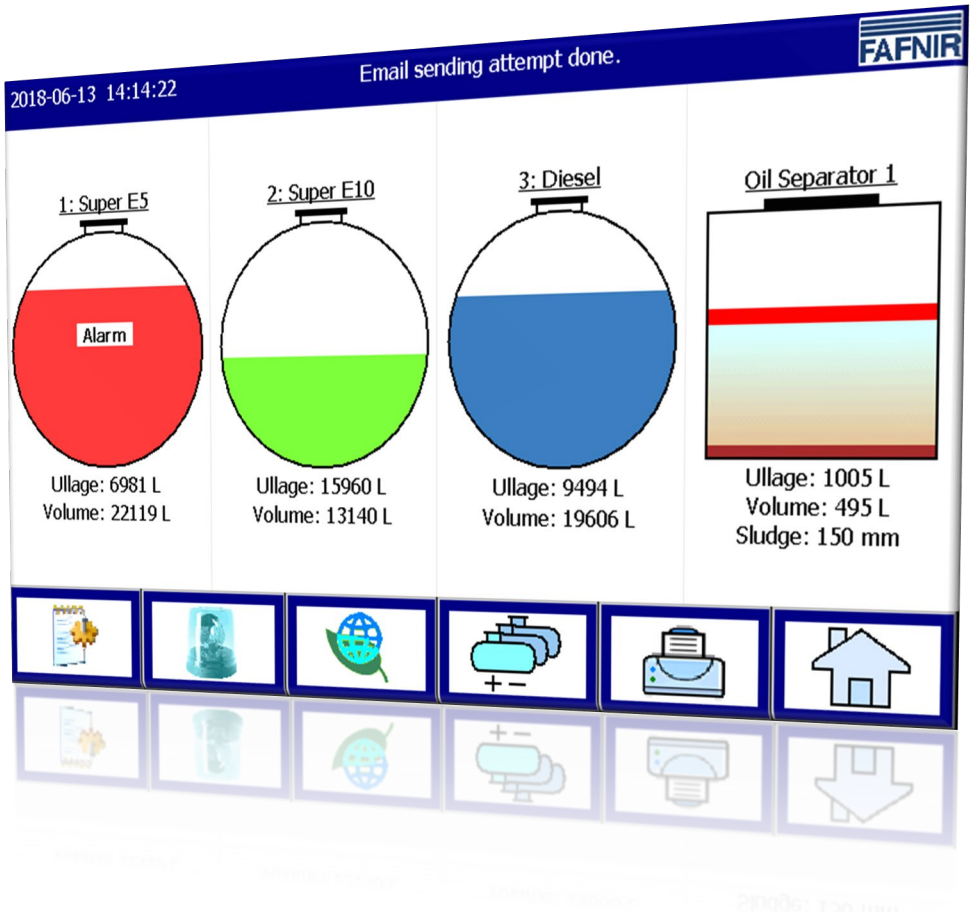
Technical Documentation

VISY-X END OF LIFE

VISY-SoftView V 1.9.1 User Guide
for VISY-Command GUI and VISY-View Touch



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1 Introduction

The display of the FAFNIR products VISY-Command GUI and VISY-View Touch can be used as an alternative to a petrol station computer for the representation and evaluation of tank data. The software VISY-SoftView is used as firmware for the display.

The tank data, delivery data and various alarms are displayed on a coloured TFT screen. All functions can be reached via the touch screen user interface. Optionally, a printer can be connected to the serial interface.

Alarms are signalled visually by the display module and also audibly by a buzzer.

This document describes the use of VISY-SoftView. For configuring VISY-SoftView as administrator, see the following instructions:

VISY-SoftView Administrator, art. no. 350144

For the use of Oil Separators (OS) with VISY-Stick probes as data source, a separate VISY-SoftView guide for configuration and use is available:

VISY-SoftView Oil Separator, art. no. 350193

VISY-SoftView obtains the measured values, alarms, product data and configurations from the central unit VISY-Command. For installation and operation of the VISY-Command and the VISY-View Touch, see the following guides:

VISY-Command..., art. no.: 207184

VISY-View Touch, art. no. 350055

VISY-Command is configured with the VISY-Setup software. For instructions on how to configure, see:

VISY-Setup V4..., art. no. 207158

1.1 Safety instructions

The VISY-SoftView software is intended for use in petrol stations. The software is used to evaluate filling levels and to control tanks and their supply pipes. The system must be used exclusively for this purpose. Please observe and follow all product safety notes and operating instructions. The manufacturer accepts no liability for any form of damage resulting from improper use.

VISY-Command GUI and VISY-View Touch, on which the VISY-SoftView software application is installed, have been developed, manufactured and tested in accordance with the latest good engineering practices and generally accepted safety standards. Nevertheless, hazards may arise from their use.

The following safety precautions must be observed in order to reduce the risk of injury, electric shocks, fire or damage to the equipment:

- Do not change or modify the system or add any equipment without the prior consent of the manufacturer.
- Only use original parts. These comply with the technical requirements specified by the manufacturer.
- The installation, operation and maintenance of the VISY-Command GUI and VISY-View Touch with VISY-SoftView must be carried out by qualified personnel only.
- Operators, installers and service technicians must observe all applicable safety regulations. This also applies to any local safety and accident prevention regulations which are not stated in this manual.

The following safety information must strictly be observed:

The touch screen may be operated only by finger or with specially designed touch pins. The use of pointed objects (e.g. screwdrivers, pens, ...) may damage the touch screen!

Useful tips:

Useful tips and information in this user guide you should observe, appear in italics and are identified by this symbol.

2 Modules

The VISY-SoftView software consists of the 2 modules

- VISY-SoftView Starter and
- VISY-SoftView

2.1 VISY-SoftView Starter

The VISY-SoftView Starter module is the start-up and control program. During start-up phase, the user is presented the start of the main program VISY-SoftView, and during operation the VISY-SoftView main program is monitored by VISY-SoftView Starter.

2.2 VISY-SoftView

The VISY-SoftView module is a display and report program for displaying the tank information of the VISY-X system.

2.3 System-wide functions

☞ *Individual functions of the main window can be password-protected, see chapter "Password" in VISY-SoftView Administrator guide, art. no. 350144.*

☞ *Tapping on certain fields will automatically close all open windows and the application returns to the main window.*

☞ *The display of the measured values is continuously updated, so that current values are displayed always.*

☞ *The representation of the measured values differs depending on the configuration.*

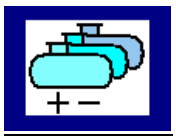
☞ *Measured values with the suffix "TC" are temperature compensated values. Measured values without the suffix "TC" are non-temperature compensated values.*

☞ *Reports and alerts can be sent via e-mail, if these functions have been configured.*

2.4 General function keys

With the function key "Home" the main window is opened from every submenu.

The "Printer" function key prints out the valuesdisplayed in the current window in tabular form.



The function key "Tanks" changes the display to show additional tanks / oil separators.

With the function key "Speed-Button" you can quickly switch to the other half of the window without having to use the scroll bar. The arrow shows the jump direction (up / down).

3 Main window

The main window is used to display the most important measured values, system information and access to the menus using function keys. The main window can be configured to display the "Standard" mode or the "Truck Driver Display" mode. The operating mode is set in the "System functions" menu.

3.1 Tank display Standard operating mode

The following graphic shows a typical example of the main window in the standard operating mode with the representation of tanks and oil separators.

If more than 8 tanks or oil separators are configured, you can switch with the function key "Tanks" to display the other ones.

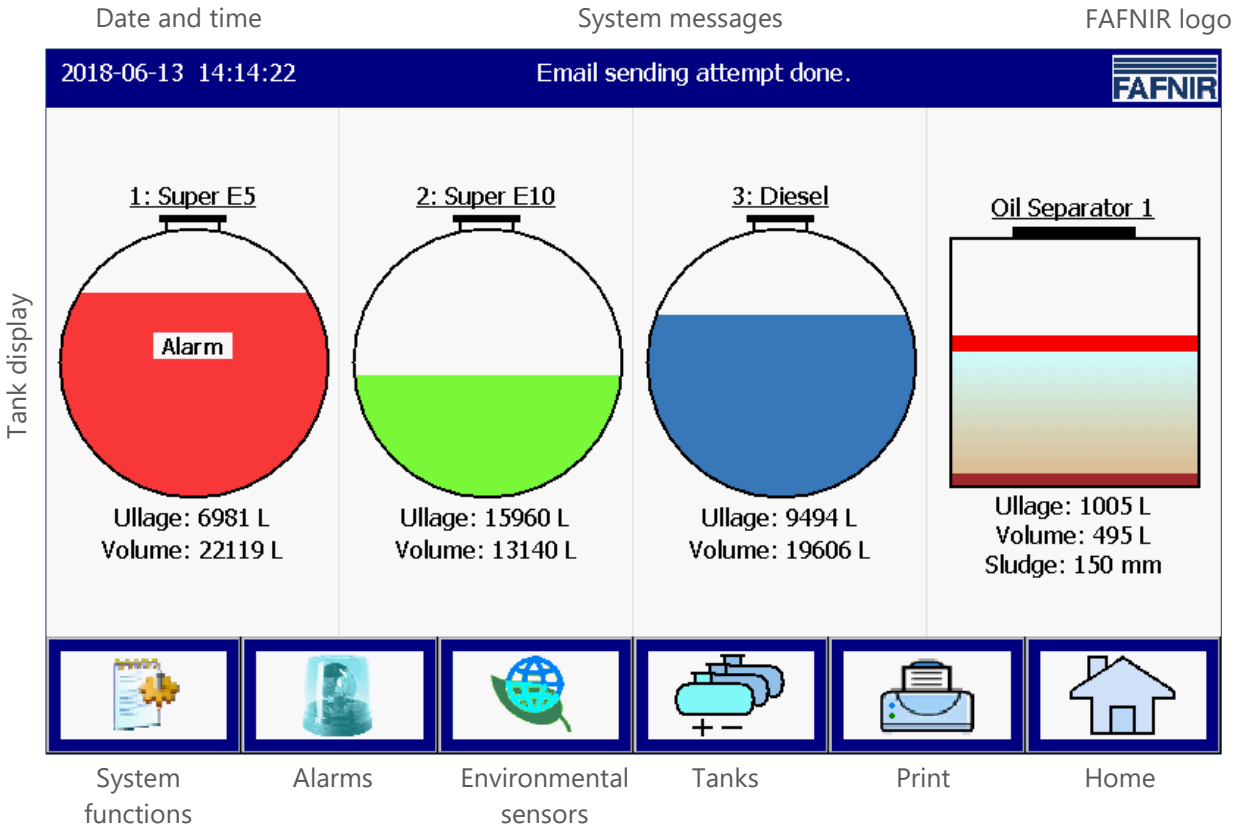


Figure 1: Main window - Standard mode with activated oil separator

3.2 Truck Driver display mode

The following diagram shows a typical example of the main window in the "Truck Driver" display mode with an enlarged display of only 2 tanks.

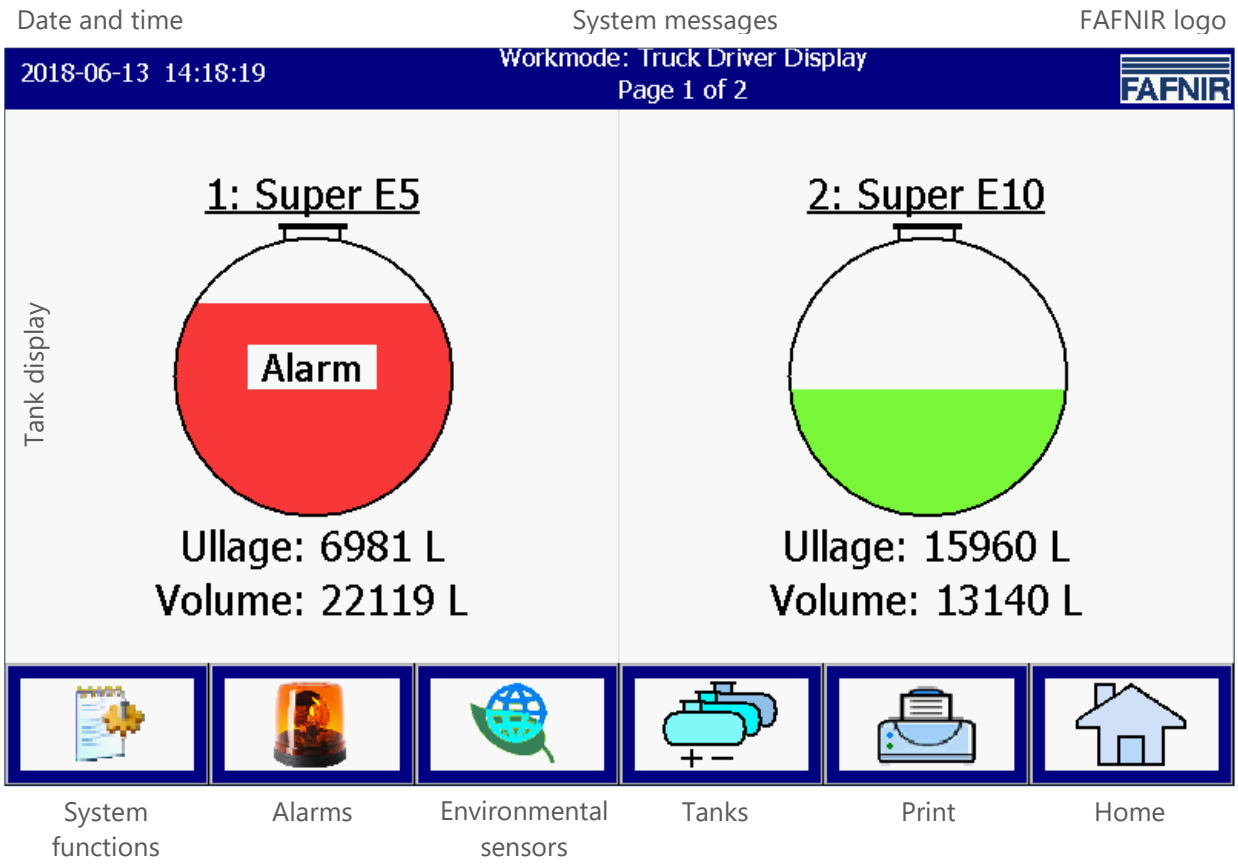
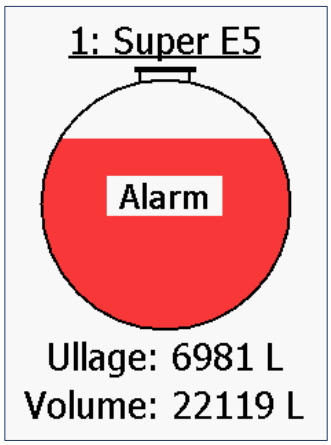


Figure 2: Main window - TD mode

3.3 Tank Details window

The main window displays the most important information for each tank / oil separator. The product filling level is displayed proportionally to the measured filling height. Each product has an individual colour assignment.

☞ *Tapping the tank graphic opens the Tank Details window of this tank, see next chapter).*



— Tank number and product name

— Alarm display for existing alarms

— Tank contents in graphic representation

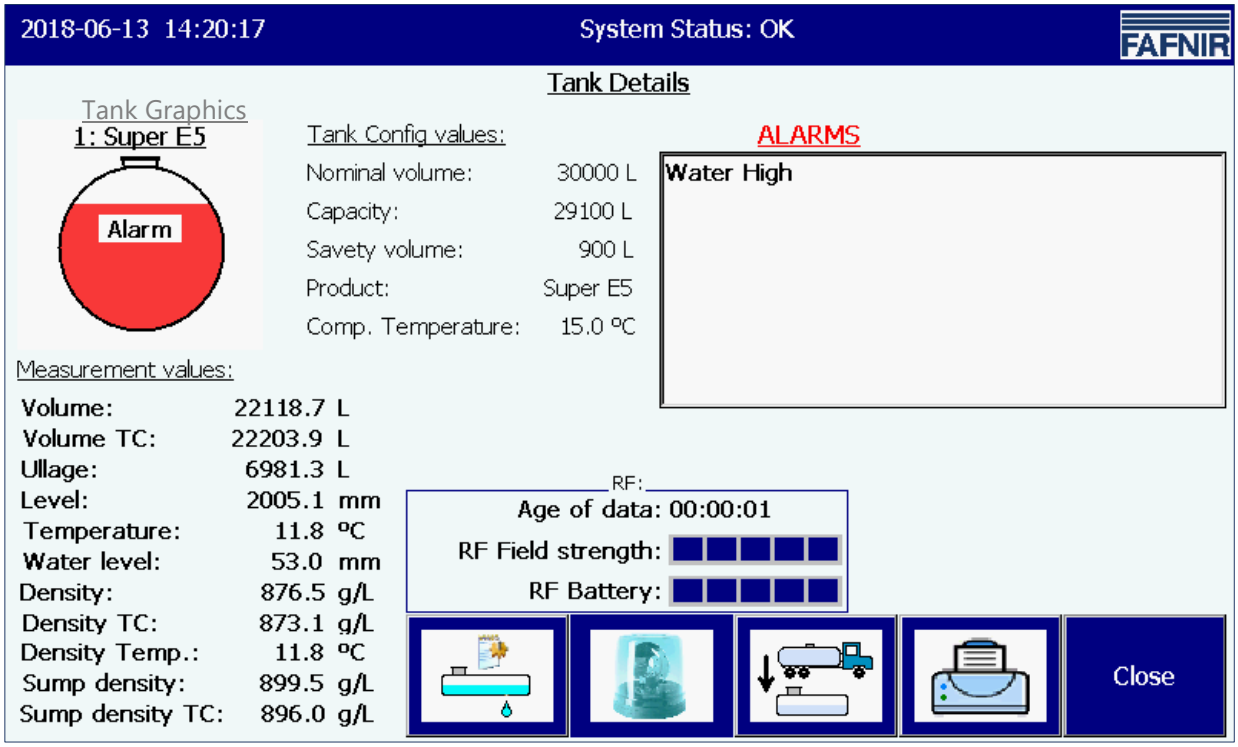
— Available free space (Ullage)

— Product volume (optionally also in percent)

Figure 3: Individual tank in main window

Tank-details

Main window -> Tank Details



Static leak detection. Alarm Deliveries Print

Figure 4: Tank details

The function keys "Static Leak Detection", "Alarm", "Deliveries", and "Print" are associated with the currently shown tank and are described in the following chapters.

Tank Graphics

The tank selected in the main window with tank number, product name and tank level is displayed. If an alarm is active for this tank, the tank graphic will show the text "Alarm".

Tank Configuration

Display of the values configured with VISY-Setup:

Nominal volume (specified by the tank manufacturer), capacity (nominal volume less safety volume), safety volume, product, set compensation temperature.

Measurement Values

Display of the measured values provided by the central unit:

Product volume (non-temperature compensated / temperature compensated); available ullage; product level; temperature; water level; density (non-temperature compensated / temperature compensated); temperature in the area of the density measurement; sump density (non-temperature compensated / temperature compensated)

Alarms

Existing alarms are displayed as product alarms (Very High, High, Low, Very Low), Water Alarm (Very High, High), and Probe Alarm (various transmitter alarms).

For instructions on how to configure the alarms, see:

Technical documentation VISY-Setup V4..., art. no. 207158

RF

These data are displayed in wireless operation only (VISY-RF wireless system).

Age of data

In wireless operation, the probe data are transmitted in intervals and signals may be affected by car or lorry traffic at the petrol station. For this reason, it is important to know the age of the measured values received.

RF Field strength

This data field reflects the RF field strength.

RF Battery

This data field reflects the battery voltage of the transmitter.

4 Functions

4.1 Date and time

Main window -> Display panel for date and time

This display panel shows the date and the time; the time displayed here is synchronised system-wide.

4.2 System messages

Main Window -> Display field for system messages

This display panel shows the system status, as well as instructions on the use of the main window function keys.

The system status relates to the communication between the display module and the central unit. For example, “System Status: OK” will be displayed when conditions are normal.

4.3 FAFNIR logo

Main Window -> FAFNIR Logo

By tapping on the "FAFNIR Logo" information about the software version and contact information to FAFNIR GmbH is displayed.

4.4 Daily Report & Deliveries via e-mail

If the function has been activated, a daily report is generated at the set time (log time). If e-mail transmission is enabled (see SMTP Server) the daily report will be sent to the recipients set up for this event (see e-mail alarm recipients).

4.5 System functions

Main window -> System functions

After tapping on the "System functions" key, a new window opens for selection of certain functions:

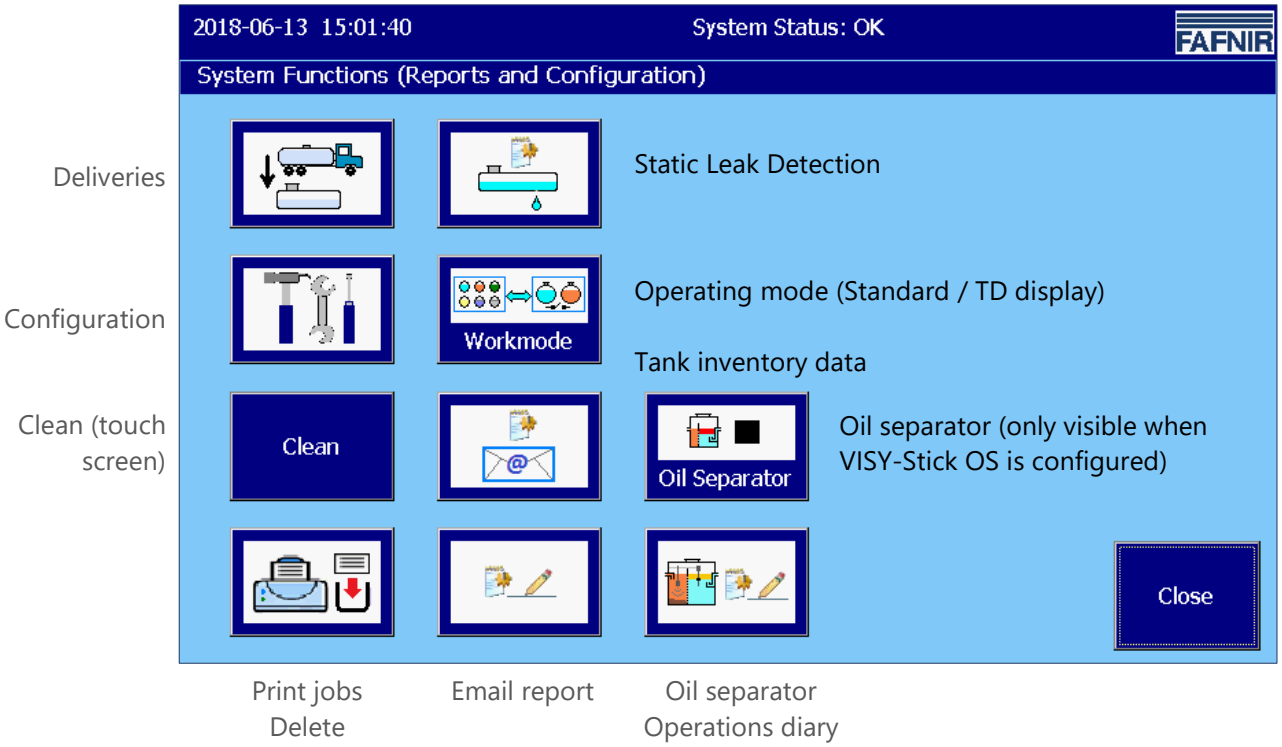
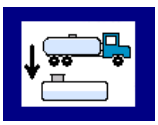


Figure 5: System functions

4.5.1 Function key "Deliveries"



Main window -> System functions-> Deliveries

After tapping on the "Deliveries" button, the values of the current month are displayed. The month is visible on the wide "month button".

Using the +/- arrow keys, the user can select a different month
and then update the list by tapping on the "Month button".

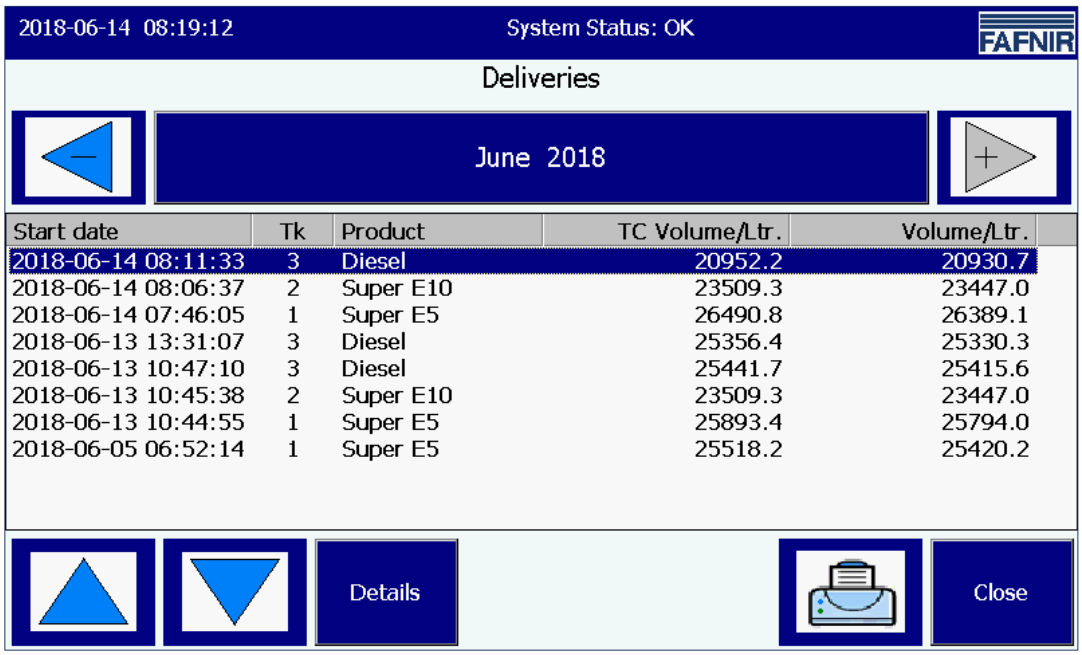


Figure 6: Delivery Function

For every delivery in this list is shown: Start of delivery, probe terminal / tank number, product name, product volume in litres (temperature compensated / non-temperature compensated).

Details of the individual deliveries can be selected with the "arrow keys" up/down and retrieved with the "Details key".

Delivery Details

The following values are logged for each delivery: Probe terminal / tank number, product name, time (start, stop), filling volume (start, stop, delivery volume, temperature compensated / non-temperature compensated), product temperature (start, stop, difference), product level (start, stop, difference), water level (start, stop, difference).

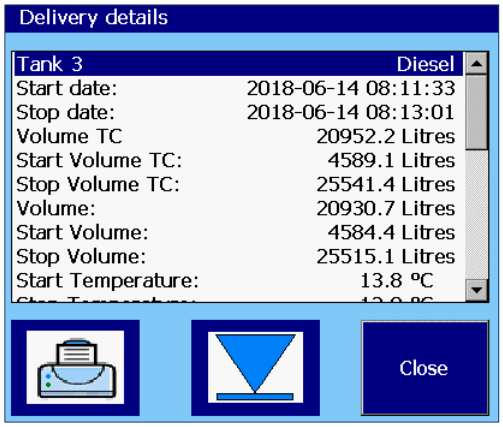


Figure 7: Delivery Details

4.5.2 Function key "Configuration"

Main window -> System functions -> Configuration

Tapping the “Configuration” button opens the Configuration menu. For security reasons, the functions available here are password protected.

To configure VISY-SoftView, see the Technical Documentation

VISY-SoftView Administrator, art. no. 350144

4.5.3 Function key "Static Leak Detection (SLD)”

Main window -> System functions -> Static Leak Detection

After tapping the "Static Leak Detection" button, the valuesfor the current month are displayed. The month is visible on the wide "month button".

Using the +/- arrow keys, the user can select a different month
and then update the list by tapping on the "Month button".

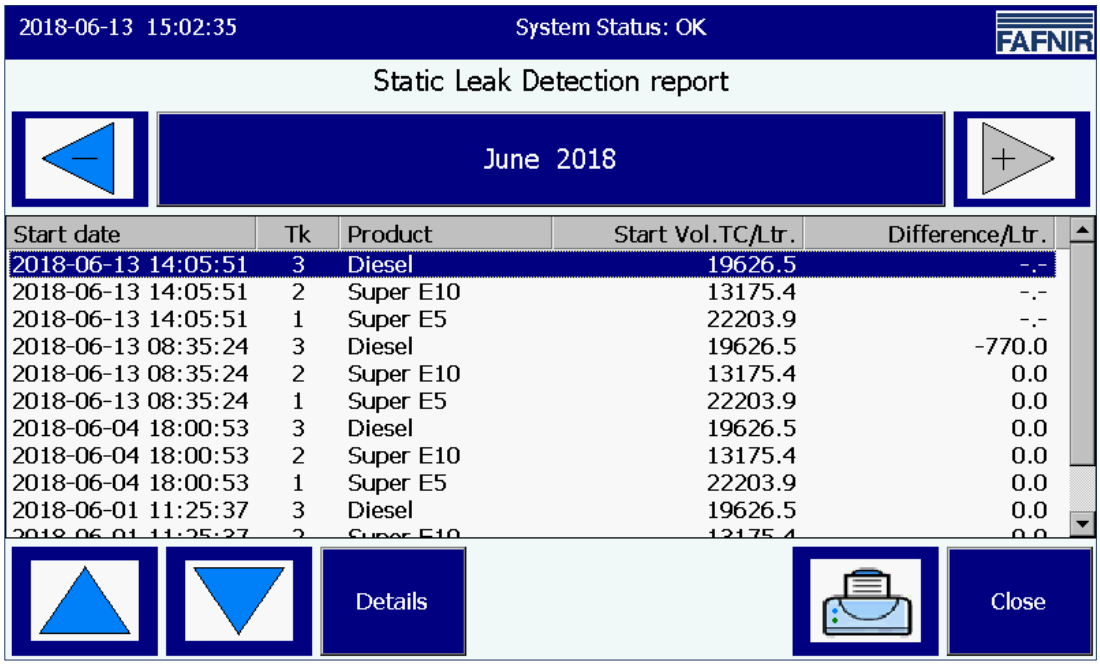


Figure 8: Static Leak Detection

For every SLD in this list is shown: Start of SLD, probe terminal / tank number, product name, start volume TC (TC product volume at the beginning of the SLD), difference (TC stop volume minus TC start volume).

Details about individual SLDs can be selected with the "arrow keys" up/down and retrieved with the "Details key".

After tapping the "Print" button, the list of SLDs for all tanks is printed.

SLD Details

System Features -> Static Leak Detection -> Details

After tapping the "Details" button, the following values of the SLD for the selected tank are displayed: Probe terminal / tank number, product name, time (start, stop, period), TC volume (start, stop, difference), product fill level (start, stop, difference), product temperature (start, stop, difference), water level (start, stop, difference).

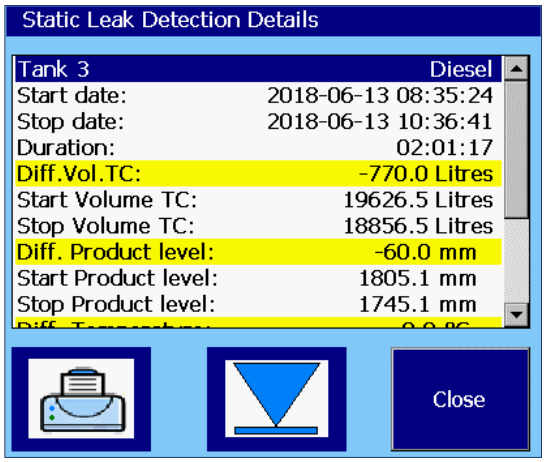


Figure 9: Static Leak Detection, Details

SLD Details Print

After tapping the "Print" button, the details of SLDs for the currently selected tank are printed out:

```
Stat.Leak Detection 2018-06-13 18:12
Tank 3                          Diesel
Start Date:       2018-06-13 08:35:24
Stop date:        2018-06-13 10:36:41
Duration:                    2:01:17
Diff.Vol.TC:            -770.0 Litres
Start Vol.TC:         19626.5 Litres
Stop Vol.TC:          18856.5 Litres
Diff.Prod.Level:            -60.0 mm
Start Prod.Level:          1805.1 mm
Stop Prod.Level:           1745.1 mm
Diff.Temperature:             0.0 °C
Start Temperature:           13.8 °C
Stop Temperature:            13.8 °C
Diff.Water Level:             0.0 mm
Start Water Level:            0.0 mm
Stop Water Level:             0.0 mm
-----------------------------------
```

Display of incomplete SLD

If the SLD is not completed, the "Test still in progress" is displayed and the corresponding values of the SKD are displayed with "-, -".

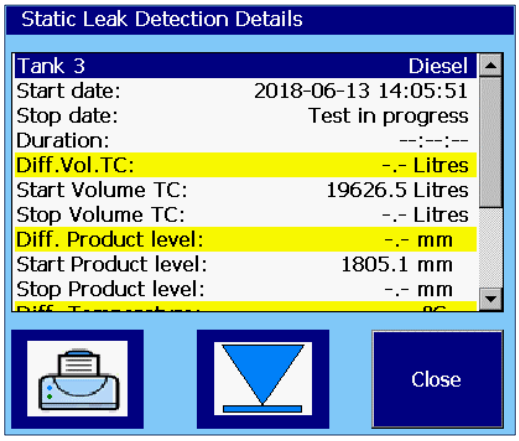


Figure 10: Static Leak Detection, not completed

4.5.4 Function key "Static Leak Detection single tank"

In the “Tank Details” view, the SLDs can be displayed for one single tank.

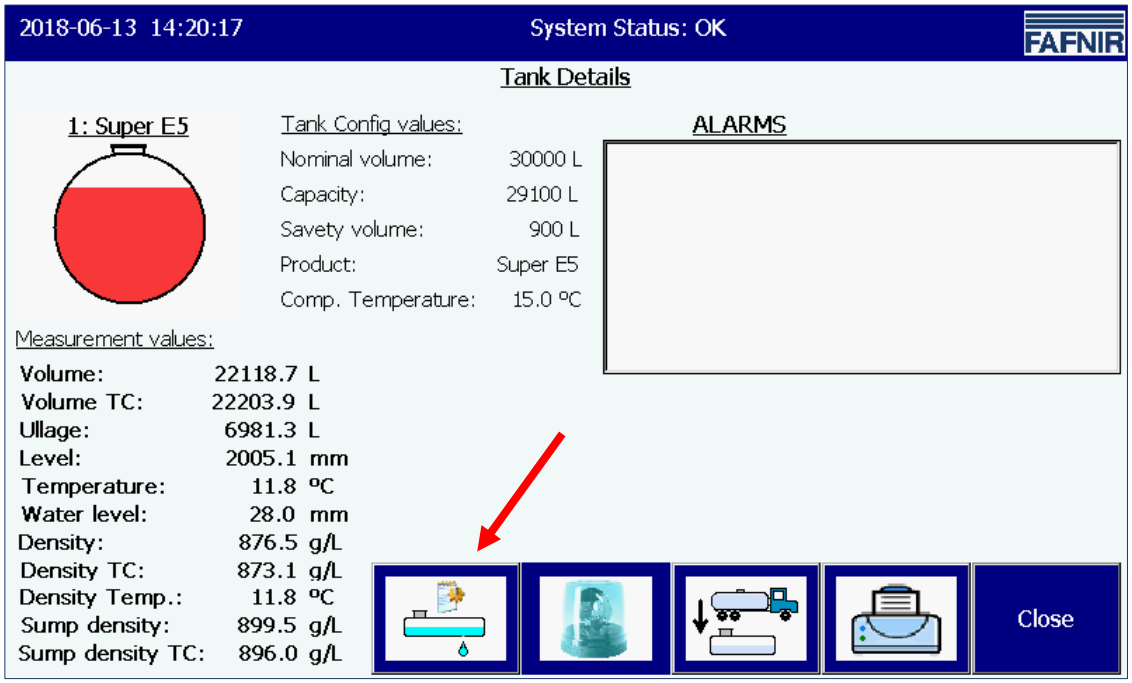


Figure 11: Static Leak Detection, call up of individual tank

Only the entries of this tank are listed and printed out.

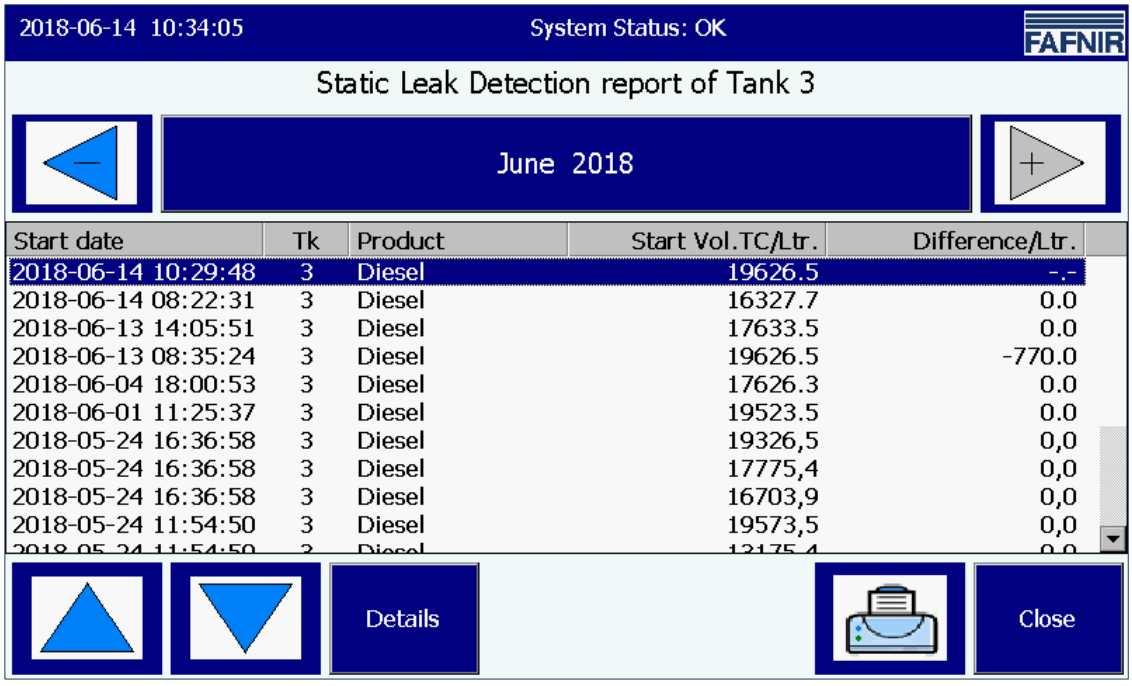
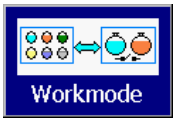


Figure 12: Static Leak Detection, list field individual tank

4.5.5 Function key "Work mode"



Main window -> System functions -> Work Mode

With the "Work mode" button, the Standard display or the TD Display (tanker driver display) can be selected.

In the "Standard" work mode, a maximum of 8 tanks and oil separators are displayed in one window; in the "TD display" work mode, a maximum of 2 tanks are displayed. If more tanks or oil separators are configured, you can switch with the function key "Tanks" to the next window.

The selection of the work mode is displayed in plain text in the following window and is active after confirmation.

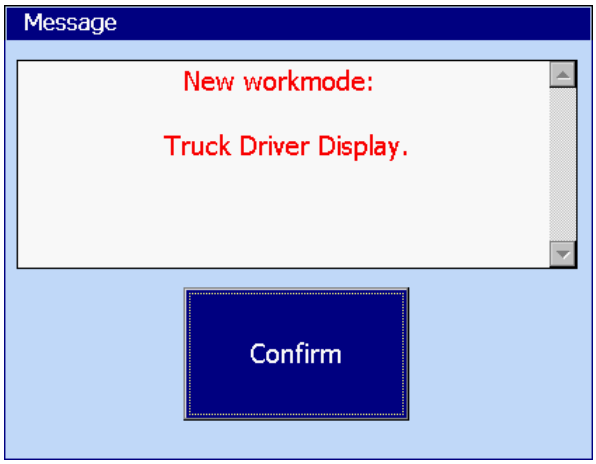


Figure 13: System Functions - Mode of confirmation

4.5.6 Function key "Oil separator"

Main window -> System functions -> Oil separator operation

Main window -> System functions -> Oil separator maintenance

This function key switches the oil separators (OS) to the work mode or maintenance mode.

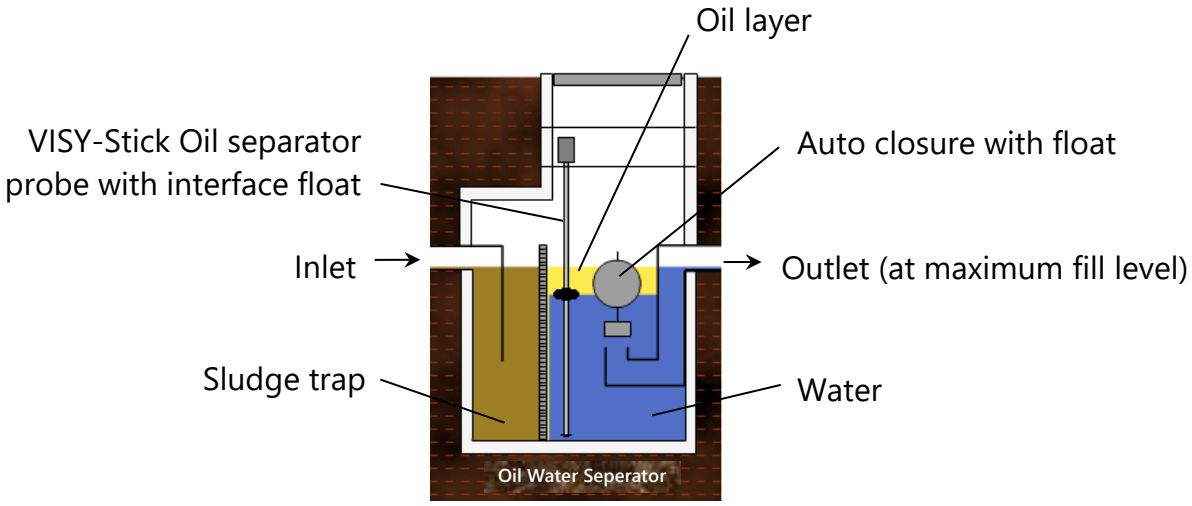
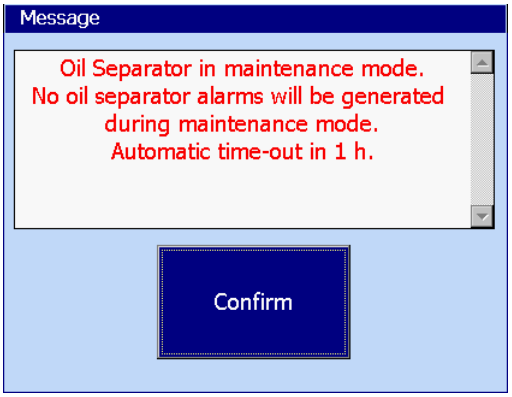


Figure 14: Oil separator with VISY-Stick Oil separator probe

For details about Oil separators with VISY-SoftView see Technical Documentation:

VISY-SoftView Oil Separator, art. no. 350193



The change from work mode to the maintenance mode is reported to the user and it is pointed to the impact of alarms.

If the time monitoring of maintenance state is enabled, it is pointed to the automatic termination (here: Time out in 1 hours)

Figure 15: Message when activating the maintenance state

4.5.7 Function key "Clean"

Main window -> System functions -> Clean

This function enables the cleaning of the touch screen for a particular time (approx. 15 seconds) without triggering other functions. During the cleaning period, a seconds counter counts down until a final message appears ("Goodbye").

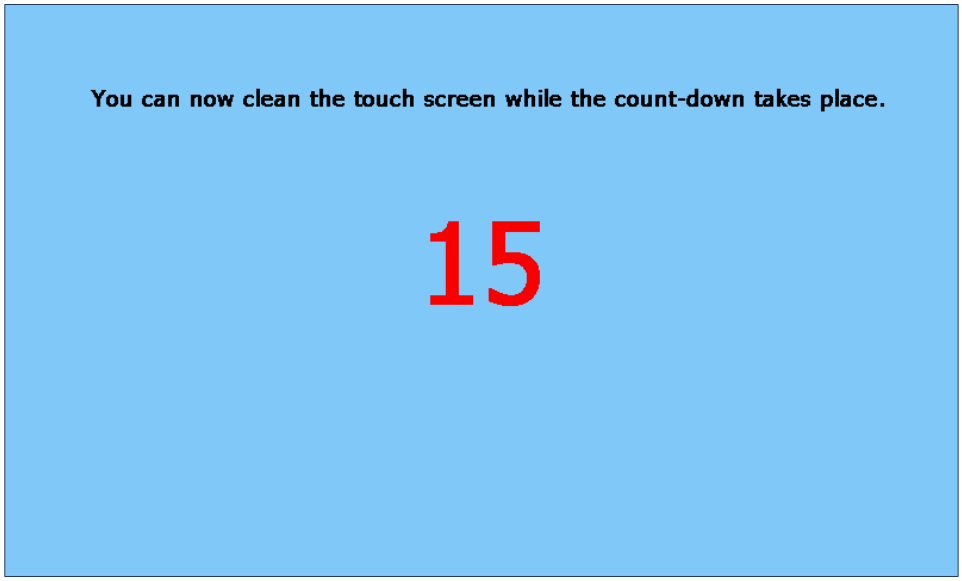


Figure 16: Touch screen cleaning mode, display of remaining time

4.5.8 Function key "Delete print jobs"

Main window -> System functions -> Delete print jobs

Executing this function will cancel current print jobs whenever possible; uncompleted print jobs will be deleted.
Finally, a brief reference to the execution of this function is printed:

```
 *** Printout cancelled. ***
----------------------------
```

4.5.9 Function key "Email Report"

Main window -> System functions -> Email report

After tapping the “Email Report” button, a list of sent and unsent alarm emails for the current month is displayed. The month is visible on the wide "month button".

Using the +/- arrow keys, the user can select a different month
and then update the list by tapping on the "Month button".

The example shows a process for "Tank 2", which was only successful after some sending attempts. The status of the e-mails will only be set to "OK" after successful transmission.

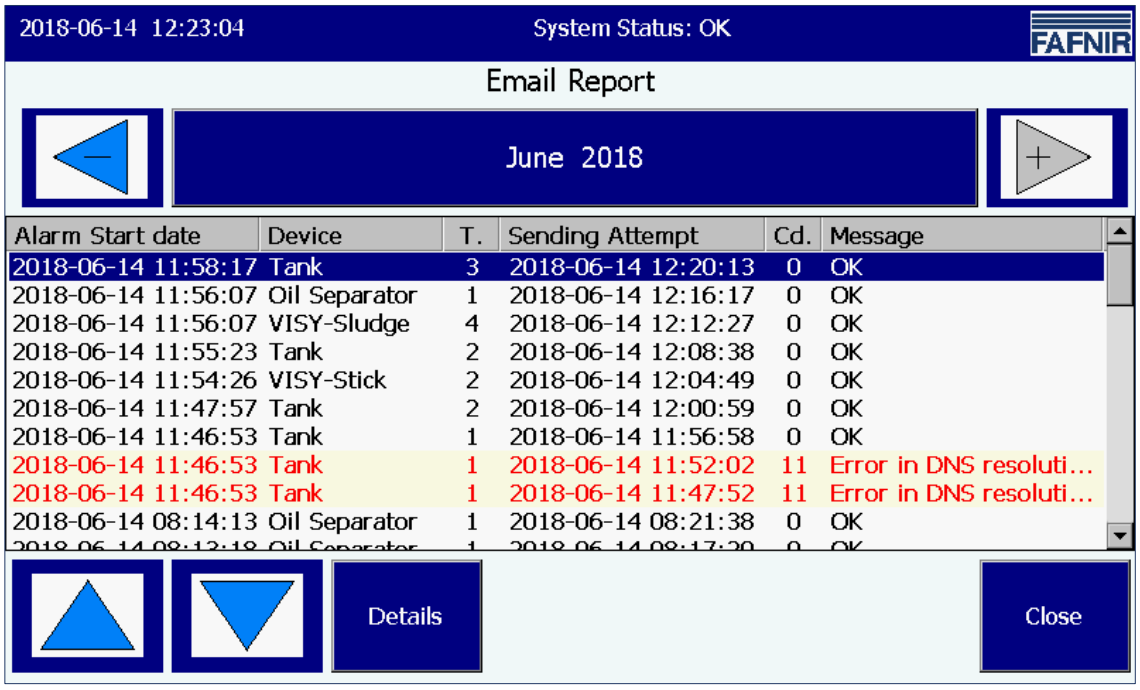


Figure 17: Email Report

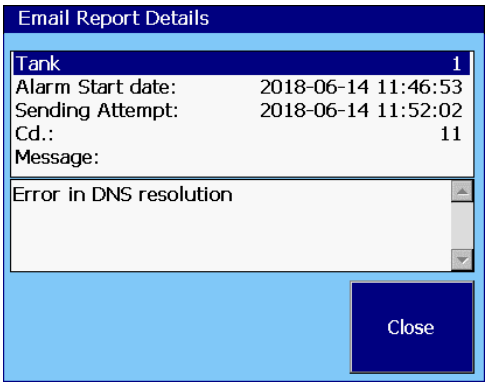
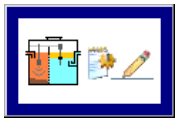


Figure 18: Email Report Details

A code is issued for troubleshooting of undelivered e-mails:

Details, failed transmission attempt
The example shows the details of a failed transmission attempt.

4.5.10 Function key "Oil separator logbook"

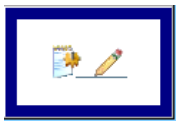


Main window -> System functions -> Oil separator logbook

This function is used as automatic operations diary of the oil separator function. The following Functions are available: Display of the OS logbook, entries into the OS logbook and data export
For a detailed description see Technical Documentation:

VISY-SoftView Oil Separator, art. no. 350193.

4.5.11 Function key "Tank inventory logs"



Main window -> System functions -> Tank inventory logs

This feature allows to view the tank inventory data from individually selected tanks or from all tanks in specific months.
For selection of all tanks, the quick selection key can be used, which cycles between "existing" (selected), "all", or "no" tanks. The background colours of the year and month keys indicate if records for the corresponding period are available (blue/green: records available, grey: no records available).

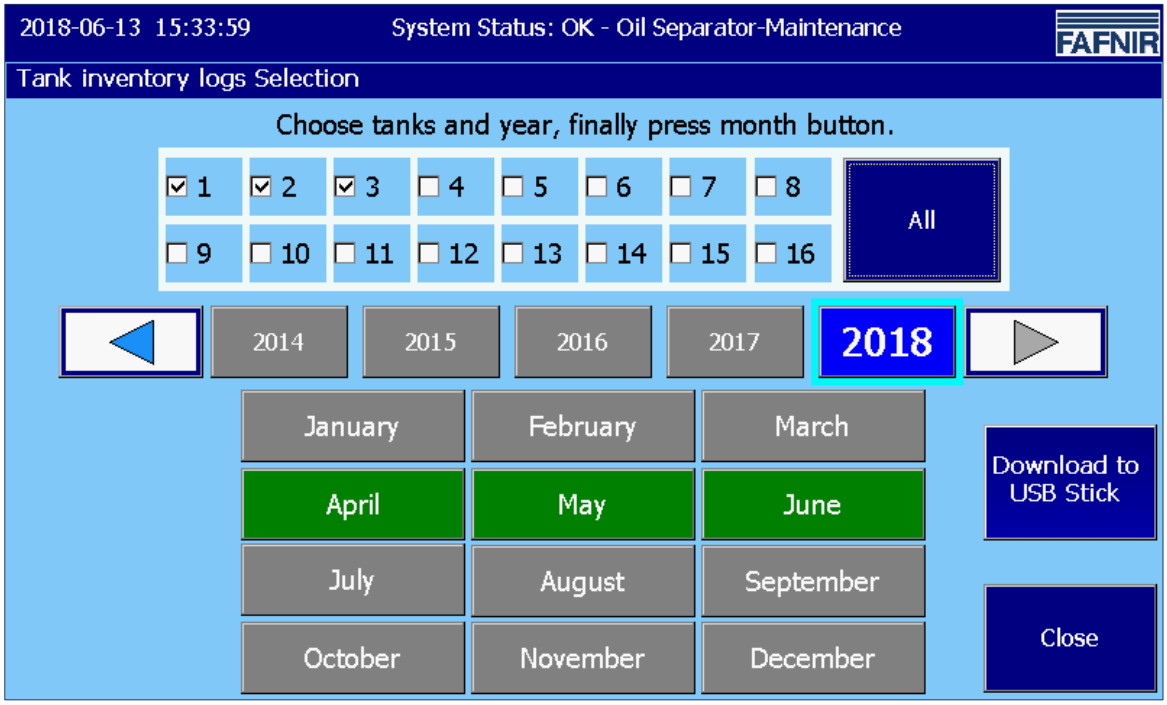


Figure 19: Tank inventory logs - Selection

Tapping the month button will create and display the Tank Inventory Report. The most important parameters are displayed in the overview.

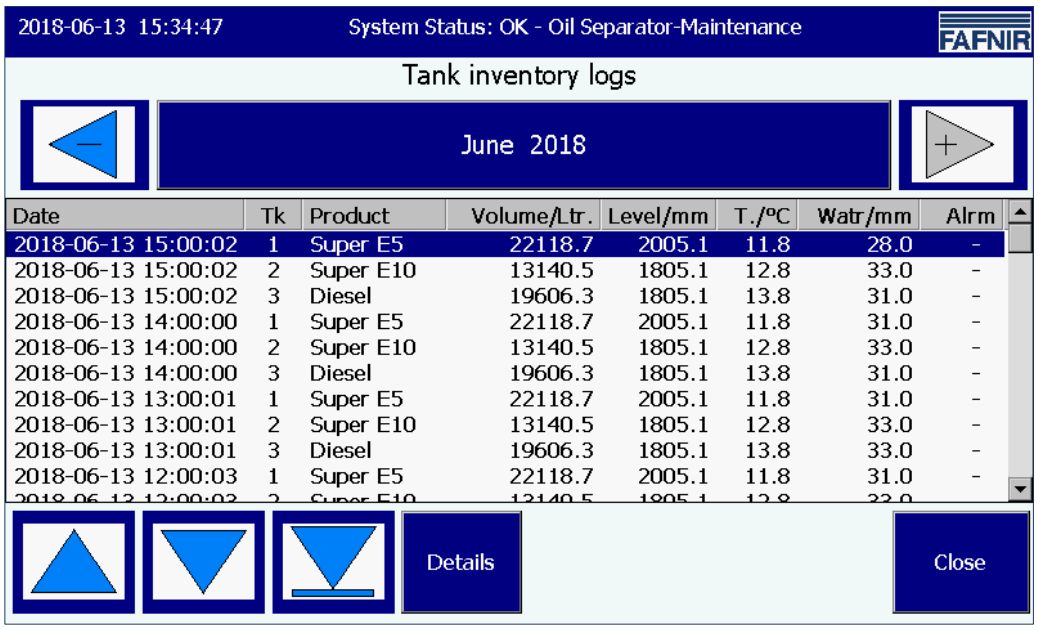


Figure 20: Tank inventory logs - Overview

The selection of individual entries can be done with the arrow keys or with the lateral slider and by tapping the line.

Details view

By pressing the "Details" button or by double-tapping the selected line, the Details view is opened.

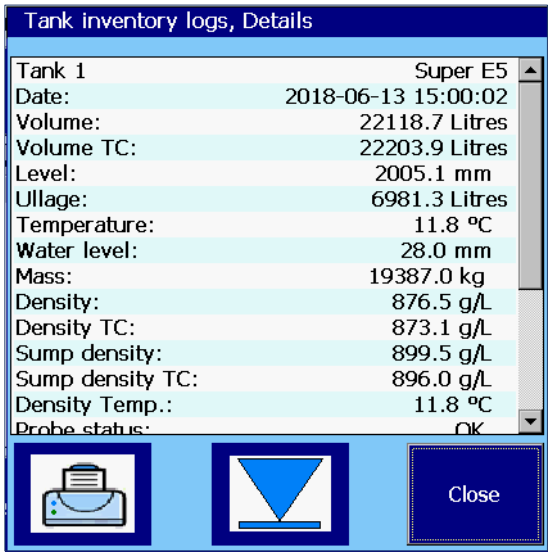


Figure 21: Tank Inventory logs - Details

The Tank Inventory Details can also be printed out.

Print Tank Inventory Logs, Details

```
==================================
Station FAFNIR Hamburg
==================================
Tank-Inv.Detail    2018-06-13 15:35
Tank 1                     Super E5
Date:           2018-06-13 15:00:02
Volume:              22118.7 Litres
Volume TC:           22203.9 Litres
Prod.Level:               2005.1 mm
Ullage:               6981.3 Litres
Temperature:                11.8 °C
Water:                      28.0 mm
Mass:                    19387.0 kg
Density:                  876.5 g/L
Density TC:               873.1 g/L
Sump density:             899.5 g/L
Sump Density TC:          896.0 g/L
Density temperature:        11.8 °C
Probe Status:                   OK
Alarms:                         No
Wireless:                       No
Age of data:                 0 s
RF Battery:                     0
RF Field strength:              0
Current delivery:               No
Last delivery start:             -
----------------------------------
```

Date & Time of the print

Date & Time of record

4.6 Alarms

☞ *Reports and alarms can be sent via e-mail, if these functions have been configured in the configuration menu "SMTP Server" and "System Options", see Technical Documentation: VISY-SoftView Administrator, art. no. 350144.*

4.6.1 New alarms

New alarms are displayed in the alarm dialogue box and at the same time, an audible alarm signal is activated, the alarm light starts blinking and a printout is initiated.

☞ *The automatic printout of alarms can be configured.*

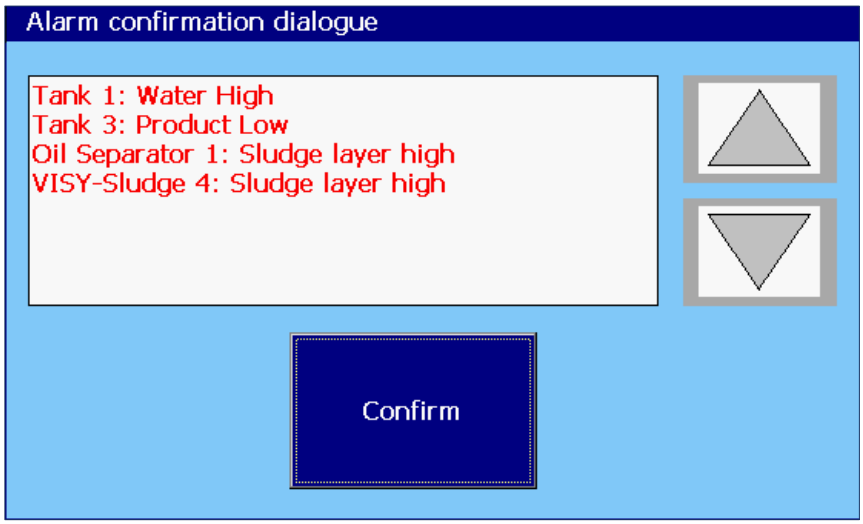


Figure 22: Acknowledgement of Alarms

New alarms appear in the Alarm dialogue box and have to be confirmed. The button "Confirm" is effective for all alarms shown in the display window. Use the arrow keys to display a next group of alarms. After confirmation of the alarms, the acoustic signal is switched off, an automatic printout of acknowledged alarms starts and the displayed alarms are removed from the alarm dialogue box.

```
Alarm Start    18/04/2011 17:28
Tank 9         Diesel
Alarm:         Product low
Start Date:    18/04/2011 17:28:49
--------------------------------
```

```
Alarm Confirmed 2011-04-18 17:28
Tank 9        Diesel
Alarm:        Product low
Start Date:   18/04/2011 17:28:49
Confirmed:    18/04/2011 17:28:57
--------------------------------
```

Automatic printout at a new and a confirmed alarm

4.6.2 Function key "Alarms"

Main window-> Alarms

The colour of the alarm button indicates whether alarms are present. If there are alarms, the lamp symbol flashes red, without alarms the lamp symbol is blue.

After pressing the alarm button, the user can select the alarm source (environmental sensors / tank probes). Active alarms of an alarm source are marked with a red underline.

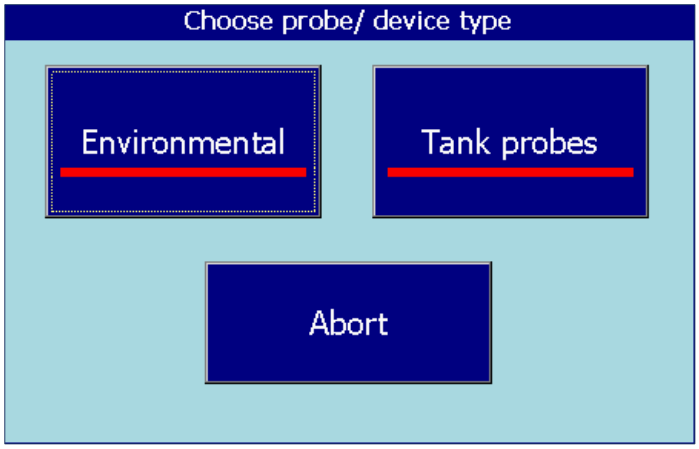


Figure 23: Selection alarm source

Tank probes

Main window -> Alarms > tank probes

After tapping on the "Tank probes" button, tank alarms for the current month are displayed. The month is visible on the wide "month button".

Using the +/- arrow keys, the user can select a different month and then update the list by tapping on the "Month button".

Currently existing alarms are displayed in red on a yellow background, ended alarms in black on a white background.

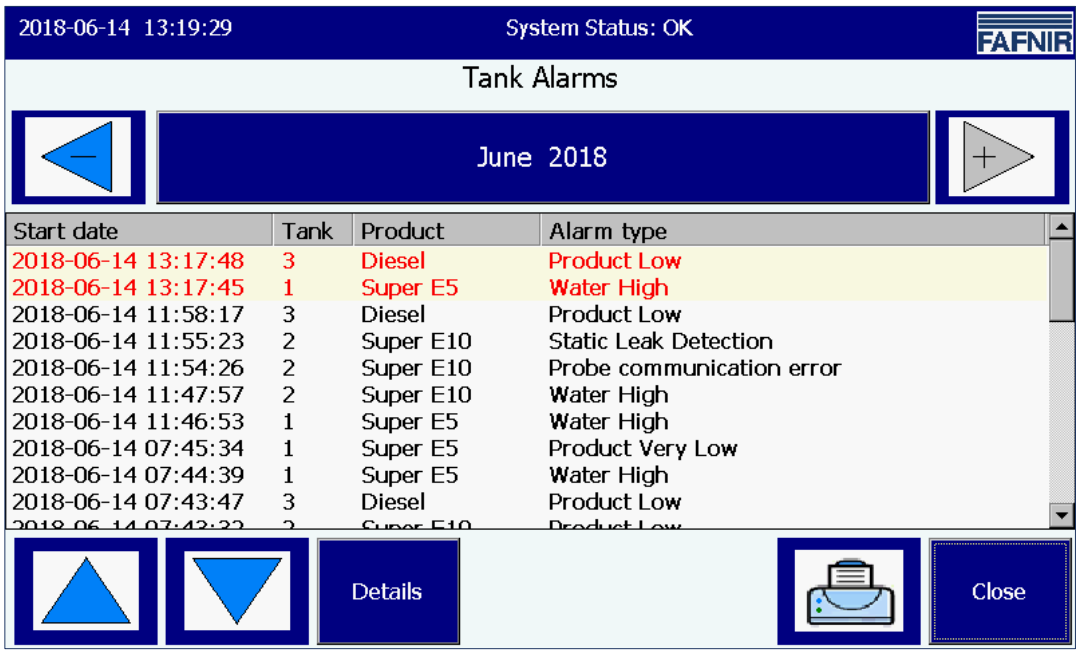


Figure 24: Tank alarms overview

The list of tank alarms displays the following alarm values: Start time, tank, product and type of alarm. Individual alarms can be selected using the arrow keys (up/down) and displayed with the "Details" key. In the details view, additionally the values alarm confirmation and alarm recovery are displayed:

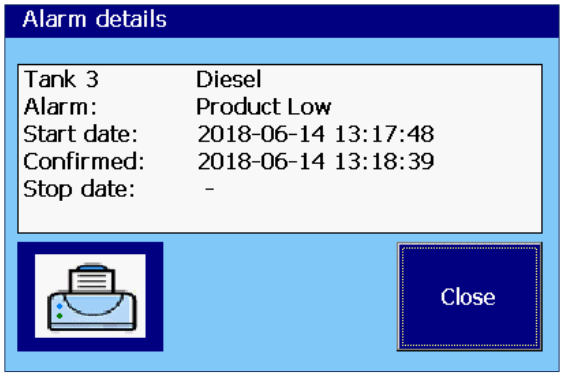


Figure 25: Tank Alarm Details

Currently active alarms do not have a stop date entry. In this case, as shown in the example above, a hyphen "-" is displayed instead.

Environmental sensors

Main window -> Alarms -> Environmental

After tapping on the "Environmental" button, environmental alarms for the current month are displayed. The month is visible on the wide "month button".

Using the +/- arrow keys, the user can select a different month
and then update the list by tapping on the "Month button".

Currently existing alarms are displayed in red on a yellow background, ended alarms in black on a white background.

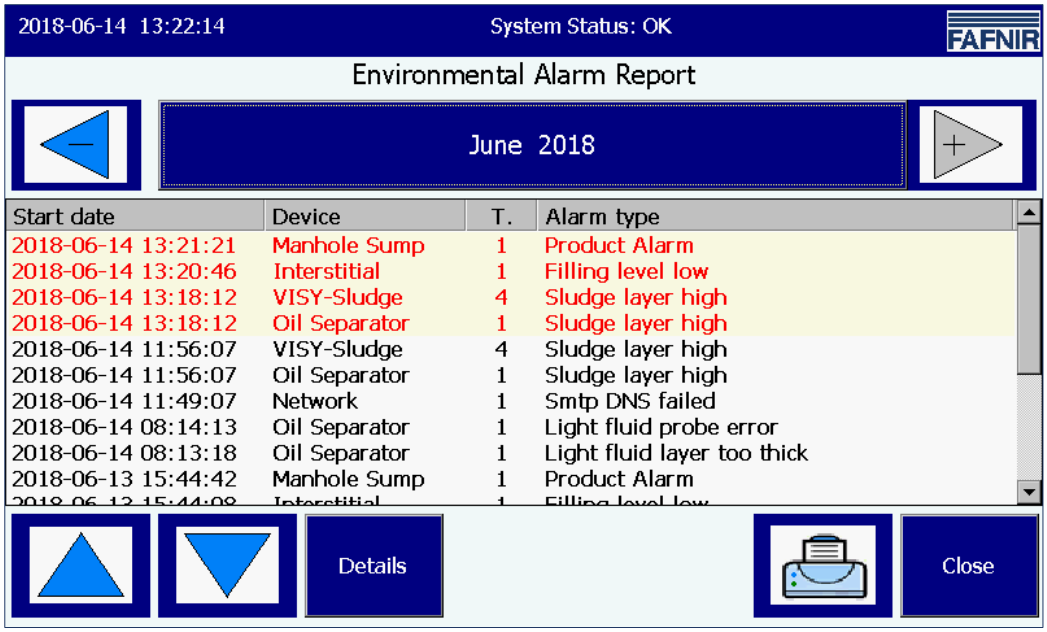


Figure 26: Environmental alarms overview

The list of environmental alarms displays the following alarm values:
Start time, device, terminal (probe terminal) and type of alarm. Individual alarms can be selected using the arrow keys (up/down) and displayed with the "Details" key. In the details view, additionally device-dependent information as well as alarm confirmation and alarm recovery are displayed:

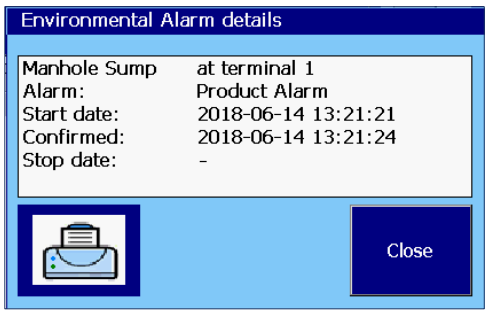


Figure 27: Environmental alarm details

4.7 Environmental sensors

Main window -> Environmental

After tapping the "Environmental" button, the overview of all device types is displayed. The colour indicates the device status: "Red" means active alarm, "Green" means normal function, "Grey" means not configured.

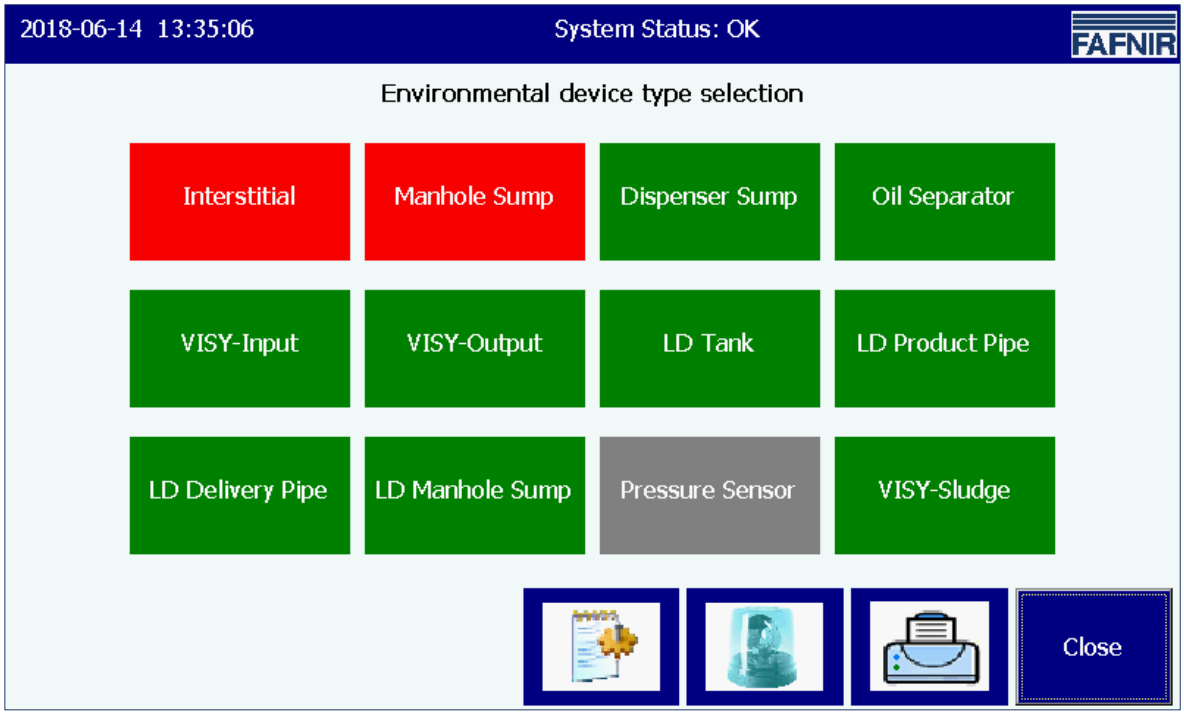


Figure 28: Overview environmental sensors, (device types)

The overview is constantly updated and shows the current state of the devices. The following types can be configured:

Type of device	Designation	Description
Interstitial	VISY-Stick/Reed Interstitial	Device for monitoring double-walled tanks
Manhole Sump	VISY-Stick/Reed Sump Manhole	Device for monitoring the manhole sump
Dispenser Sump	VISY-Stick/Reed Sump Dispenser	Device for monitoring the dispenser sump
Oil separator	Oil separator	Monitoring of oil separators
VISY-Input	VISY-Input 8	Digital 8-Channel Input Module
VISY-Output	VISY-Output 8	8-Channel Relay Output Module

Type of device	Designation	Description
LD Tank	Leak detection in tanks ("LD" = Leak Detection)	Device for leak detection in tanks
LD Product Pipe	Leak detection in product pipe	Device for leak detection in product pipes (between tanks and dispensers)
LD Delivery Pipe	Leak detection in filling pipe	Device for leak detection in filling pipes (between connection fittings and tanks)
LD Manhole Sump	Leak detection in manholes	Device for leak detection in manholes
Pressure sensor	Pressure sensor	Pressure sensors VPS-T and L-VPS for pressure monitoring in tanks
VISY-Sludge	VISY-Sludge	Device for measuring the height of sludge layers, for example in oil separators

After tapping on a specific type, all the devices in that group are displayed. In the following figure, the type "Interstitial" was selected:

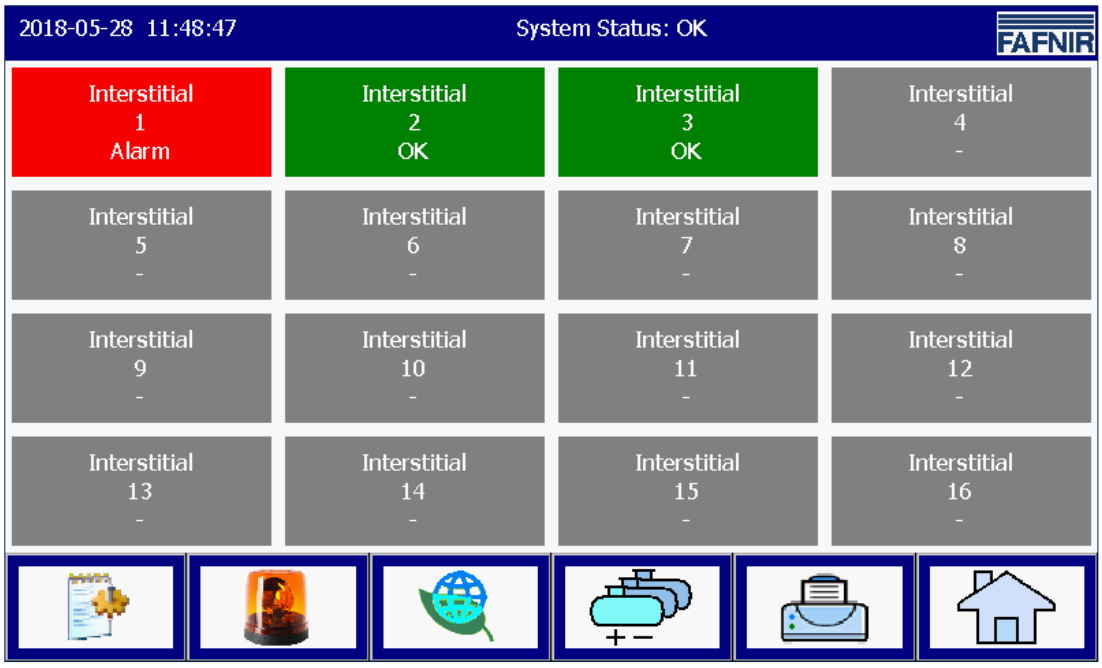


Figure 29: Devices of the type "Interstitial"

For each individual device the information "Device Type", "Probe terminal", and the status "Normal Operation/Alarm/Configured" are displayed.

After tapping on a specific device, the details view opens. In the following display the device "Interstitial 1" was selected in active alarm state:

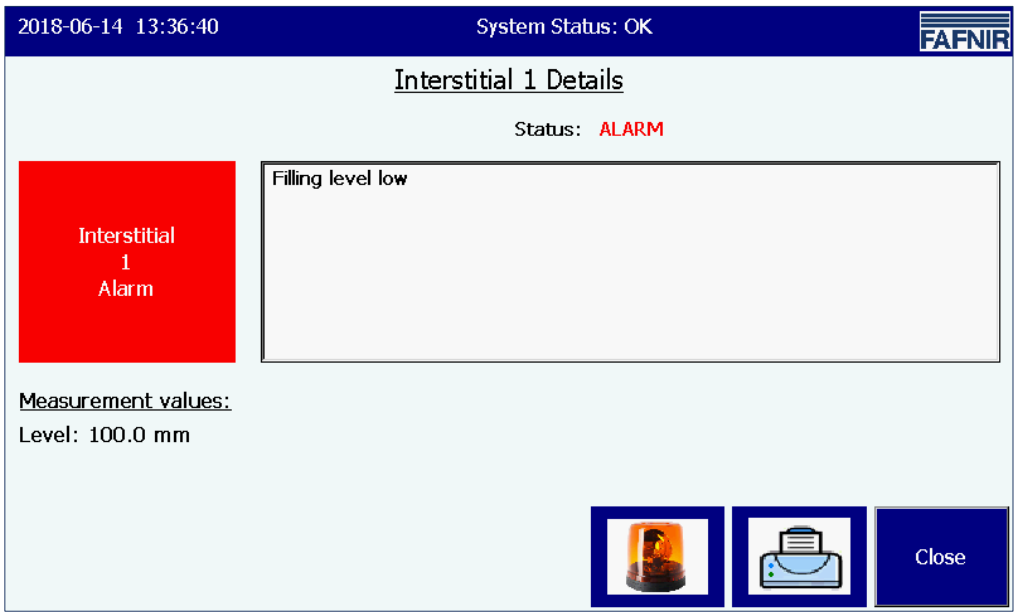


Figure 30: Interstitial 1 Details

The Details view also shows the type of alarm and the corresponding measured values. Not all environmental devices supply measured values.

With oil separators based on VISY-Stick additional configuration parameters and measured values are displayed.

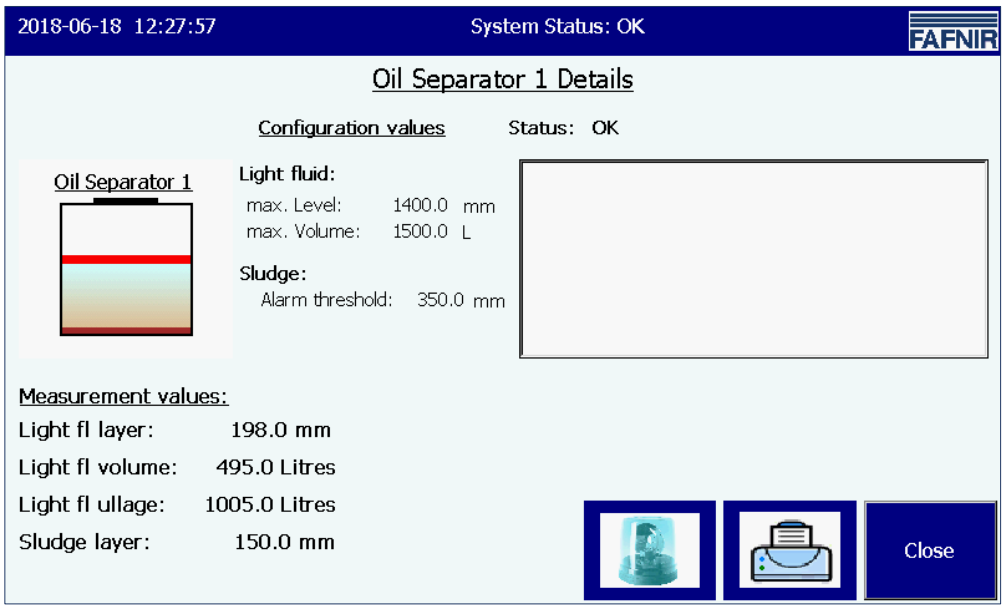


Figure 31: VISY-Stick based Oil separator, Details

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