

EcoFrog: Configuration and Installation Guide

Ultrasonic level gauge for tank filling measurement.

Annotations

You have already provided important data on your tank with your online order. This allows us to pre-configure your gauges according to the application. The supplied the EcoFrog is already programmed to your specifications and therefore able to perform accurate level measurements in your tank. Please note that the preset the EcoFrog only provides correct measurement results for the tank type with the basic geometric parameters that match your specifications. These parameters are as follows:

Basic geometric parameters for the EcoFrog pre-configuration :

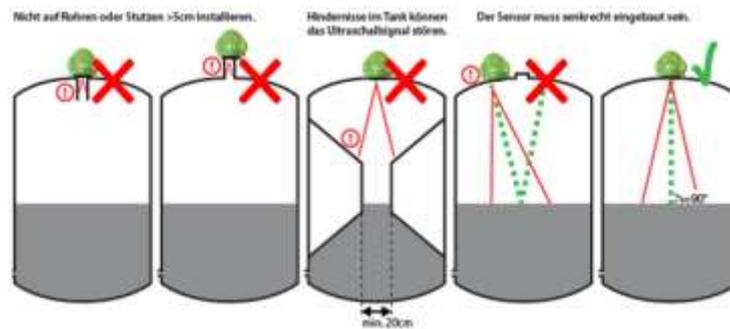
- Fluid in the tank
- the geometric shape of the tank (tank type A, B or C)
- tank width / length / depth
- Maximum volume (litres)
- Height of sampling point/suction point
- Height of gauge above maximum level (empty area)



Before installing the gauge on the tank

The following instructions must be followed before installing the EcoFrog on the tank: (more Info on our website)

- The tank must be within range of a local WIFI network to allow the EcoFrog to connect to the Internet.
- Tank nozzles over 2 cm high (5 cm for 2" diameter nozzles) should be avoided when installing the EcoFrog.
- Please keep a safety distance of at least 20 cm between the gauge and the tank wall. (For example, a basketball should fall undisturbed and not be distracted by facilities, etc.).
- The maximum measuring range is 3 m between the gauge and the ground (0% mark).



Ecofrog Application Areas

- Tank contents: fuel oil, used oil, diesel, kerosene, water, etc.
- Ecofrog's main functions: level indication and monitoring, avoid supply failures, optimize supplies or collections, permanent access to the filling level from any location.

INSTALLATION & CONFIGURATION

Step 1: Connect Ecofrog to the WIFI local network

To transfer the measured data to the database server, the Ecofrog must first be connected to the local WIFI network. Multiple gauges can operate on the same WIFI network without mutual interference. Each Ecofrog has a unique number that is used to assign measurement data to the respective gauge or tank in the database server.

Note: It is important that all gauges are within the range of your local WIFI network. The signal strength must be sufficient to avoid attempts to reconnect, otherwise the battery life may be reduced.

Integration of the Ecofrog into the WIFI local network:

1. Press the black button on the top of the Ecofrog for about 6 seconds until the next LED turns red.
2. Using your smartphone or computer, search for an input named TEKELEK - XXXXX (=Ecofrog) in the WIFI connections and connect to that input.
3. Enter the Ecofrog fixed IP address (192.168.4.1) in the address bar of your smartphone or web browser on your computer and load the gauge display page.
4. On the display page, select your local WIFI connection (SSID) from the list under "Select WIFI Network", enter the network password under "Enter Network Password" (usually found on the router box) and connect to "Connect to WIFI".



Mounting the Ecofrog on the tank :

1. Look for the thread opening provided at the top of the tank (usually a 2" or 5 cm nut thread). Remove the cover and keep it.
2. ensure that the opening is at least 20 cm from the sides of the tank and that there are no internal obstacles that could affect the quality of the measurements.
3. Place the foam gasket supplied with the Ecofrog on the threaded opening.
4. Screw the Ecofrog clockwise into the threaded hole.



Step 3: Manual connection test of the Ecofrog

Congratulations! Your Ecofrog is now ready for use. If there are connection problems to the WIFI and you need to identify the problem, you can manually test the Ecofrog network connection:

1. Press the black button on the top of the Ecofrog for only 2 seconds until the LED turns green. The Ecofrog then sends a test data to the server on the Internet.
2. Wait about 20 seconds for the LED to start flashing green or red.
3. The green flash indicates that the test was successful and that the data was transmitted to the data server as intended. The red blinking indicates that the connection was not successful. The number of flashing red signals gives you an indication of the cause of the error so that you can correct it:

List of red flashing signal codes to limit a transmission error:

- 1 blink signal - WIFI network not found (or WIFI configuration incomplete)
- 2 blink signals - connection to the WIFI network failed (e.g. bad signal or MAC filtering enabled on the router)
- 3 blink signals - WIFI password incorrect (case sensitive!)
- 4 blink signals - Server endpoint is not accessible (no web service detected)
- 5 blink signals - No server response (data sent but server response not received)
- 6 blink signals - Invalid server response (e.g. http 404 response returned)
- 7 blink signals - Firmware download failed (dead time, not found or wrong type)
- 8 blink signals - Low battery (a discharged battery can prevent WIFI connections)
- 9 blink signals - WIFI module does not respond (critical error)

If you are unable to solve the problem, please contact us.