



Installation Guide/ Operation Manual, Page 1 EcoCloud & Webportal

Ultrasonic level indicator for heating oil, diesel fuel, lubrication oil and water tanks PROT-EC-IA-v4 (status as at 11/2014)

Step 1 - Preparation

A. Unpacking

Check the contents of your EcoCloud package.

B. Package contains:

- 1 x Proteus EcoCloud GSM ultrasonic sensor
- 1 x Neoprene seal
- 1 x Adapter ring
- 2 x Screws (for attaching the adapter ring) 1 x Configuration data sheet with data of your Tank
- 2 x Barcode stickers
- 1 x Magnet (is needed only in case of error)
- 1 x This installation guide

C. Correct sensor orientation

Make sure that the sensor is mounted the right way, so that the ultrasonic signal reaches the liquid surface of the medium to be measured at the right angle (90°) (see Fig. 1).

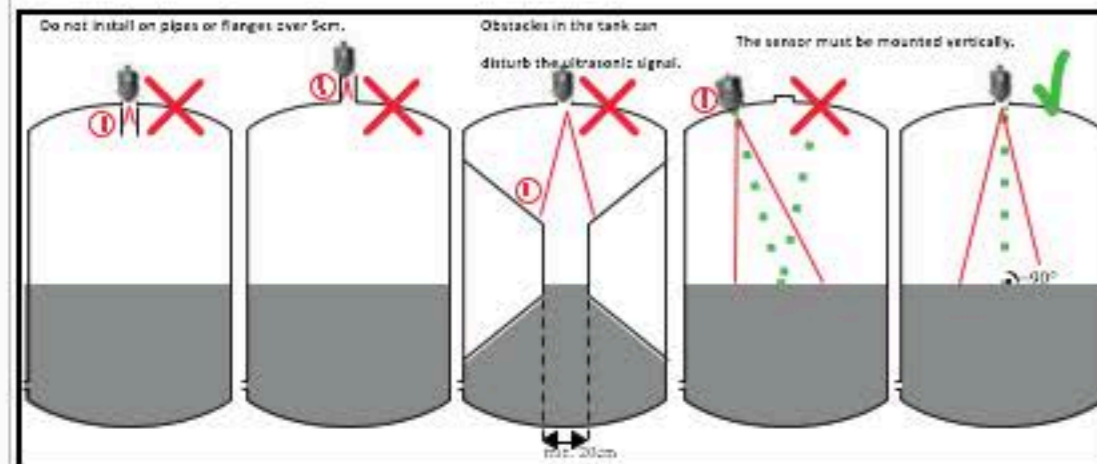


Fig. 1 - Correct sensor orientation

D. Tank dimensions registered?

Have you specified the correct tank data during placing order? If your tank has not yet been registered, please contact the Proteus Customer Support.

Step 2 - Mounting the EcoCloud device on tank

Heating oil and fuel tanks (under TÜV requirements)

Tanks with 1 ¼" and 1 ½" threaded openings:

- Sensor must be mounted with adapter ring
- Place seals 1 and 2 as shown in Fig. 3 and screw with the adapter ring
- Mount the sensor in the tank.

Tanks with 2" threaded openings:

- Remove the adapter ring (Fig. 4) and the inner sealing from the sensor (2, Fig. 3)
- Put the neoprene seal (1, Fig. 3) on as shown in the picture
- Mount the sensor in the tank.

Other tanks without threaded opening (for example, water tanks and cisterns) *:

Once you have found an adequate location for the sensor, drill a 47mm hole in the tank (as centrally as possible, at the highest point of the tank), put the weather seal and attach the adapter ring centrally above the hole with the screws provided. Screw the sensor into the adapter ring.



Fig. 2 - Sensor side view

Proteus EcoCloud device without an adapter ring, side view



Fig. 3 - Sensor bottom view

Proteus EcoCloud sensor without an adapter ring, view from below:
1 neoprene seal/weather seal

- 2 Internal seal ring
- 3 sensor membrane
- 4 1 ¼" thread
- 5 1 ½" (47mm) thread
- 6 2" thread



Fig. 4 - Adapter ring

Adapter ring, bottom view

*Please note:

Only valid for tanks which are not under TÜV requirements. Proteus and the Inno-Tec GmbH do not take any responsibility for damaged tanks or sensors, or loss caused by incorrect or negligent installation/assembly of the device.

Step 3 - Access to the Web portal

The EcoCloud comes as preconfigured device immediately ready to measure the liquid level in the tank.

Login page:

<http://ecocloud.proteus-meter.com>

Username

Your email address specified while ordering.

Password

The IMEI number of your device (see the label below bar code on the back of the sensor, Fig. 5)



Fig. 5 - IMEI number of your device

Note

- Avoid installing the EcoCloud on tank flanges longer than 5cm (Fig.1)
- Maximum measuring range of the sensor is 3m.
- Please note that the sensor uses a 20 cm measuring cone, so this area (from the sensor membrane to the bottom of the tank) must be free of obstacles to allow the EcoCloud make measurements in the right way (Fig. 1).

GPRS/GSM signal

Using a mobile phone you can determine strength of available GPRS/GSM signal. Without access to GPRS/GSM networks EcoCloud device won't be able to send measurement data to the Proteus data server.

Customer support

Visit www.proteus-meter.com/faq, where you will find general information and answers to frequently asked questions (FAQs).

Our free Customer Service is also available directly by phone: +49 (0)7622 697 9359 or e-mail: support@proteus-meter.com.





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1. Data visualization on the web portal

Measurement data sent by the EcoCloud sensor are displayed in the web portal.

The EcoCloud sensor measures the actual tank volume at hourly intervals.

These data are stored by the sensor and transmitted daily at about 15:00 clock to the web portal. The EcoCloud beeps for about 5 minutes during the data transmission.

The web portal provides the measurement data in graphical form, the current actual volume in liters and percent, the battery status and the GPRS/GSM signal strength.

The web portal has also been optimized for mobile devices like smartphones and tablets allowing you to access your data whenever an Internet connection is available - all over the world.

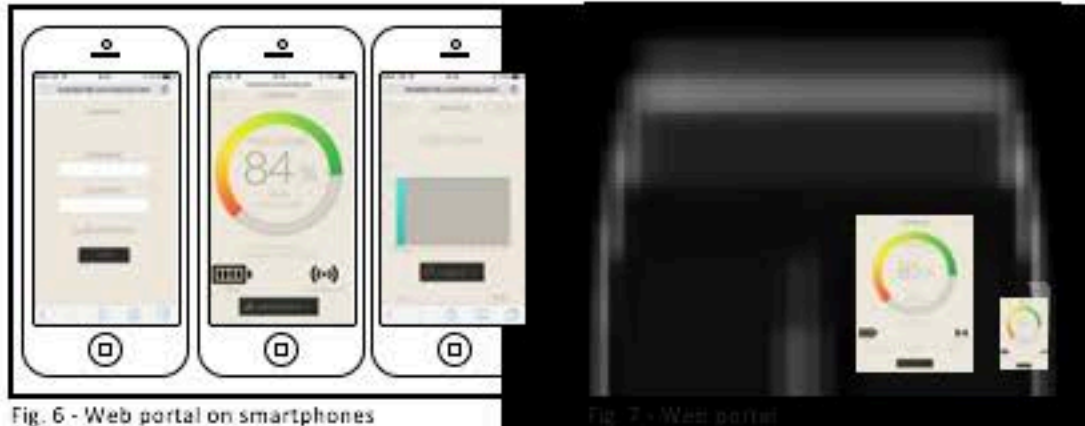


Fig. 6 - Web portal on smartphones

Our web portal was developed and created in collaboration with Cumulocity GmbH (www.cumulocity.com). The know-how of the Düsseldorf based company allows us to show you the concept of Internet of Things as an example of using modern technologies in everyday life.

Partnership with Cumulocity also allows us to fulfill individual wishes and constantly expand and improve our platform's functionality. Please [contact our Customer Support](#) if you have individual wishes.



2. Notes on installation and mounting

Sensor automatically subtracts the lower 8cm of the content in the tank (residue/dead zone), so the EcoCloud displays usable volume only. The so-called dead zone can be specified during the ordering or registration.

If an air zone (empty area between the maximum liquid level and sensor membrane) is larger than 12cm, the difference must be specified as an offset value (tank height H minus max. fill level height), remembering that heating fuel oil tanks are filled up to only 95% for safety reasons.

Example of tank without offset

When the air buffer does not exceed 12 cm, it is not necessary to enter offset.

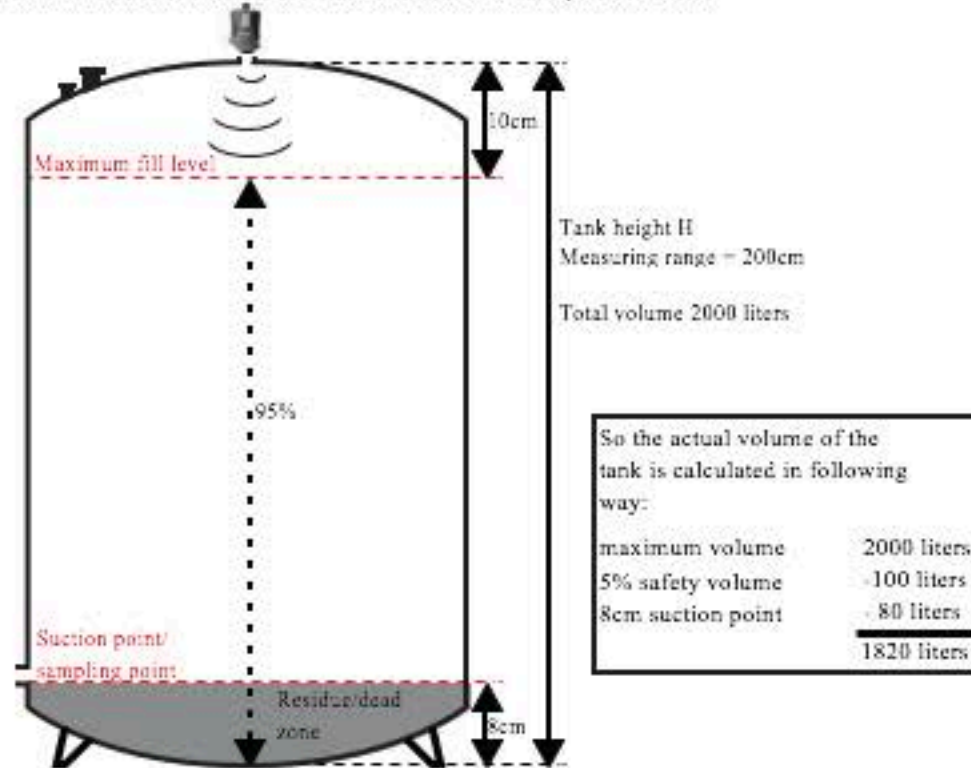


Fig. 8 - Example of tank without offset.

Example of tank with offset

When the air buffer exceeds 12 cm, offset value must be specified.

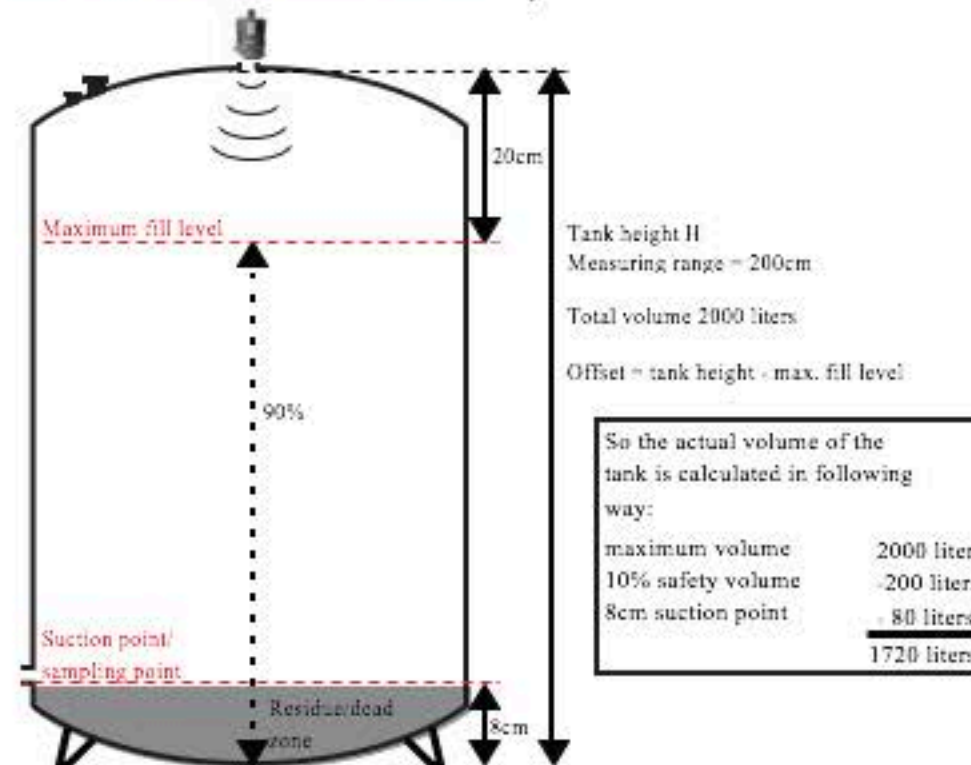


Fig. 9 - Example of tank with offset.

3. Warranty

This product has a warranty period of 24 months, running from the date of purchase, protecting you against device loss and failure. This does not affect your legal rights. Normal wear, damage due to negligence, accident or improper use/ installation of this device is not covered by the warranty.

Any modifications or changes that were carried out by the purchaser or a third party, including repair attempts, cancel the warranty provisions.

The warranty is valid only if the device has been installed according to the instructions and connected to an electrical power supply with parameters specified.

The warranty is canceled as soon as the equipment has been resold by customer.

This product may only be used in the private sector. The obligations of the Inno-Tec GmbH are limited to repair or, at will, to replace the product.

The unit should be returned only after receiving confirmation by the customer.

To contact the customer service, please fill out a form on our website www.proteus-meter.com. If asked, you must return the complete package, so that device can be checked for errors and need of exchange to the new one could be confirmed. Inno-Tec GmbH, its sub-subsidiaries and distributors shall not be liable for any indirect or consequential loss or damage that may be caused by the use of this product.

4. Contact data

If you have further questions about the configuration, installation or general usage of the device, please visit our Help page on www.proteus-meter.com/faq, where you will find videos and answers to frequently asked questions (FAQs), or contact us using our free customer service:

Phone: +49 (0)7622 6979 359

e-mail: support@proteus-meter.com

