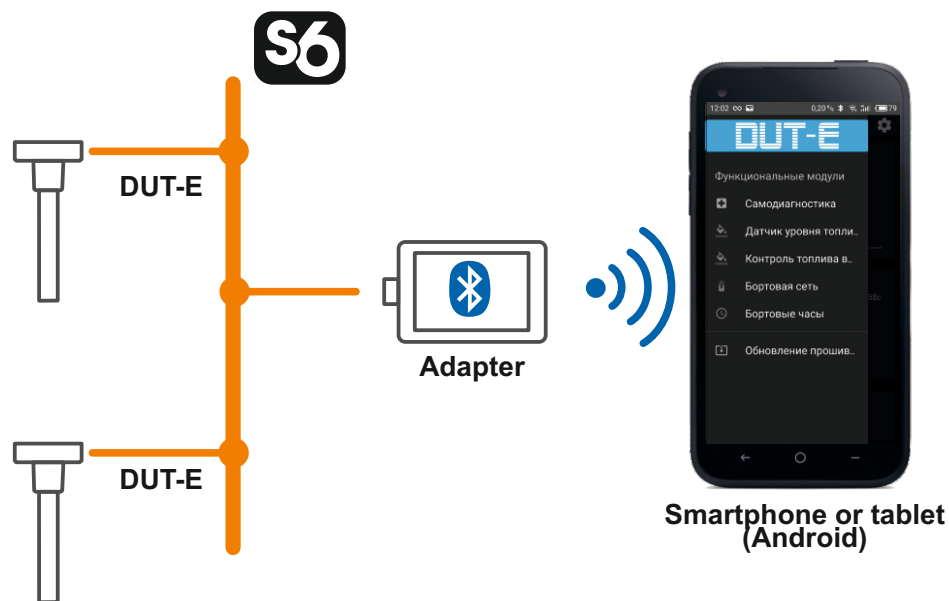
Features/ GPS tracking



Track example – HOWO truck. DUT-E GSM provides complete track of vehicle's route, places and duration of stops, places of refueling, etc.

DUT-E**GSM****Fuel level sensor**

Features/ Configuration over Bluetooth



DUT-E GSM configuration over Bluetooth is possible with Android-based smart phones or tablets. To do that, connect S6 BT Adapter to DUT-E GSM and run Service S6 DUT-E Android application (downloaded and installed via Google Play).

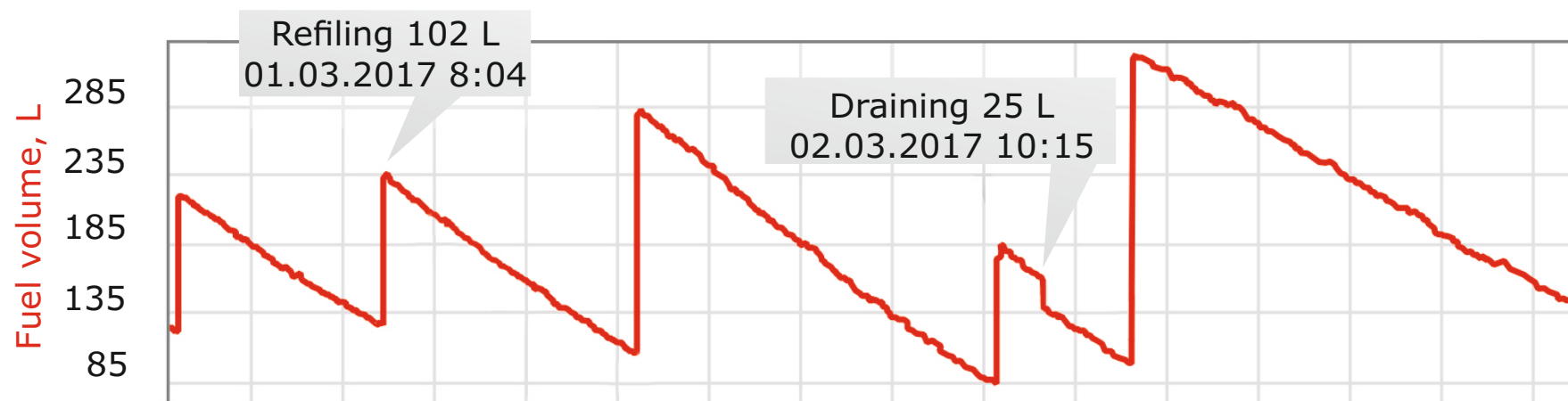
If several DUT-E GSM are connected through CAN/S6 interface, each unit can be configured through single S6 BT Adapter.

DUT-E

GSM

Fuel level sensor

Features/ Recognizing "Refilling" and "Draining" Events



Fuel volume chart example

DUT-E GSM detects the change of fuel volume in fuel tank, sends Reports on recorded refiling and draining volumes.

DUT-E

GSM

Fuel level sensor

Features/ Sending Reports and Events



Events

Standard: refiling/draining fuel, low/high onboard network voltage, lost/established connection with satellites, engine start/stop.

Configurable: fuel level is lower than x%, exceeding allowed time of continuous vehicle operation, speeding, etc.



Reports

Combination of 10 selected operation parameters. Reported is sent regularly or triggered by Event, which is selected from the list.

DUT-E GSM can send up to 20 different Reports simultaneously, on regular basis or upon Event recognition.

DUT-E**GSM****Fuel level sensor**

Features/ Configuring Reports

The screenshot shows the 'Reports Generator' window with the 'Fuel Discharge' report selected. The interface includes several configuration sections:

- Enable Report:** A checkbox is checked. Below it, 'Generate a Report when an Event occurs' is selected. The 'Event SPN' is set to 'SPN 521201 - Fuel Discharge' and the 'Report Name' is 'Fuel Discharge'.
- Report generation conditions:** Includes checked options for 'Ignition OFF', 'Ignition ON, stopped', and 'Movement'. The 'Roaming' option is unchecked.
- Receivers of Reports:** The 'Automatic Vehicle Location' checkbox is checked. Under 'E-mail', three dropdown menus are all set to 'Disabled'. Under 'SMS', three dropdown menus are also all set to 'Disabled'.
- Report Data (SPN):** A table with columns for 'SPN', 'Bus Marker', and 'S6 Address (SA)'. It lists five power-related SPNs, each with a checked 'X' in the first column, 'Not Used' in the second, and '101' in the third.

	SPN	Bus Marker	S6 Address (SA)
X	SPN 158 - Keyswitch Battery Potential	Not Used	101
X	SPN 521055 - Vehicle Power Supply Voltage	Not Used	101
X	SPN 521055 - Vehicle Power Supply Voltage/Average For 5 Minutes	Not Used	101
X	SPN 521056 - Vehicle Power Supply Status	Not Used	101
X	SPN 521076 - Vehicle Power Supply Presence	Not Used	101

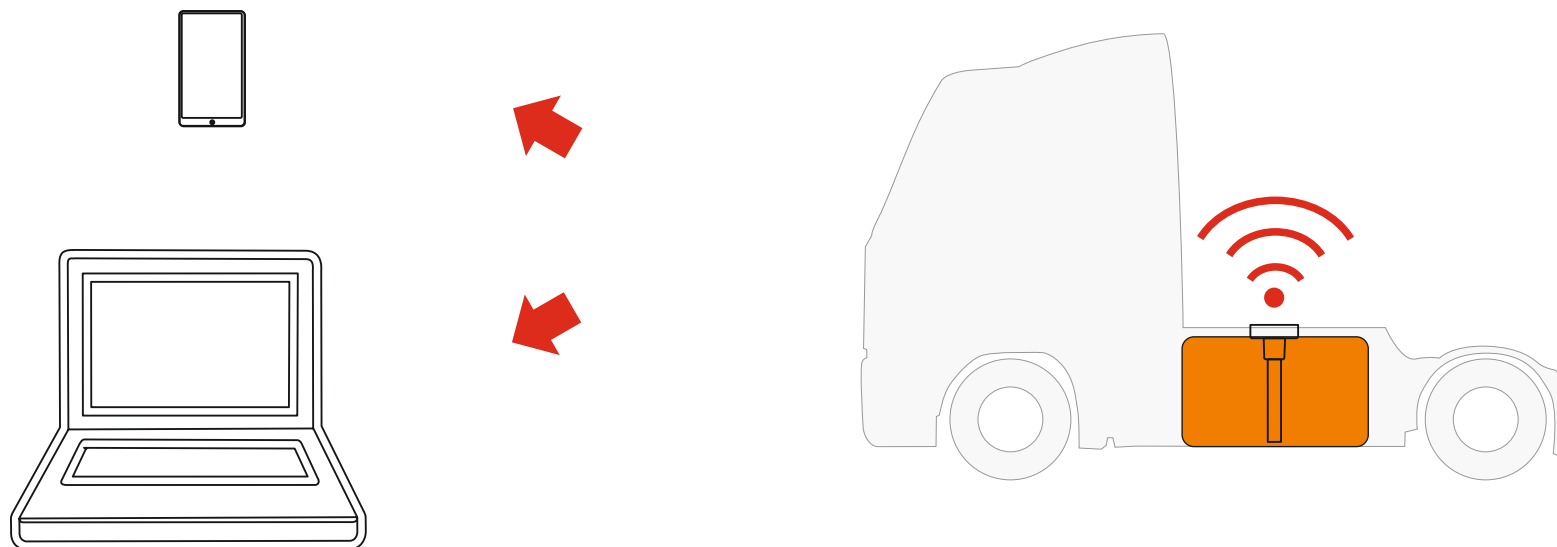
“Reports Generator” menu in Service S6 DUT-E software allows to create and configure up to 20 different Reports. Reports are also configured remotely.

OUT-E

GSM

Fuel level sensor

Features/ **Sending SMS and e-mail**



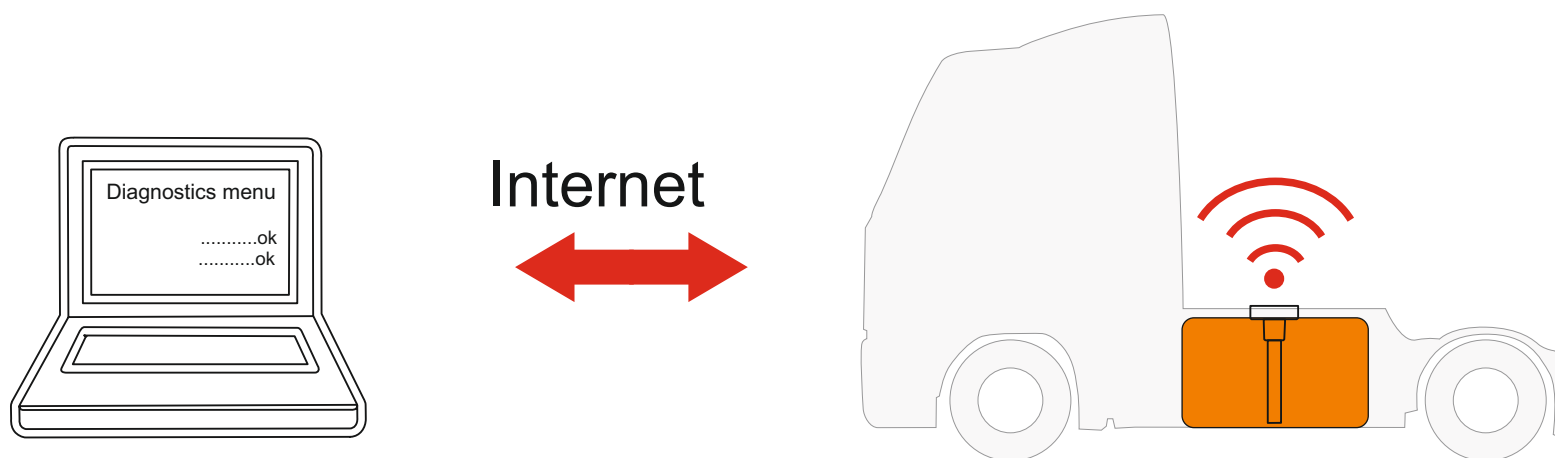
Prompt notification by SMS on recognized important Events.
Sending Reports to user's e-mail without using telematics server.

OUT-E

GSM

Fuel level sensor

Features/ Remote diagnostics and configuration



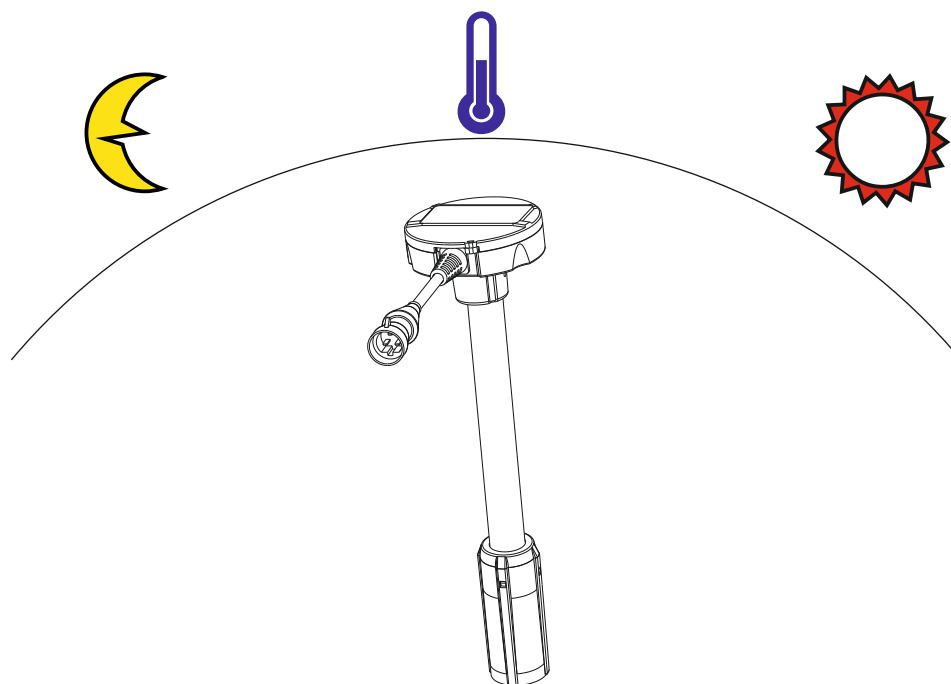
Remote check of sensor's quality of operation - accuracy, settings, malfunctions.
Allows to configure sensor remotely without any physical connection.

OUT-E

GSM

Fuel level sensor

Features/ Temperature correction



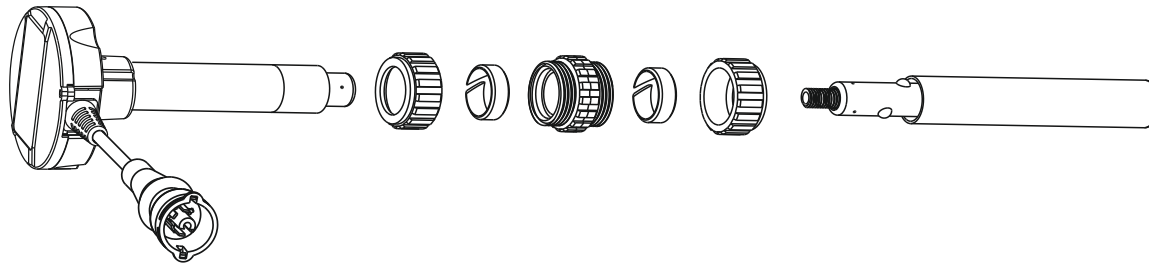
Accurate fuel volume measurement while ambient temperature is changing within -40 to $+85$ °C range.

OUT-E

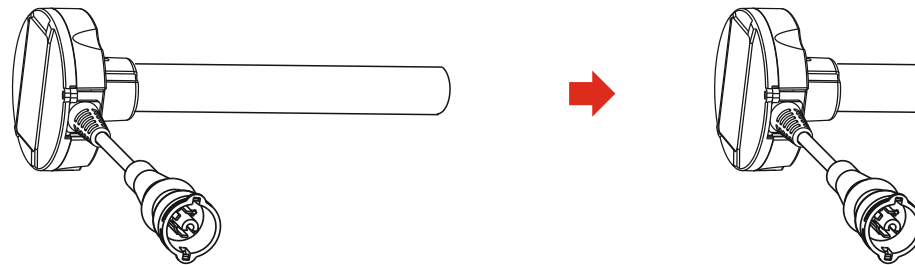
GSM

Fuel level sensor

Design/ Extending and shortening probe length



Extending with additional sections up to 6000 mm. Simplifies delivery and reduces delivery costs for projects with big fuel tanks.



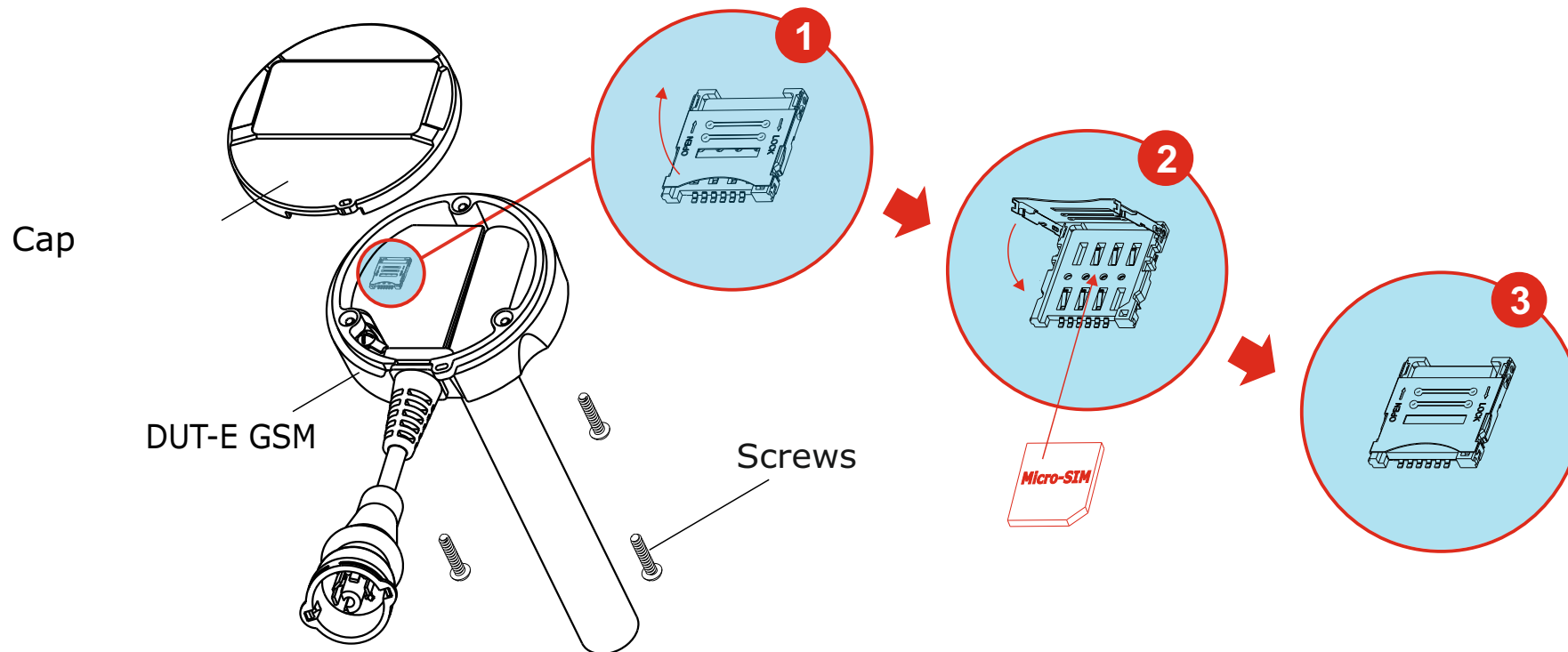
Can be cut to any length needed - sensor will fit any fuel tank.

DUT-E

GSM

Fuel level sensor

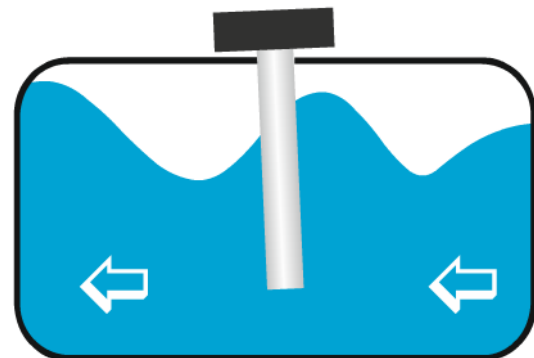
Design/ Installing SIM-card



Design/ Screen filter and bottom stop

Delivery set of all fuel level sensors made by Technoton contains mounting kit with bottom stop and screen filter.

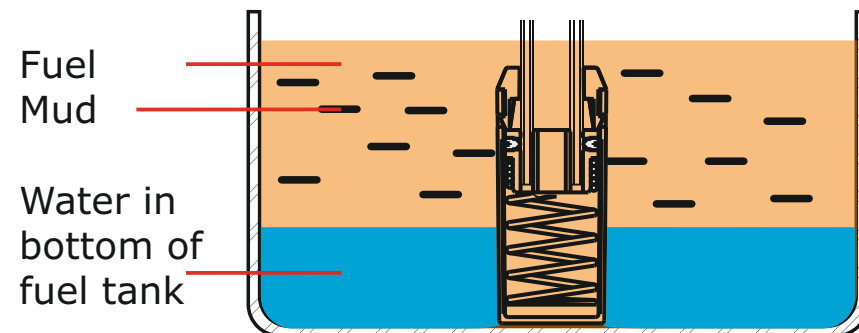
Bottom stop



▶ Without bottom stop

Enhances rigidity of fastening and decreases influence of vibration on measurement accuracy.

Screen filter



Protects tubes from water and mud in tank's bottom, increases lifespan of fuel level sensors.

DUT-E**GSM**

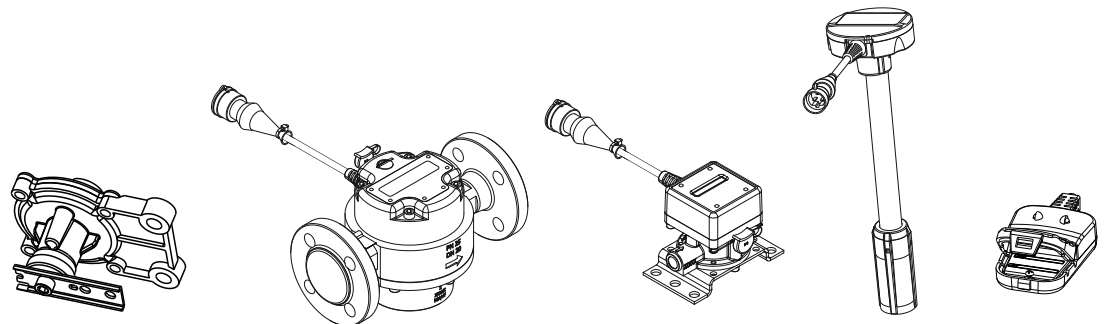
Fuel level sensor

CAN/S6 interface/ System extension

DUT-E GSM can be used as a central unit of advanced telematics system. Using CAN/S6 interface, other devices can be connected to the sensor:

1. Up to 7 DUT-E CAN fuel level sensors.
2. Up to 8 DFM CAN or DFM Marine fuel flow meters.
3. FSMCroccodile contactless FMS-gateway.
4. MasterCAN DAC J1939 i/o module for processing signals of analog sensors, e.g. GNOM axle load sensors.

Solution for highly complexed objects

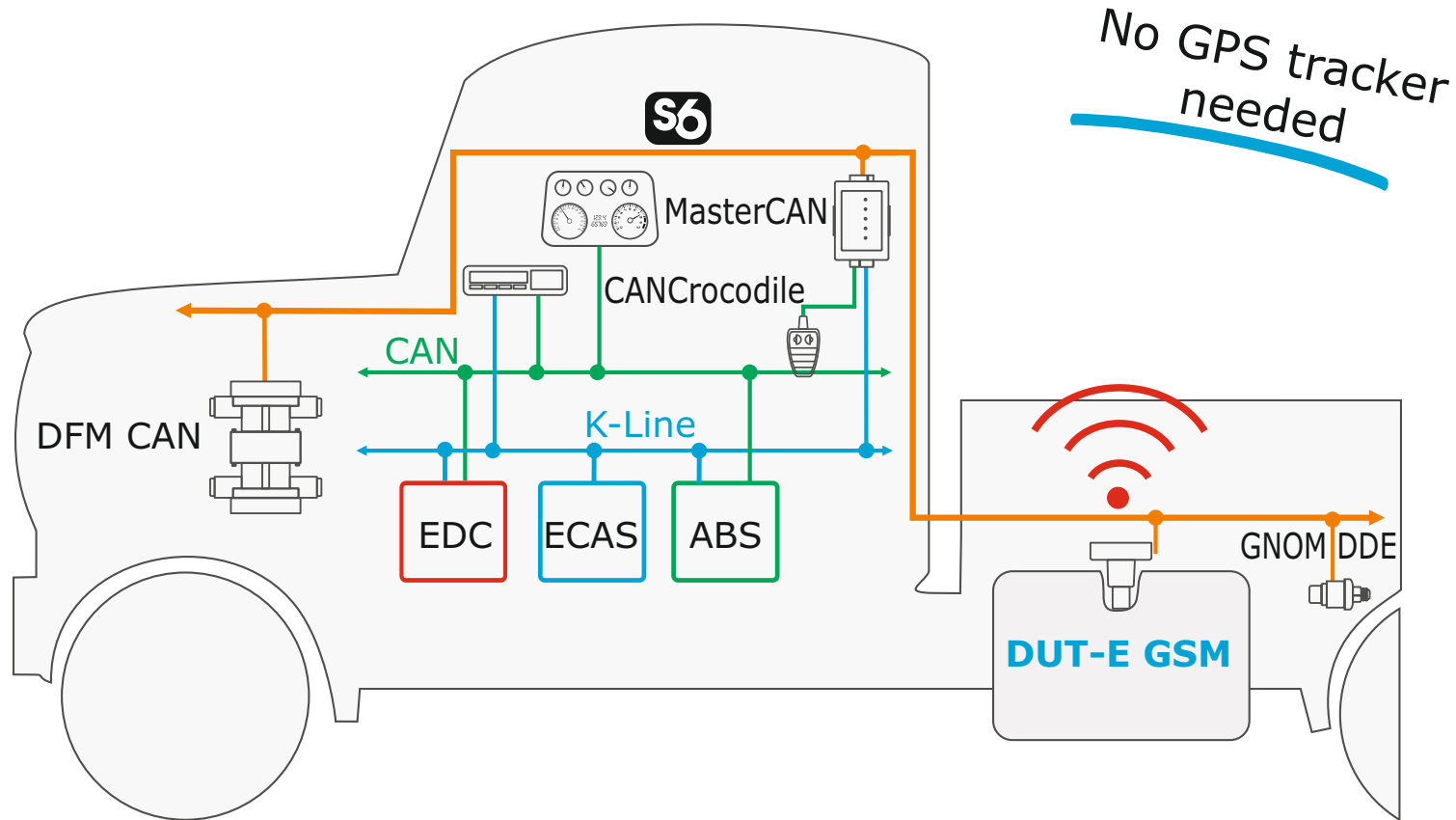


DUT-E

GSM

Fuel level sensor

CAN/S6 interface/ Vehicles



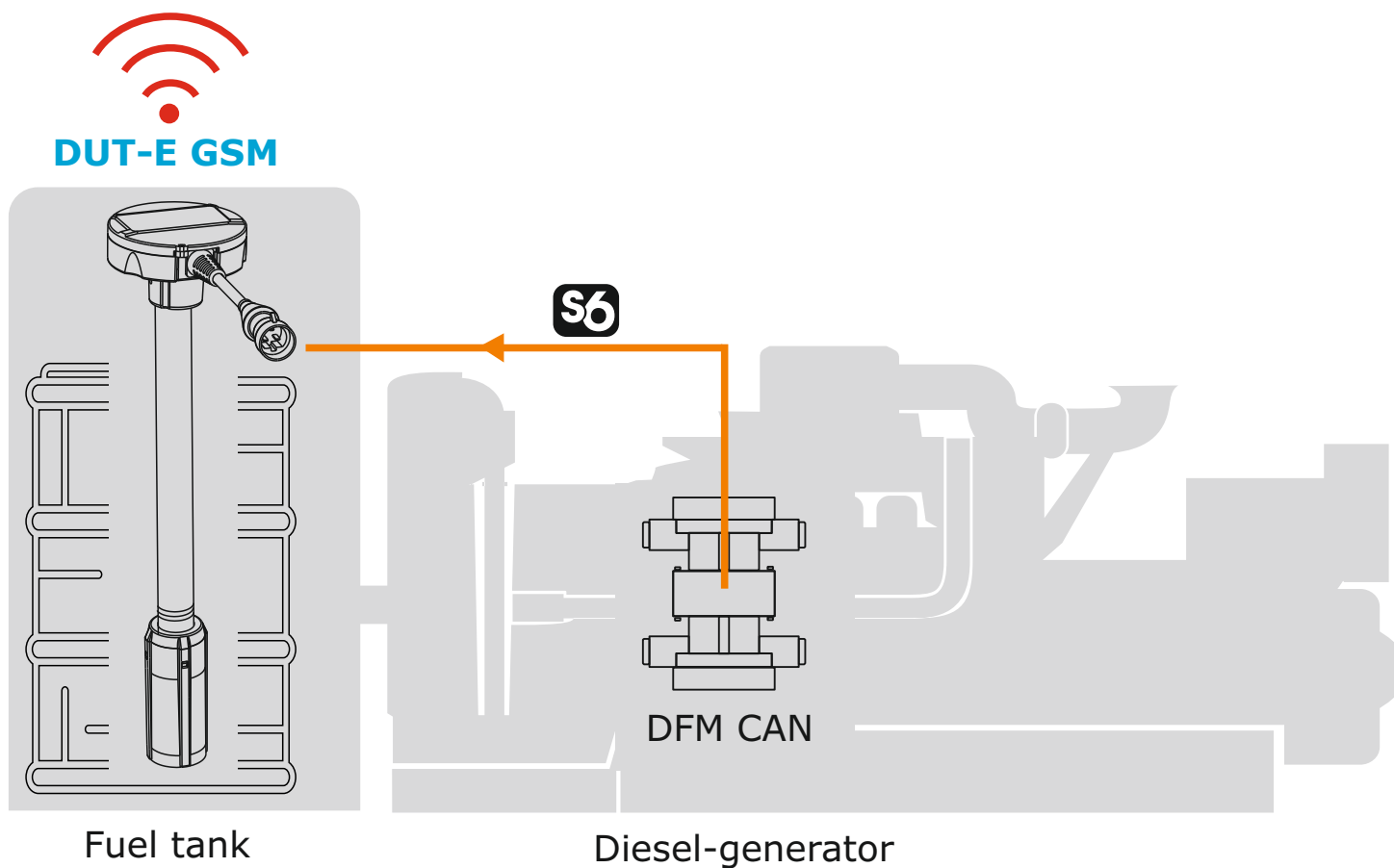
When operated within CAN/S6 telematics interface, DUT-E GSM receives data from other devices and transfers aggregated information to telematics server.

DUT-E

GSM

Fuel level sensor

CAN/S6 interface/ Stationary units



Summary

1. Two-in-one.

Saving time for installation and configuration.

“Hardware/firmware incompatibility” is not topical anymore.

2. Flexible Report generation system.

Receiving ready-for-use Reports, no need of further data processing and creating report templates on telematics server.

3. Remote diagnostics and configuration over the Internet.

Saves customer’s time and efforts of technical support team.

4. Operation via CAN/S6.

Advanced telematics system connected over a single cable.

Compatibility is guaranteed, saves time on equipment installation and cabling.

OUT-E

GSM

Fuel level sensor

Learn more

Official web



www.jv-technoton.com

CAN/S6 telematics interface description



www.s6.jv-technoton.com

Document center



www.docs.jv-technoton.com

Official YouTube channel



/c/technotonen

Follow us in social networks



/company/technoton



/technoton