Technical Documentation

SECON-X

SECON-Client User (Remote Access)

Version: 2
Edition: 2023-04
Art. no: 350175

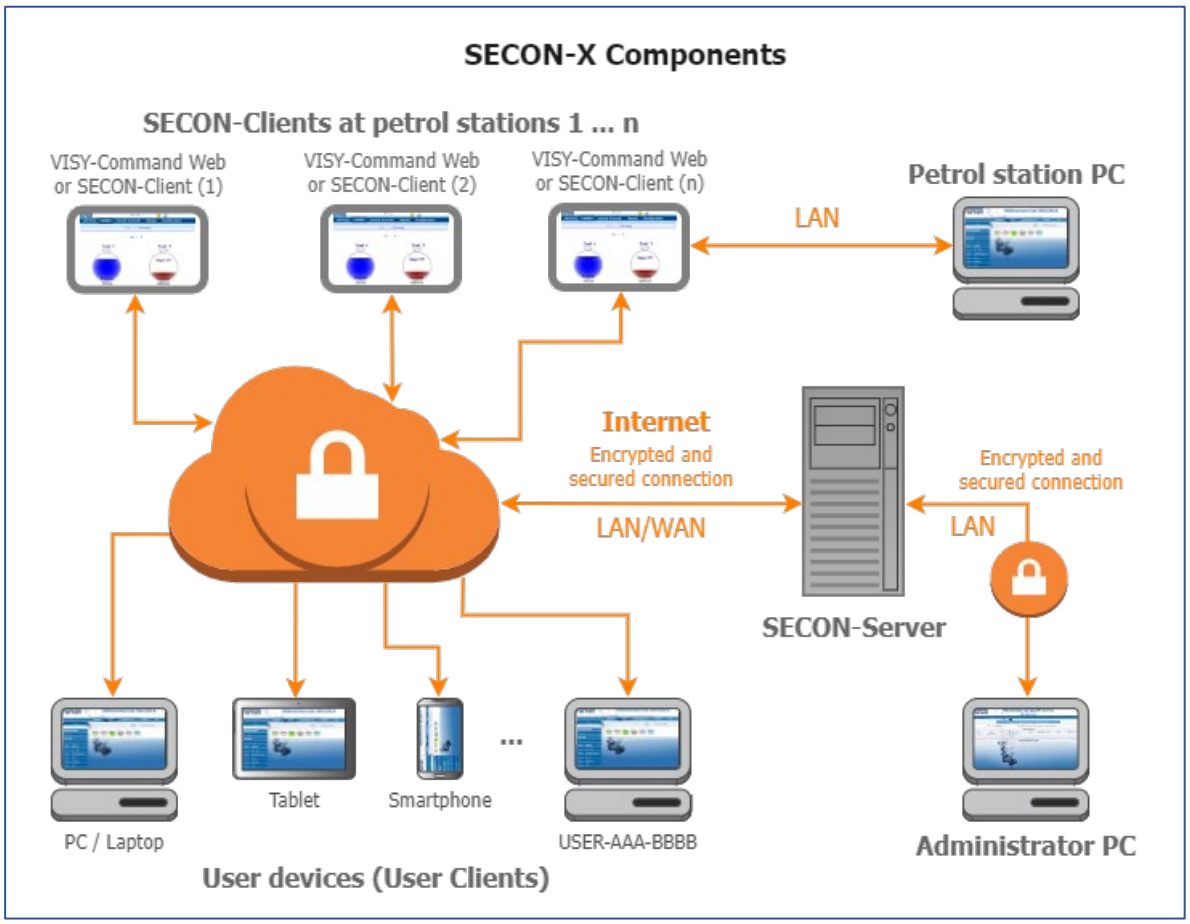
FAFNIR GmbH • Schnackenburgallee 149 c • 22525 Hamburg • Germany • T.: +49 / 40 / 39 82 07–0 • Web: www.fafnir.com

Table of Contents

1 Overview

SECON-X is a universal hardware-software network system for recording, evaluating and displaying gas station data. The system performs the following tasks: Worldwide data access with web interface, local and remote display, remote evaluation, data backup (local and remote), remote diagnosis, and universal data format (XML).

At each single petrol station, the data is recorded, displayed and made available locally with one **VISY-Command Web** or by a combination of **VISY-Command/VAPORIX-Control and SECON-Client**. A **petrol station PC** connected to the LAN serves as a local application and the **SECON-Server** is used for the worldwide transmission of the data. The data is transmitted to the end devices (user clients) by a protected HTTPS connection.



The term "SECON-Client" is used synonymously for the devices SECON-Client with VISY-Command/VAPORIX-Control and for the VISY-Command Web.

A network connection is required for the SECON-X components.

The access to the SECON-Server should preferably be done with the Internet browsers Mozilla Firefox, Google Chrome, or Apple Safari.

For the web access to the SECON Server or SECON Client, its IP address and the access data (user name and password) are required.

1.1 SECON-X Documentation

This manual "**SECON Client User (Remote Access)**" describes the remote access to the web interface of the SECON-Client "**Welcome to SECON-X (User)**" as a user.

Other manuals of the SECON-X system are:

SECON-Client (hardware device)	Art. no. 350076
SECON-Client Administrator (local and remote access)	Art. no. 350340
SECON-Client User (local access)	Art. no. 350263
SECON-Server Installation	Art. no. 350112
SECON-Server Administrator	Art. no. 350088
SECON-Server User	Art. no. 350377
SECON-X Autocalibration	Art. no. 350342
SECON-X Reconciliation	Art. no. 350344
VAPORIX Flow/Control	Art. no. 207083
VISY-Command	Art. no. 207184
VPS Pressure Sensors	Art. no. 350204

1.2 Safety Instructions

The SECON-X system is intended for the display, evaluation and storage of petrol station data. Observe and follow all product safety notes and operating instructions. The manufacturer accepts no liability for any form of damage resulting from improper use.

The SECON-X system has been developed, manufactured and tested in accordance with the latest good engineering practices and recognised technical safety regulations. Nevertheless, the system may be a source of danger. The following safety precautions must be observed 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 devices may only be carried out by qualified personnel.
- Operators, installers and service technicians must comply with all applicable safety regulations. This also applies to any local safety and accident prevention regulations which are not stated in this manual.

Not observing these safety instructions result in the risk of accident or damages to the system.

2 Welcome to SECON-X (User)

The "**Welcome to SECON-X (User)**" website is the web interface of the SECON-Client that enables the measured values of the SECON-X system to be displayed with a web browser.

If you move the mouse over individual devices or functions, sometimes additional information (mouseover) is displayed.

2.1 Login

You reach the **website** with the IP address of the SECON-Client. The IP address is displayed on the SECON-Client device in the "WEB GUI" menu, see:

SECON-Client Administrator, chapter Web GUI, art. no. 350340

The access to the **website** is password-protected:

≫ Enter the IP address of the SECON-Client in the address bar of the browser.

≫ Enter the following login data and confirm:

User name: `fafnir`

Password: `fafnir22766`

2.2 Home Page

After logging in, the "**Welcome to SECON-X**" website opens with the access as **User**, see green frame:

By a click on the <**Admin**> button (red frame) you access the web interface "**SECON Configuration GUI**" of the SECON-Client for configuration of the SECON-X system as administrator, see technical documentation:

SECON-Client Administrator, art. no. 350340

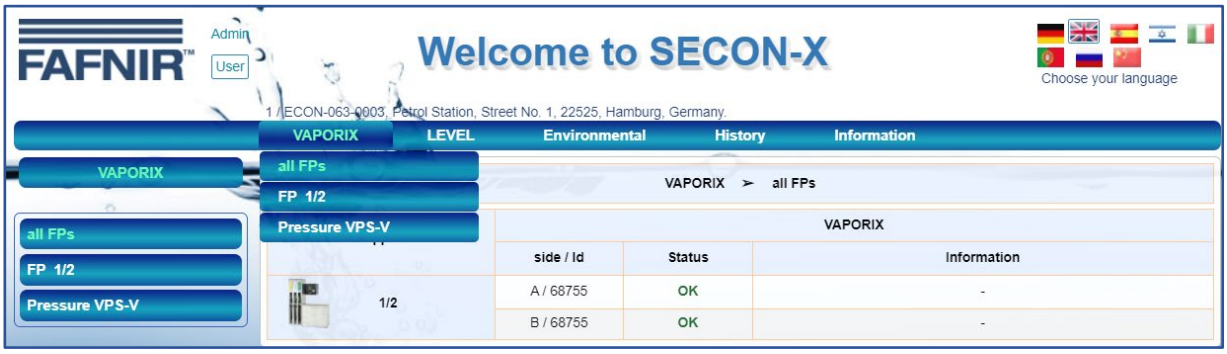
Depending on the registered **services** (SECON-VAP, SECON-VAP+, SECON-LEV, SECON-LEV+), individual functions in the menus are activated or deactivated, see technical documentation:

SECON-Client Administrator, chapter "Services", art. no. 350340

In the right part of the window you can set the language of the website. The following languages are currently available:

German – English – Spanish – Italian – Portuguese – Hebrew – Russian – Chinese

3 Menu “VAPORIX”

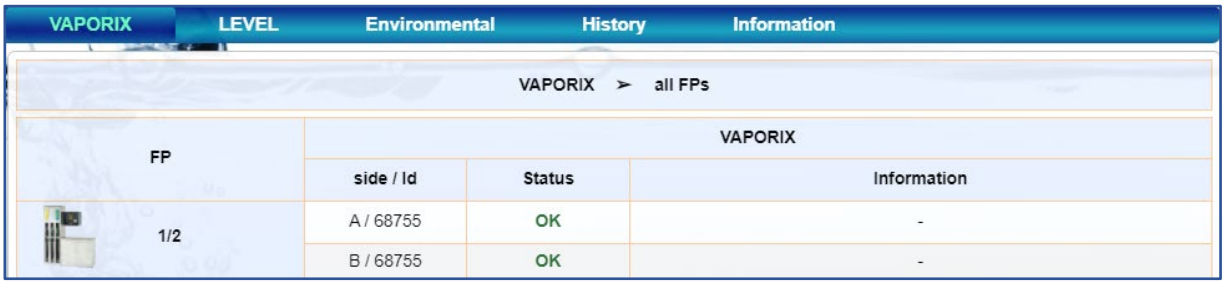


The current functional status, the readings and the alarms of the VAPORIX vapour recovery are displayed in the **VAPORIX** menu. The VAPORIX system monitors and evaluates the vapour recovery of the fueling points (FP 1/2 etc. of side A or side B) of the dispensers.

☞ *The* **pressure sensor VPS-V** *is no longer available.*

3.1 All FPs (Fueling Points)

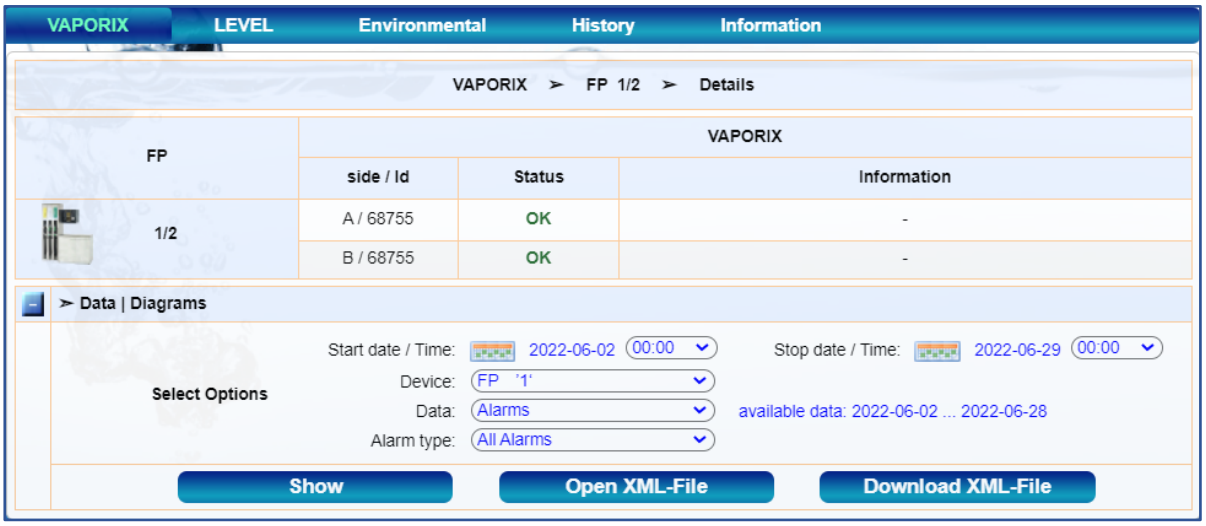
The main view shows the status of the individual fueling points with VAPORIX-Controls and their stored information.



The status message can be "**OK**", "**Warning**" or "**Fail**".

3.2 FP 1/2 ... (Fueling Point Details)

After selecting a fueling point (1/2, 3/4, ...), a window opens with the details about it:



In the "**Data/Diagrams**" window area, the details for a specific **period** with individual Start and Stop date/Time for a specific "**device**" (fueling point FP 1 or 2 ...) can be selected for displaying the data.
The "**Data**" option lets you choose between "**Alarms**", "**Service via Dongle**" or "**Diagram**".

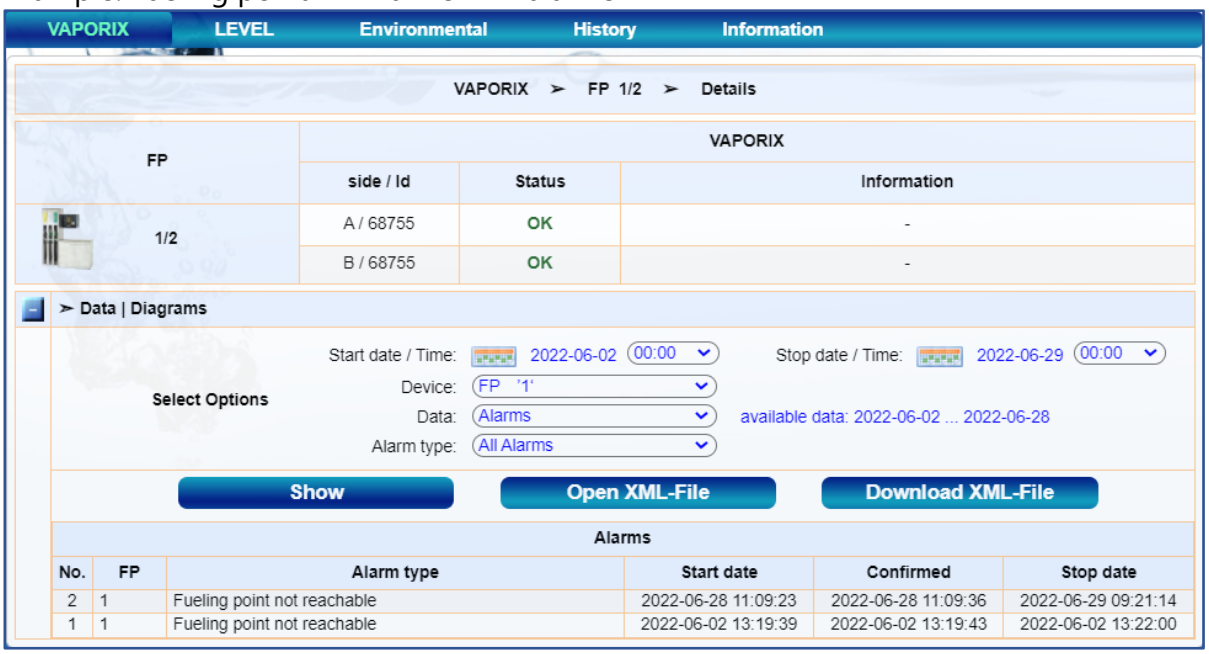
☞ *The "**Service via dongle**" option can only be proceeded by a service technician, see chapter: 3.3.2 Alarms and Shutdown by Pressure Monitoring.*

The alarms can be specified using the "**Alarm Type**" option.

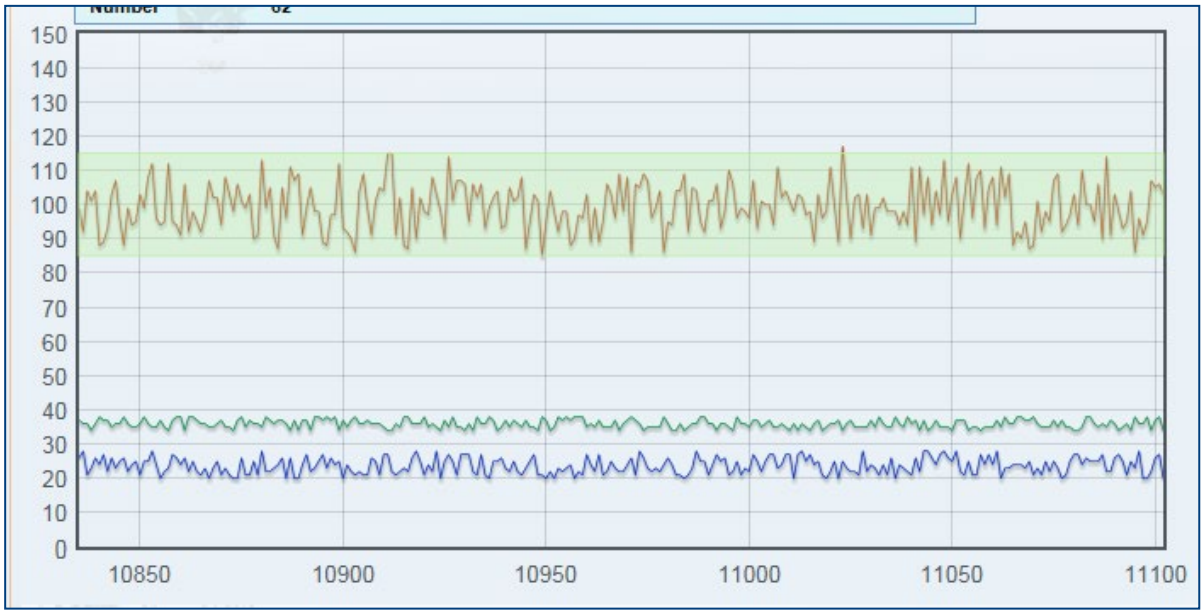
- **Active alarms** are currently present, confirmed or unconfirmed alarms.
- **Inactive alarms** are expired alarms that have been cancelled by the system.
- **Only ...** is the selection of certain alarm types

With the "**Show**" button in the "**Data/Diagrams**" window area, the desired data (alarms or diagrams) are displayed in tabular or graphic form:

Example: Fueling point 1 - Alarms - All alarms



Example: Fueling point 1 - Diagrams - Historical



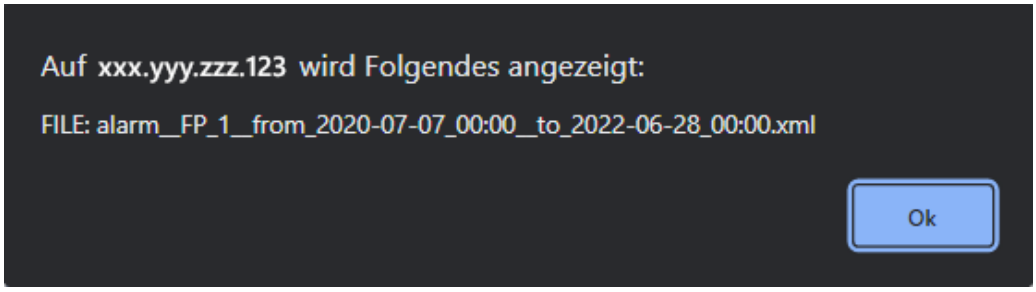
With the "**Open XML-File**" button in the "**Data/Diagrams**" window area, the data of the selected fueling point is opened for viewing in the web browser:

Informations / Settings	
Station ID	1 / ECON-063-0003
Address	Street No. 1, 22525, Hamburg, Germany
Start Date	2020-07-07 00:00:00
End Date	2020-07-18 00:00:00
Device Name	Zapfpunkt '1'
Device Number	1
Alarms	2

Alarms

No	Device	Alarm Type	Start-Date	Confirmed	End-Date
1	Zapfpunkt 1	Fueling point not reachable	2020-07-07 14:37:55	2020-07-07 14:38:14	2020-07-07 14:38:51
2	Zapfpunkt 1	Fueling point not reachable	2020-07-17 12:34:26	2020-07-17 12:34:37	2022-04-06

With the "**Download XML-File**" button in the "**Data/Diagrams**" window area, the **data is downloaded in XML format as a file**.



3.3 VPS-V Pressure Sensor

☞ *The VPS-V pressure sensor is no longer available*

3.3.1 Country-specific evaluation of the pressure sensor data (AU/IL)

Data

Data from the connected pressure sensors is queried and stored every 30 seconds.

WARNINGS

The pressure sensor data is queried at an interval of 30 seconds. The data is continuously checked for error condition. If such occurs, a WARNING is first generated and remains active until the values no longer correspond to the error condition.

Error type	Condition
DEGRADATION	Half of the pressure readings of the last hour (60/120) must be below -20 mbar or above 7.5 mbar.
GROSS	3 minutes of the pressure readings of the last hour (6/120) must be below -25 mbar or above 12.5 mbar.
NO-TEST	All pressure readings from the last hour (except incorrect measurements) must be within a range of +/- 0.5 mbar and the petrol station must not be in operation (no refuelling).
VAPOUR LEAK	For 23 hours of the day the pressure readings must be within a range of +/- 0.5 mbar and the petrol station is in operation.
SYSTEM ERROR	The pressure sensor cannot be reached for at least 1 hour of the day or supplies incorrect data.

Table 1: Error types WARNINGS (pressure evaluation AU/IL)

WARNINGS are stored in the database with the following information:

Information	Value format
Error type	DEGRADATION, GROSS, NO-TEST, VAPOUR LEAK, SYSTEM ERROR
Start of error state	YYYY-MM-DD hh:mm:ss
End of error state	YYYY-MM-DD hh:mm:ss
Average value	mbar

Table 2: Data structure WARNINGS (pressure evaluation AU/IL)

FAILS

While WARNINGS can occur individually, they do not result in a shutdown. Only when a certain number of WARNINGS is exceeded within a specified time, a FAIL state is recognized and a shutdown of the monitored fueling points is initiated. Attention to a FAIL state is drawn by a visual and acoustic alarm. This must be confirmed manually.

The occurrence of a FAIL state requires the maintenance of the system by a service technician, who can deactivate the FAIL state and reset the shutdown after rectifying the problem.

Error type	Condition
DEGRADATION	One DEGRADATION WARNING must have occurred at least once a day for 7 consecutive days. The shutdown occurs after 30 days.
GROSS	One GROSS WARNING must have occurred at least once a day for 3 consecutive days. Shutdown occurs on the 7th day after the first occurrence.
NO-TEST	No shutdown required.
VAPOUR LEAK	One VAPOUR LEAK WARNING must have occurred at least once a day for 2 consecutive days. Shutdown occurs on the 7th day after the first occurrence.
SYSTEM ERROR	One SYSTEM ERROR WARNING must have occurred at least once a day for 2 consecutive days. Shutdown occurs on the 7th day after the first occurrence.

Table 3: Error types FAILS (pressure evaluation AU/IL)

FAILS are stored in the database with the following information:

Information	Value format
Error type	DEGRADATION, GROSS, VAPOUR LEAK, SYSTEM ERROR
Start of FAILS	YYYY-MM-DD hh:mm:ss
Time of shutdown	YYYY-MM-DD hh:mm:ss
Date of confirmation	YYYY-MM-DD hh:mm:ss
Average value	mbar
Fueling points to be shut down	Logical numbers of the fueling points, separated by semicolons

Table 4: Data structure FAILS (pressure evaluation AU/IL)

Daily reports

At each end of the day, a summary for the day with all occurred events and measured values is created. This summary has the following details:

Information	Value format
Start of day	YYYY-MM-DD hh:mm:ss
End of day	YYYY-MM-DD hh:mm:ss
Status of the day	PASS: No errors have occurred. WARNING: At least one WARNING has occurred. FAULT: A FAIL is active, there is the danger of a shut-down. SHUTDOWN: At least one of the monitored fueling points has been shut down and must be serviced and unlocked by a service technician. NO-TEST: The petrol station is not in the operating state (no refuelling registered; pressure difference is balanced).
Average value	mbar
Maximum pressure	mbar
Minimum pressure	mbar
Types of WARNINGS that have occurred	DEGRADATION, GROSS, NO-TEST, VAPOUR LEAK, SYSTEM ERROR
Types of FAILS that have occurred	DEGRADATION, GROSS, VAPOUR LEAK, SYSTEM ERROR
Time of shutdown	YYYY-MM-DD hh:mm:ss (only when set)
Fueling points to be shut down	Logical number (only if FAIL is active)
Average value of DEGRADATION errors of the day	mbar
Average value of the GROSS errors of the day	mbar
Consecutive days on which one WARNING type has occurred.	n days each for DEGRADATION, GROSS, NO-TEST, VAPOUR LEAK, SYSTEM ERROR

Table 5: Data structure daily reports (pressure evaluation AU/IL)

3.3.2 Alarms and Shutdown by Pressure Monitoring

Display of Alarms

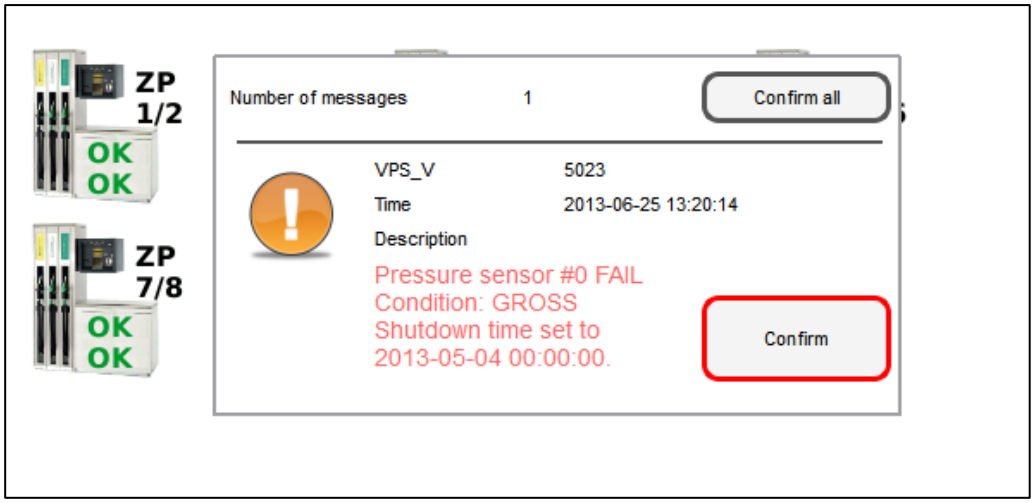
The pressure evaluation in countries with legal required monitoring distinguishes between WARNINGS and FAILS. WARNINGS are temporary error states whose occurrence is registered and stored.

A FAIL state occurs when the WARNING exceeds a defined limit. An acoustic and visual alarm is output locally. It contains information about the type of error and must be confirmed. The date of the confirmation is stored.

Since a FAIL state sets the petrol station into an alarm state by starting a shutdown process of the fueling points, this is also indicated on the web interface of the associated SECON-Client, as well as with SECON-Server on the web interface of the petrol station.

Local Display on the Touch Screen

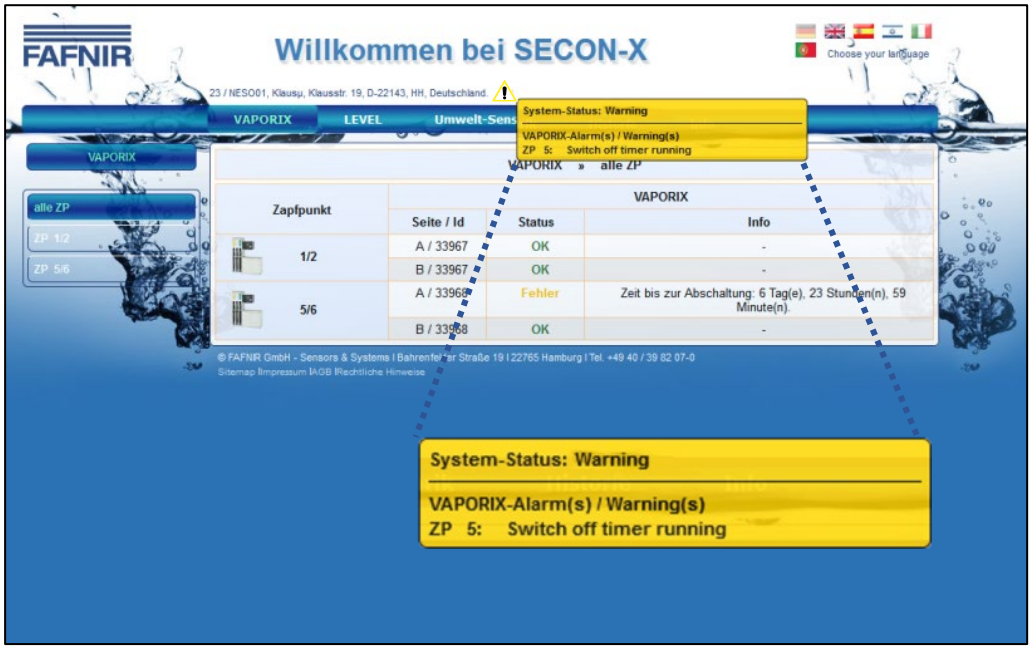
An alarm window appears on the SECON-Client and an acoustic alarm sounds. By touching the "**Confirm all**" or "**Confirm**" button the alarm is confirmed.



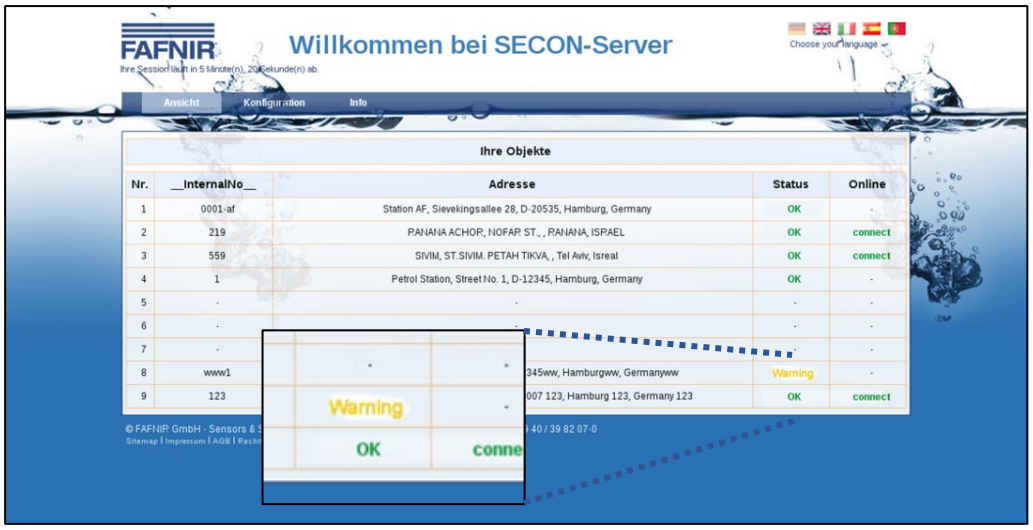
Alarms and Shutdown of SECON-Client (series of pictures)

Web Interface

A warning symbol ⚠ is displayed in the web interface. This remains in place until the error has been rectified by a service technician.



More detailed information is shown if the mouse cursor is moved across the symbol.



Shutdown

A FAIL state always sets a shutdown time that depends on the type of the error. This process is analogous to the shutdown of the individual fueling points by the VAPORIX-Control but affects all monitored fueling points.

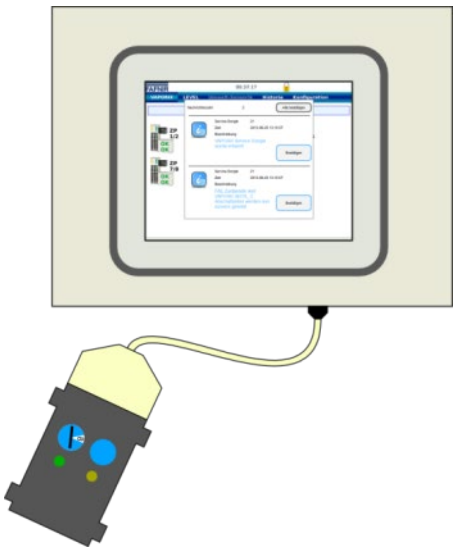
The times of shutdown are displayed on site and in the web interface under the item VAPORIX on the overview of the fueling points.

The shutdown counter continues to run after the start independently of the SECON-Client. Leaving the error status or shutting down the SECON-Client cannot stop this process. A reset can only be performed by a service technician with a VAPORIX Service Dongle.

Reset of the Shutdown Counter with the VAPORIX Service Dongle

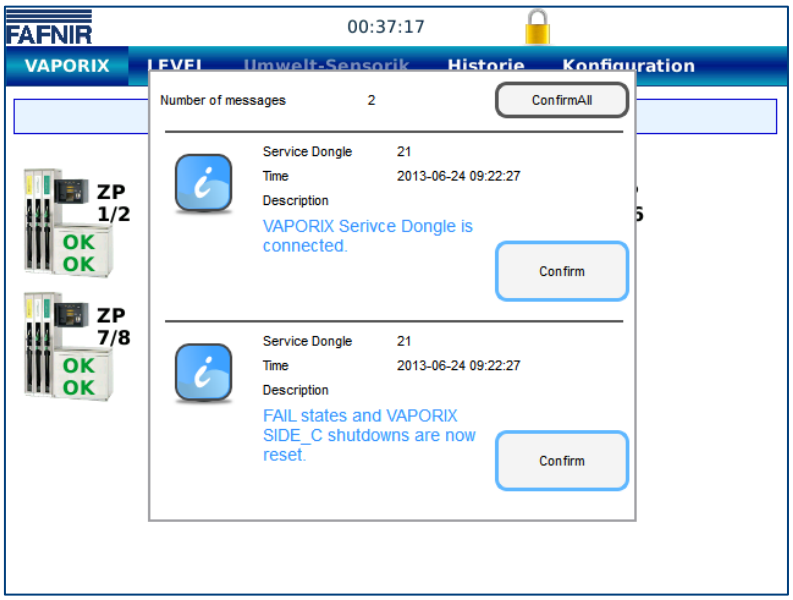
If the shutdown counter is triggered by pressure monitoring, the counter is not reset individually on the VAPORIX-Controls in the dispensers, but on the SECON-Client for all devices. There is no reset of an individually triggered shutdown on the fuel dispenser.

A reset can only be performed by service technicians who must use a VAPORIX Service Dongle licensed by FAFNIR.



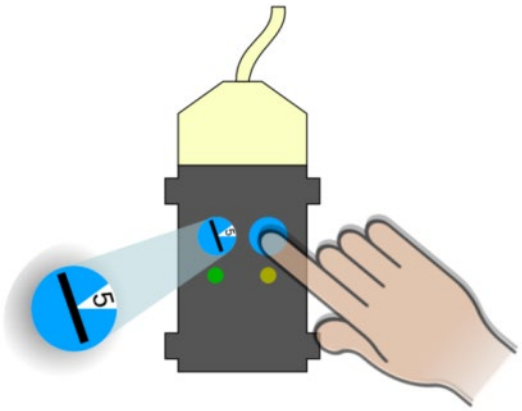
To reset, the VAPORIX Service Dongle must be connected to the SECON-Client via the adapter cable.

Reset of FAIL conditions SECON-Client (picture series)



The reset with the Service Dongle is performed only for shutdowns triggered by exceeding pressure limit values.

The Dongle is recognized by the system and a message (1) appears.

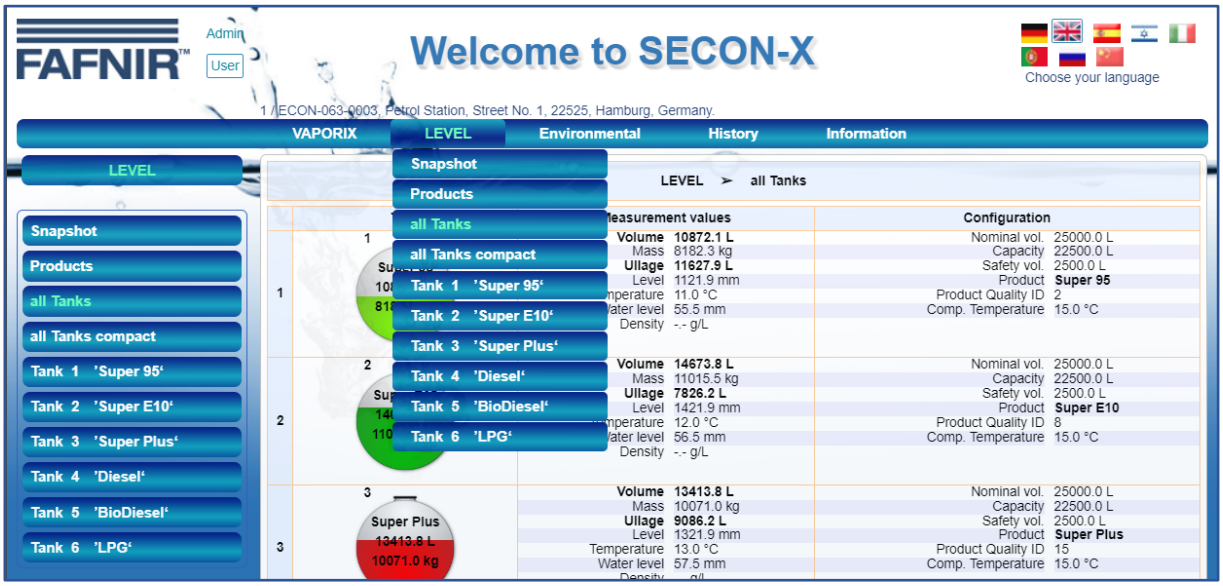


Now the FAIL state can be cancelled, and the shutdown can be stopped by turning the switch to position 5 and pressing the button on the dongle.

The reset is confirmed by another message (2).

In the overview of the fueling points on the screen of the SECON-Client all fuel dispensers with status OK are displayed with the next status update (1 min. interval), unless further shutdowns were initiated directly by the VAPORIX systems. These must be deactivated directly on the fuel dispensers.

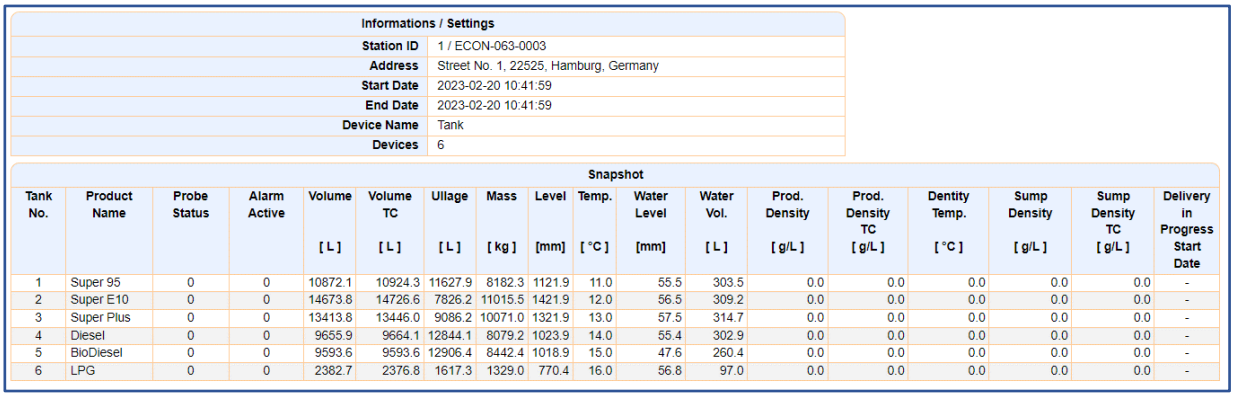
4 Menu "Level"



In the **LEVEL** menu, the current status, the tanks, products, readings, reports and alarms of the VISY-X level measurement are displayed and can be downloaded. With the VISY-X system, a precise and continuous filling level measurement in up to 16 tanks is proceeded. The product temperature, the water level and optionally the product density are measured simultaneously.

4.1 Snapshot

The Snapshot menu provides a brief overview of the most important tank data:



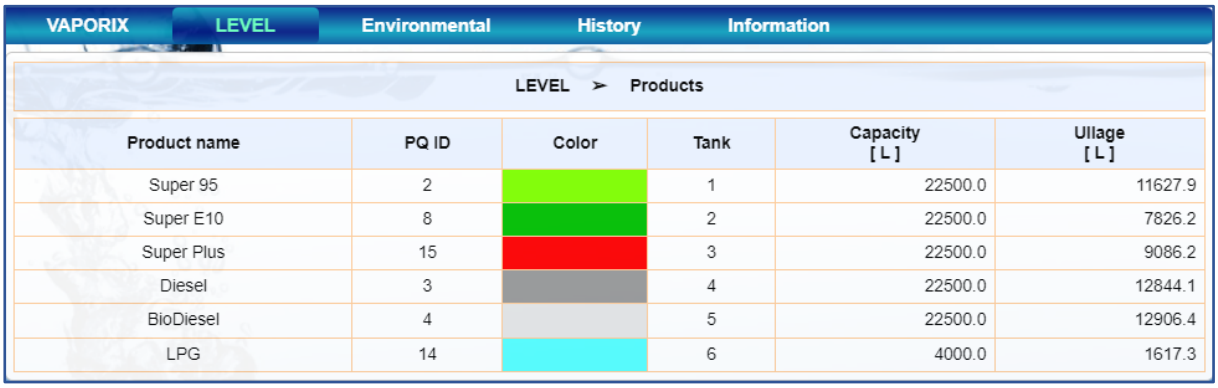
Informations / Settings	
Station ID	1 / ECON-063-0003
Address	Street No. 1, 22525, Hamburg, Germany
Start Date	2023-02-20 10:41:59
End Date	2023-02-20 10:41:59
Device Name	Tank
Devices	6

Snapshot

Tank No.	Product Name	Probe Status	Alarm Active	Volume [L]	Volume TC [L]	Ullage [L]	Mass [kg]	Level [mm]	Temp. [°C]	Water Level [mm]	Water Vol. [L]	Prod. Density [g/L]	Prod. Density TC [g/L]	Dentity Temp. [°C]	Sump Density [g/L]	Sump Density TC [g/L]	Delivery in Progress Start Date
1	Super 95	0	0	10872.1	10924.3	11627.9	8182.3	1121.9	11.0	55.5	303.5	0.0	0.0	0.0	0.0	0.0	-
2	Super E10	0	0	14673.8	14726.6	7826.2	11015.5	1421.9	12.0	56.5	309.2	0.0	0.0	0.0	0.0	0.0	-
3	Super Plus	0	0	13413.8	13446.0	9086.2	10071.0	1321.9	13.0	57.5	314.7	0.0	0.0	0.0	0.0	0.0	-
4	Diesel	0	0	9655.9	9664.1	12844.1	8079.2	1023.9	14.0	55.4	302.9	0.0	0.0	0.0	0.0	0.0	-
5	BioDiesel	0	0	9593.6	9593.6	12906.4	8442.4	1018.9	15.0	47.6	260.4	0.0	0.0	0.0	0.0	0.0	-
6	LPG	0	0	2382.7	2376.8	1617.3	1329.0	770.4	16.0	56.8	97.0	0.0	0.0	0.0	0.0	0.0	-

4.2 Products

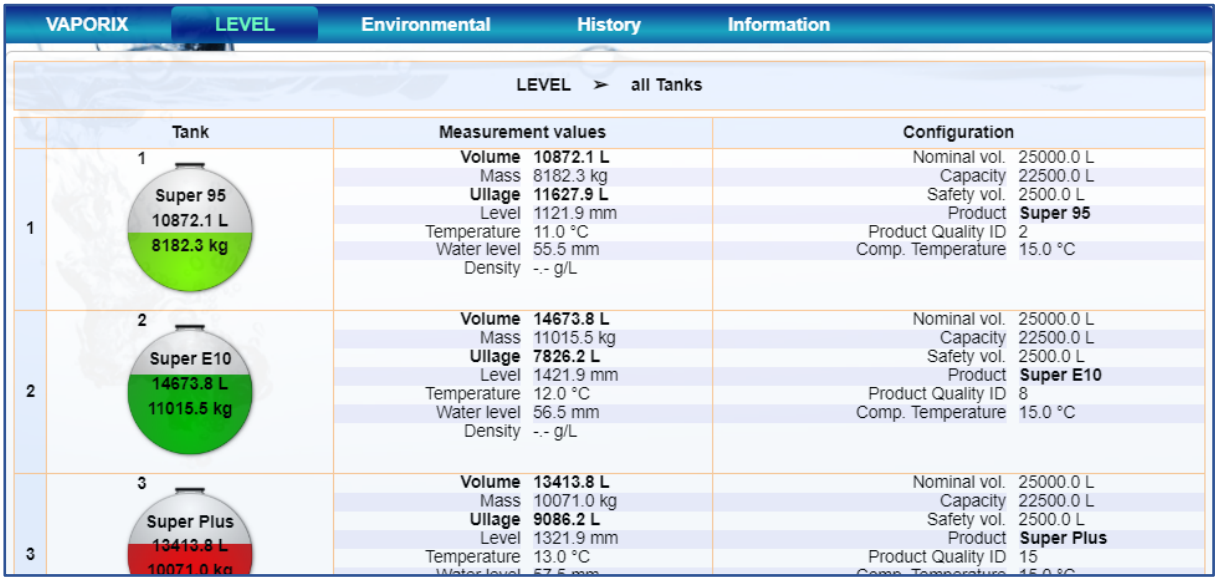
The Products menu item shows an overview of the defined product qualities with information on the Product name, Product Quality ID, Colour, Tank, Capacity and Ullage:



Product name	PQ ID	Color	Tank	Capacity [L]	Ullage [L]
Super 95	2		1	22500.0	11627.9
Super E10	8		2	22500.0	7826.2
Super Plus	15		3	22500.0	9086.2
Diesel	3		4	22500.0	12844.1
BioDiesel	4		5	22500.0	12906.4
LPG	14		6	4000.0	1617.3

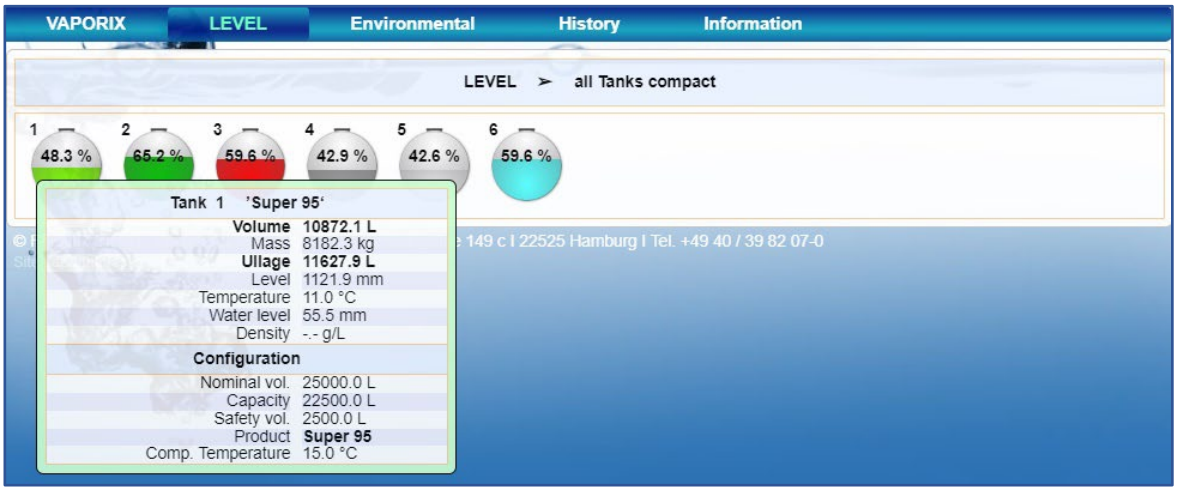
4.3 All Tanks

The menu item "all Tanks" shows the tank data of all tanks in short form:



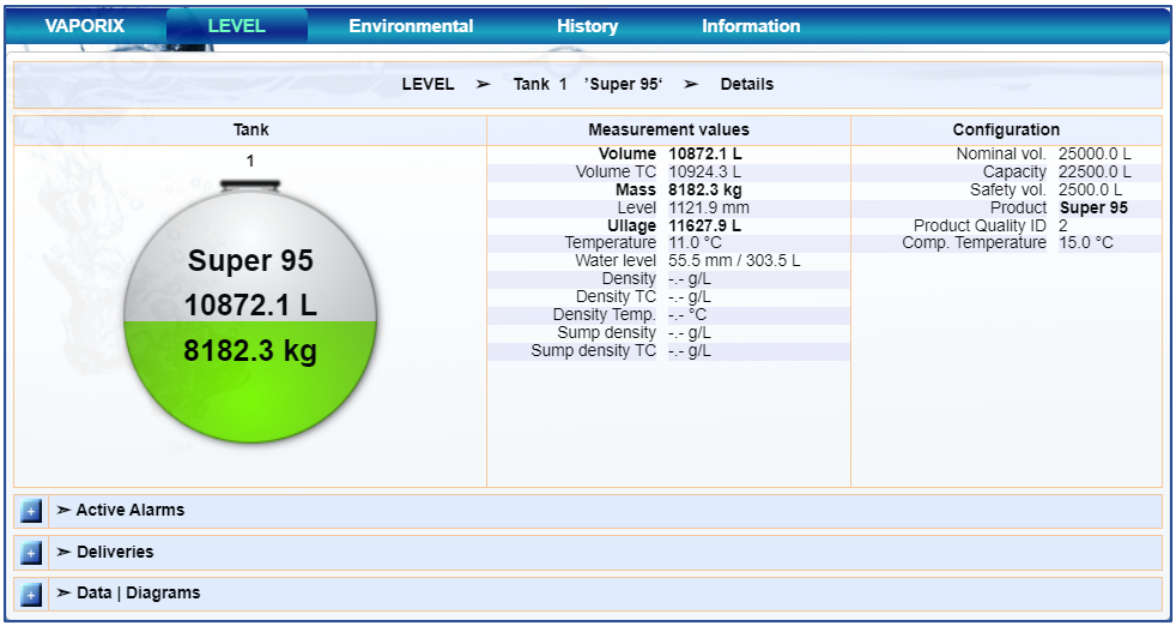
4.4 All Tanks Compact View

The menu item "all Tanks compact" only shows the tanks as graphics. Details about the tanks are displayed as mouseover when the mouse is moved over the tank graphics.



4.5 Tank 1 ... (Details)

This menu item shows all details of a selected tank, here in this example of Tank 1:

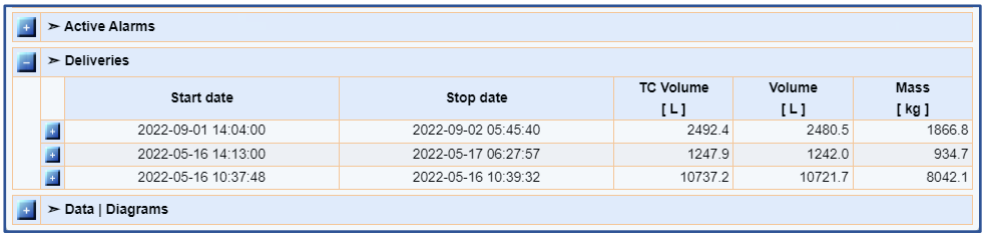


- **Tank**: Product name and level in litres and kg
- **Measurement Values**: Volume (TC), Mass, Level, Ullage, Temperature, Water level, Density (TC), Density Temperature, Sump Density (TC)
- **Configuration**: Nominal volume, Capacity, Safety volume, Product (name), Product Quality ID, Compensation Temperature

4.5.1 Active Alarms

"Active Alarms" shows the currently existing unconfirmed and confirmed alarms.

4.5.2 Deliveries



"Deliveries" shows the list of the stored deliveries with Start and Stop date, Volume (TC) [L], Mass [kg] and the detailed view with a click on the plus symbol.

4.5.3 Data / Diagrams

- Start and Stop date / Time
- Device: Tank (1, ...)
- Data with the following items for selection:

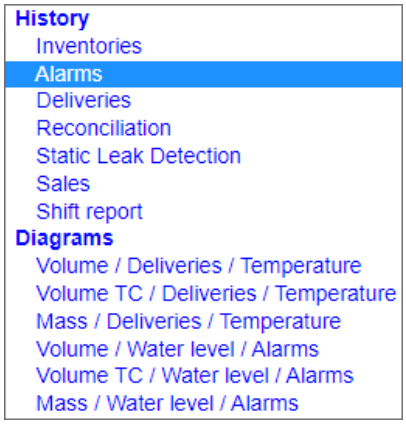
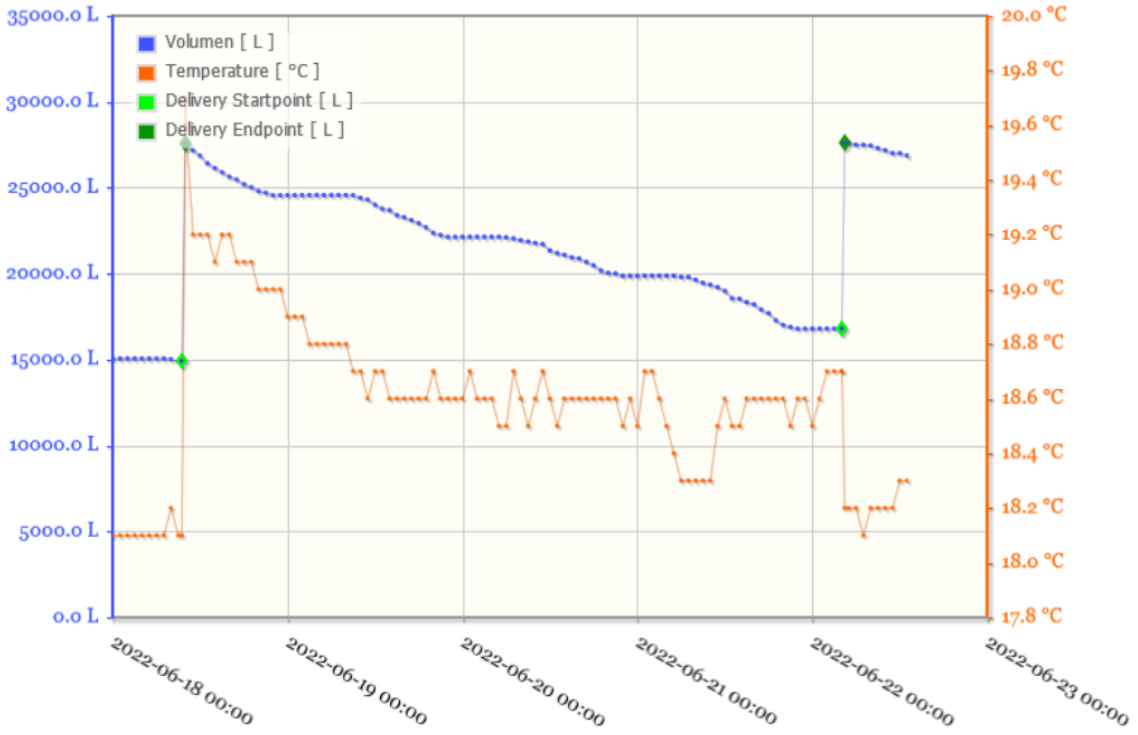


Diagram Settings / Infos	
Station ID	1 / ECON-063-003
Address	Street No. 1, 22525, Hamburg, Germany
Device Name	Tank
Device Number	2
Start Date	2022-06-18 00:00:00
End Date	2022-06-23 00:00:00
Measuring Points	114
Deliveries	2



Deliveries					
No.	**Start Date**	**Start-Volumen [L]**	**End Date**	**Stop-Volumen [L]**	**Volumen [L]**
1	2022-06-18 09:28:26	14919.8	2022-06-18 09:58:10	27569.8	12650.0
2	2022-06-22 04:03:02	16802.9	2022-06-22 04:27:22	27622.0	10819.1
				Σ	**23469.1**

Total			
-	2022-06-18 00:00:09	**Tank: Start-Volumen [L]**	15060.0
1 - 2		**Deliveries [L]**	23469.1
-	2022-06-22 13:00:14	**Tank: Stop-Volumen [L]**	(-) 26867.1
		Σ	**11662.0**

Example diagram: Volume - Temperature - Delivery

5 Menu "Environmental"

The functional status, the readings and the alarms of the environmental sensors are displayed in the **Environmental** menu.

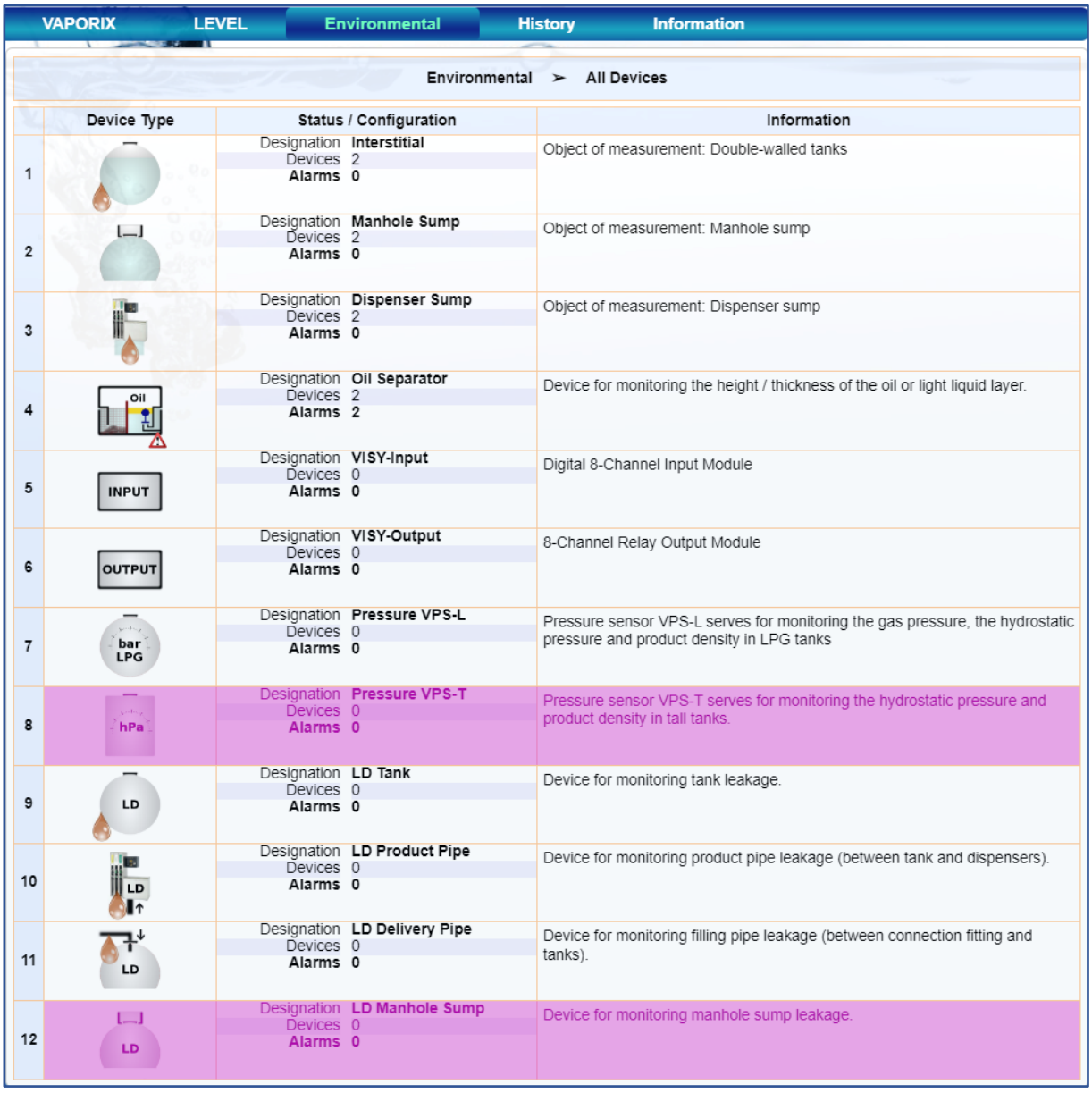
The environmental sensors include the probes for monitoring the

- Intermediate spaces in double-walled tanks (VISY-Stick/Reed Interstitial)
- Manholes (VISY-Stick/Reed Manhole Sump)
- Dispenser Sumps (VISY-Stick/Reed Dispenser Sump)
- Oil Separators (VISY-Stick Oil, VISY-Stick Sludge)
- Input and Output modules for alarms (VISY-Input, VISY-Output)
- LPG Tanks (Pressure sensors VPS-L)
- Leakage detection (LD) via pressure or vacuum monitoring in double-walled tanks or pipelines

☞ *The pressure sensors type **VPS-T** and the leakage detection **LD Manhole Sump** (marked purple) are no longer available.*

5.1 All Devices

The menu item "All devices" is a tabular overview of the environmental sensors with information about the number of devices used and the alarms:



	Device Type	Status / Configuration	Information
1		Designation **Interstitial** Devices 2 **Alarms 0**	Object of measurement: Double-walled tanks
2		Designation **Manhole Sump** Devices 2 **Alarms 0**	Object of measurement: Manhole sump
3		Designation **Dispenser Sump** Devices 2 **Alarms 0**	Object of measurement: Dispenser sump
4	Oil	Designation **Oil Separator** Devices 2 **Alarms 2**	Device for monitoring the height / thickness of the oil or light liquid layer.
5	INPUT	Designation **VISY-Input** Devices 0 **Alarms 0**	Digital 8-Channel Input Module
6	OUTPUT	Designation **VISY-Output** Devices 0 **Alarms 0**	8-Channel Relay Output Module
7	bar LPG	Designation **Pressure VPS-L** Devices 0 **Alarms 0**	Pressure sensor VPS-L serves for monitoring the gas pressure, the hydrostatic pressure and product density in LPG tanks
8	hPa	Designation **Pressure VPS-T** Devices 0 **Alarms 0**	Pressure sensor VPS-T serves for monitoring the hydrostatic pressure and product density in tall tanks.
9	LD	Designation **LD Tank** Devices 0 **Alarms 0**	Device for monitoring tank leakage.
10	LD	Designation **LD Product Pipe** Devices 0 **Alarms 0**	Device for monitoring product pipe leakage (between tank and dispensers).
11	LD	Designation **LD Delivery Pipe** Devices 0 **Alarms 0**	Device for monitoring filling pipe leakage (between connection fitting and tanks).
12	LD	Designation **LD Manhole Sump** Devices 0 **Alarms 0**	Device for monitoring manhole sump leakage.

Details on the individual environmental devices can be found in the following chapters.

☞ *The pressure sensors type **VPS-T** and the leakage detection **LD Manhole Sump** (marked purple) are no longer available.*

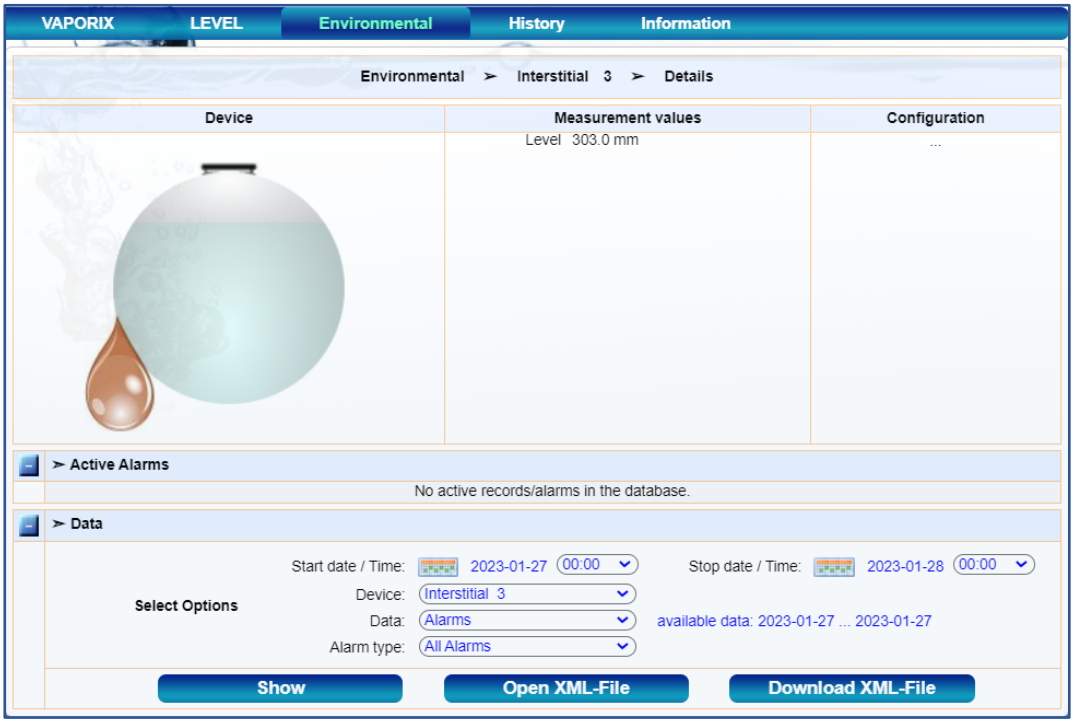
5.2 Interstitial

VISY-Stick Interstitial

The sensor VISY-Stick Interstitial is designed for monitoring the leak-detection fluid (salt brine, glycol, etc.) in the intermediate chambers of double-walled tanks. It reports over- and undershooting of adjustable thresholds. VISY-Stick Interstitial can also be used as a "dry sensor" to detect the penetration of a liquid into the intermediate chambers of double-walled tanks.

VISY-Reed Interstitial

The sensor VISY-Reed Interstitial Dry is designed for monitoring the dry intermediate chambers of double-walled tanks. The reed contact indicates the penetration of a liquid into the dry intermediate space.



In the Data area, the alarms of the selected device can be filtered, displayed and downloaded for a specific period.

5.3 Manhole Sump

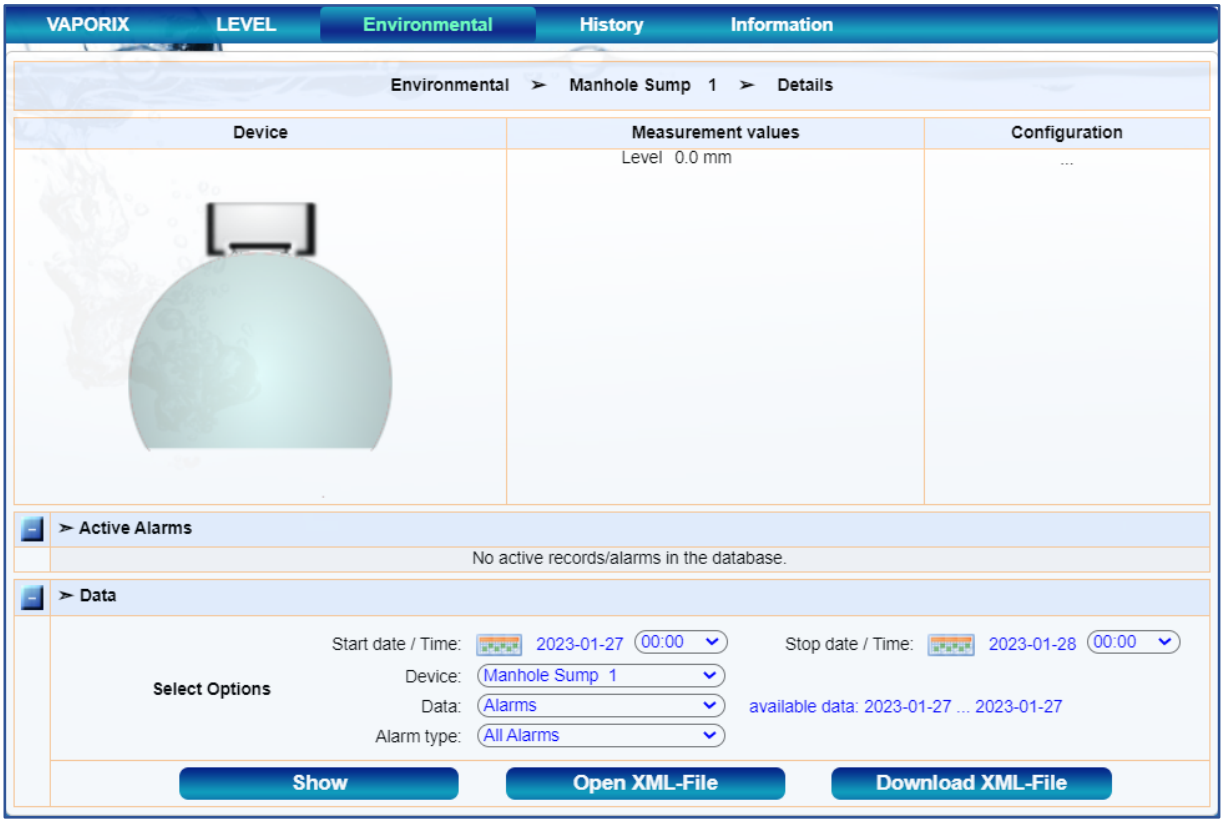
The Manhole Sump sensor is suitable for monitoring liquids in the sump of the manhole.

VISY-Stick Sump Manhole

This sensor detects liquids in the manhole sump and can distinguish between water and fuel.

VISY-Reed Sump Manhole

This sensor detects liquids in the manhole sump without distinction and serves purely as alarm indicator.



In the Data area, the alarms of the selected device can be filtered, displayed and downloaded for a specific period.

5.4 Dispenser Sump

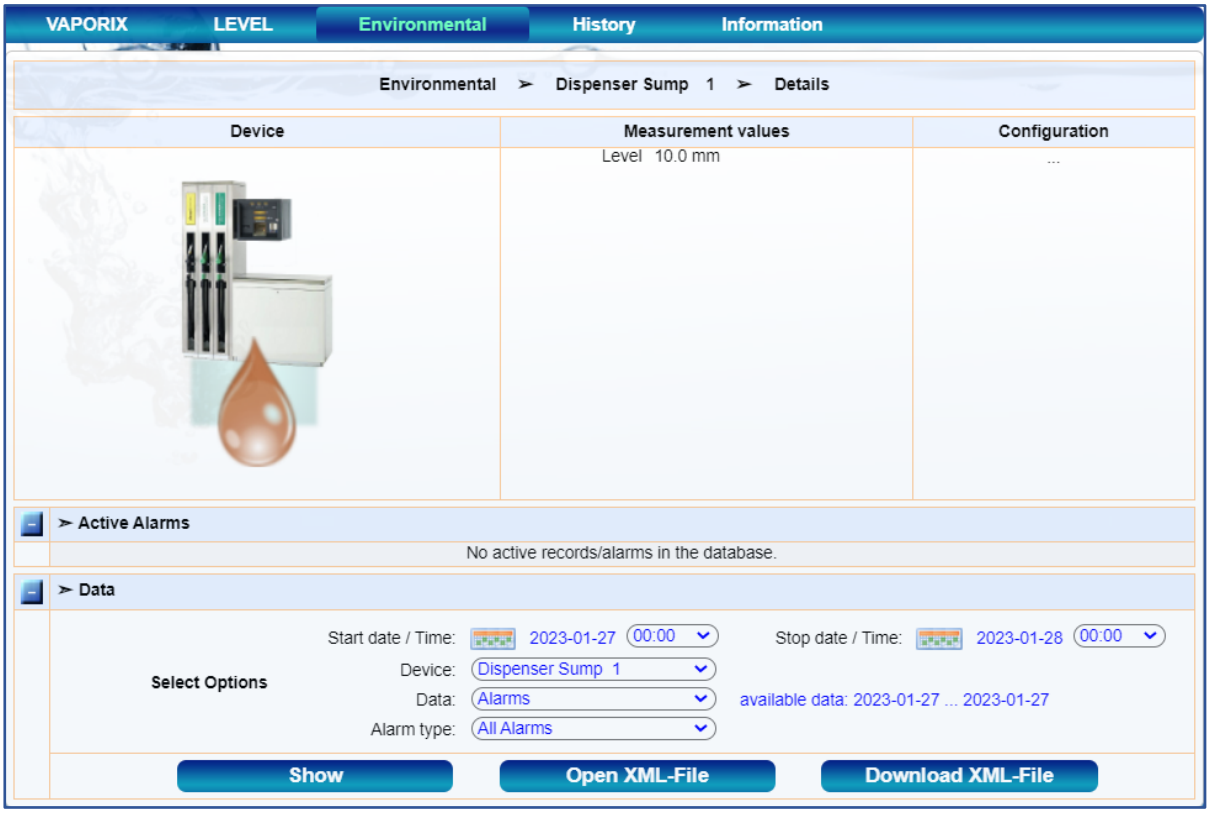
The Dispenser Sump sensor is suitable for monitoring liquids in the sump of the dispenser.

VISY-Stick Sump Dispenser

This sensor detects liquids in the dispenser sump can distinguish between water and fuel.

VISY-Reed Sump Dispenser

This sensor detects liquids in the dispenser sump without distinction and serves purely as indicator.

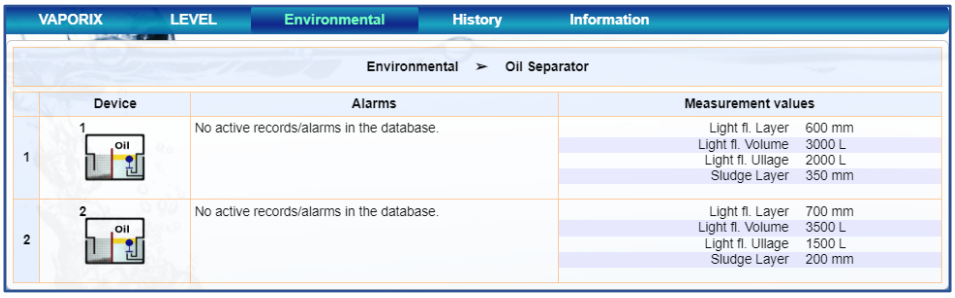


In the Data area, the alarms of the selected device can be filtered, displayed and downloaded for a specific period.

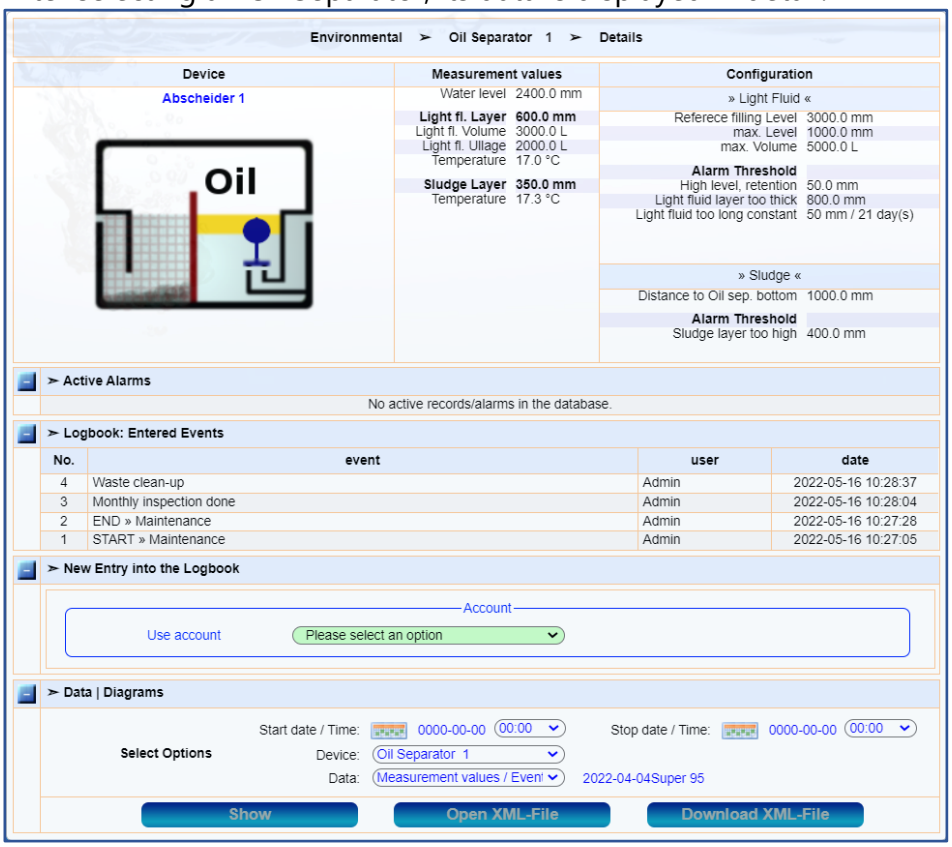
5.5 Oil Separator Monitoring

The Oil Separator function continuously monitors the sludge, oil and water level or volume in light liquid separators (oil separators). The VISY-Stick Oil level sensor monitors the thickness of the oil layer. The VISY-Sludge ultrasonic sensor measures the height and the temperature of the sludge in the separator. If the defined maximum layer thickness or level height is exceeded, an alarm message is sent locally and by remote transmission directly to the responsible persons or control centre.

A list of all configured Oil Separators with the most important information about the alarms, layer thicknesses and free space of the oil separators appears in the Oil Separator menu:



After selecting an Oil Separator, its data is displayed in detail:

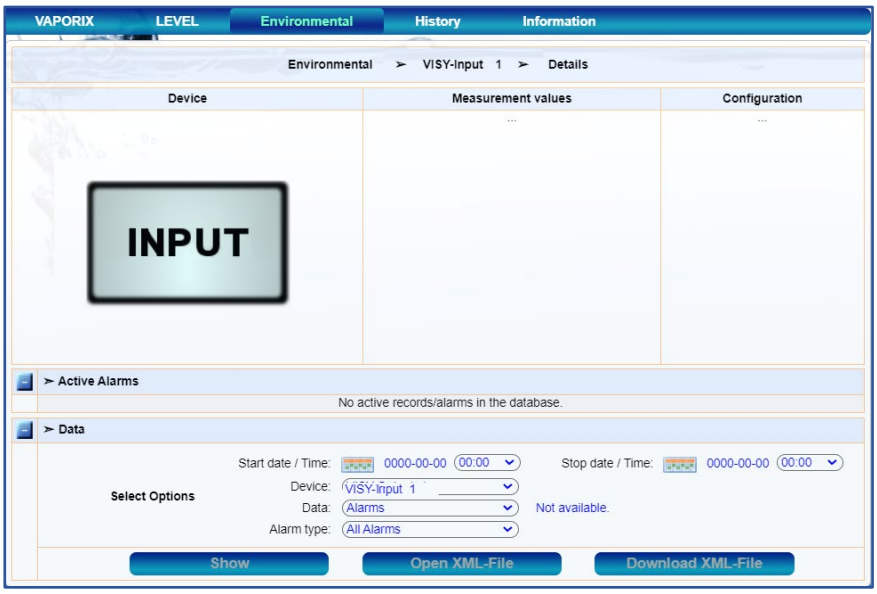


For entries in the logbook see technical documentation:

COMS Operating Log, art. no. 350368

5.6 VISY-Input

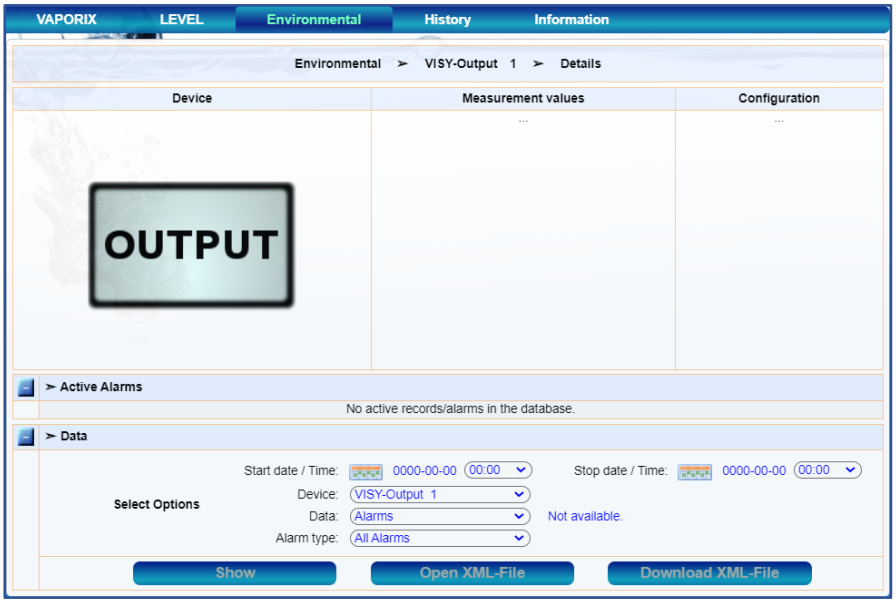
VISY-Input is a digital 8-channel input module for connecting external alarm outputs to the VISY-X system. With VISY-Input, alarms from external systems can be forwarded to the VISY-X system.



In the Data area, the alarms of the selected device can be filtered, displayed and downloaded for a specific period.

5.7 VISY-Output

VISY-Output is an 8-channel relay output module for connecting the VISY-X system to external security devices or alarm indicators. With VISY-Output, alarms from the VISY-X system can be forwarded to external systems.



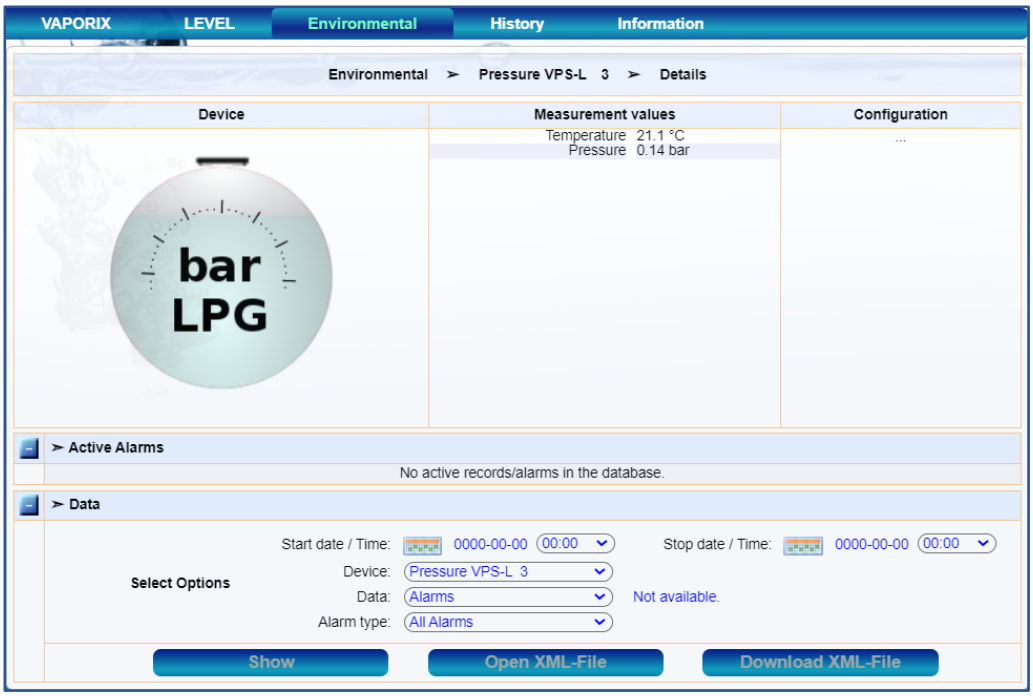
In the Data area, the alarms of the selected device can be filtered, displayed and downloaded for a specific period.

5.8 VPS-L Pressure Sensor

The VPS-L pressure sensor is used to determine the product mass (mass of the liquid phase and the vapor phase) of LPG in LPG tanks.

With the VPS-L pressure sensor, the vapour pressure in LPG tanks is measured, which only depends on the temperature and gas composition. Filling height and product density of the liquid phase are measured by VISY-Stick LPG and VISY-Density module to determine the product mass and volume of the liquid phase.

The product mass of the vapour phase is determined from the volume of gas (total volume minus liquid volume) and the vapour pressure. The entire product mass is calculated from the mass of the liquid phase plus the mass of the vapour phase.



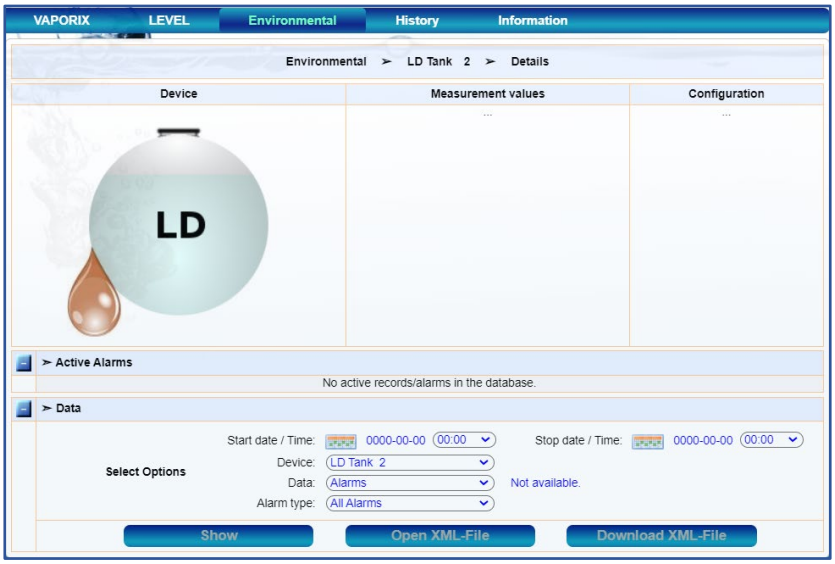
In the Data area, the alarms of the selected device can be filtered, displayed and downloaded for a specific period.

5.9 VPS-T Pressure Sensor

☞ *The VPS-T Pressure Sensor is no longer available.*

5.10 LD Tank

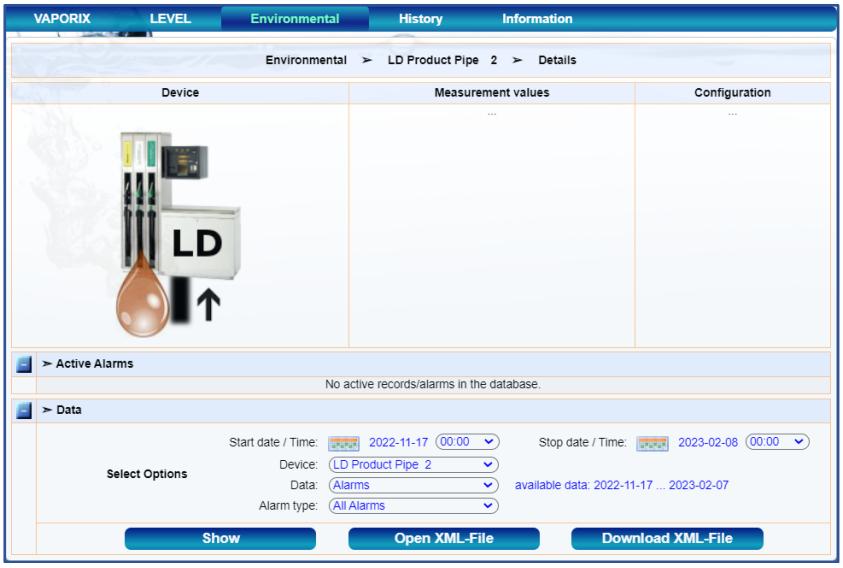
LD Tank is the leakage detection for double-walled tanks by monitoring the pressure or vacuum from the intermediate chambers of the tank walls.



In the Data area, the alarms of the selected device can be filtered, displayed and downloaded for a specific period.

5.11 LD Product Pipe

LD Product Pipe is the leakage detection for double-walled pipelines (tank to dispenser) by monitoring the pressure or vacuum from the intermediate chambers of the pipe walls.



In the Data area, the alarms of the selected device can be filtered, displayed and downloaded for a specific period.

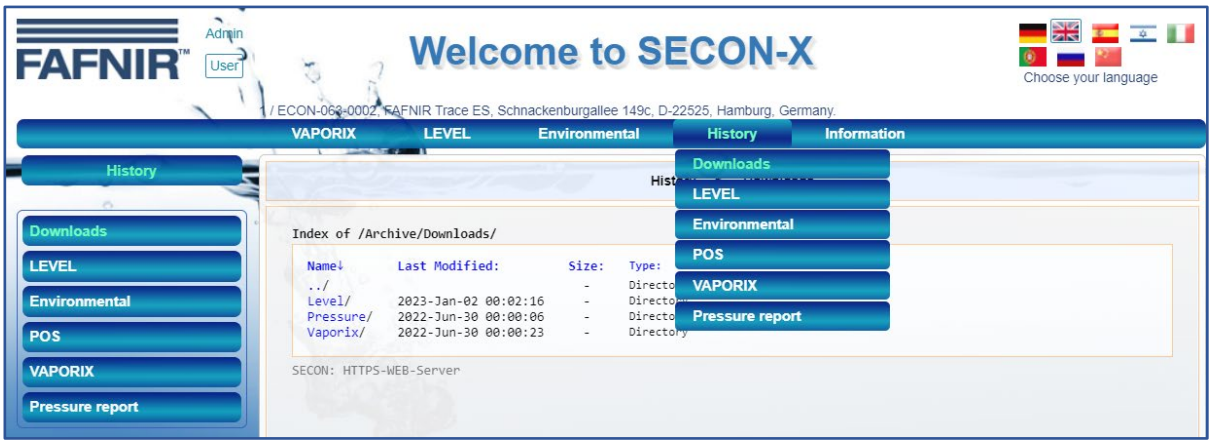
5.12 LD filling line (in preparation)

5.13 LD Manhole Sump

The leakage monitoring LD Manhole Sump is no longer available.

6 Menu "History"

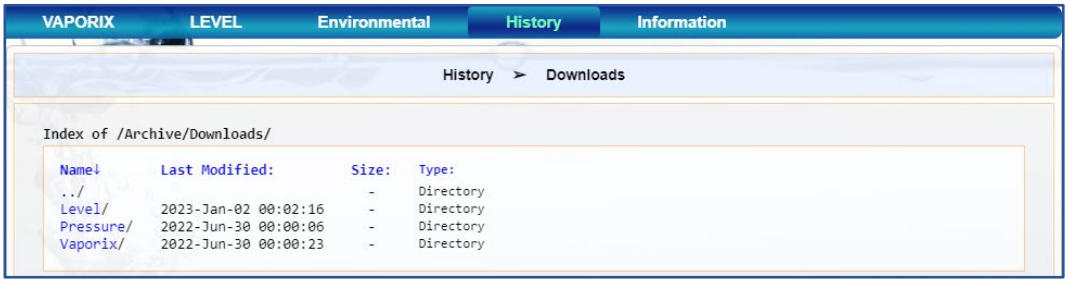
This menu provides access to the history data of the booked services:

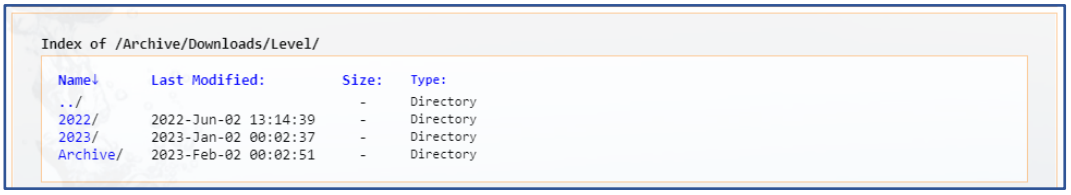


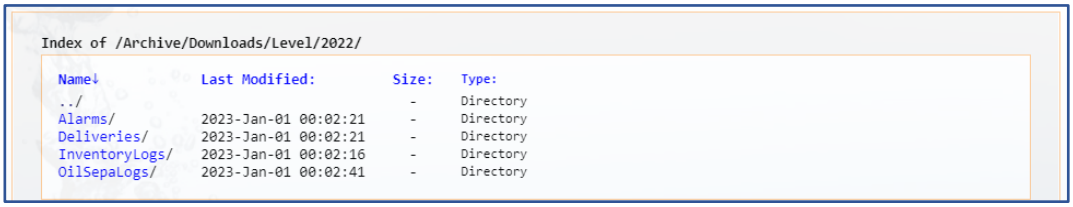
In some menus, the data is displayed with the "**Show**" button or opened in a separate browser window in detail view with "**Open XML-File**". The detailed data can be downloaded with the "**Download XML file**" button.

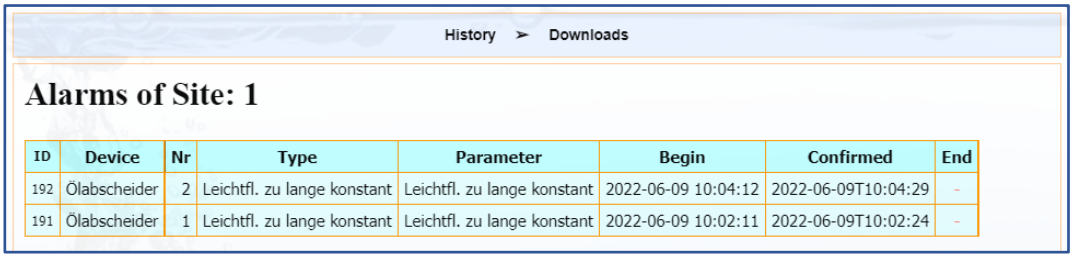
6.1 Downloads

In the "History - Downloads" Menu appears a list of the applications (Level, Pressure, Vaporix) for downloading the associated data, here for example the application "Level":







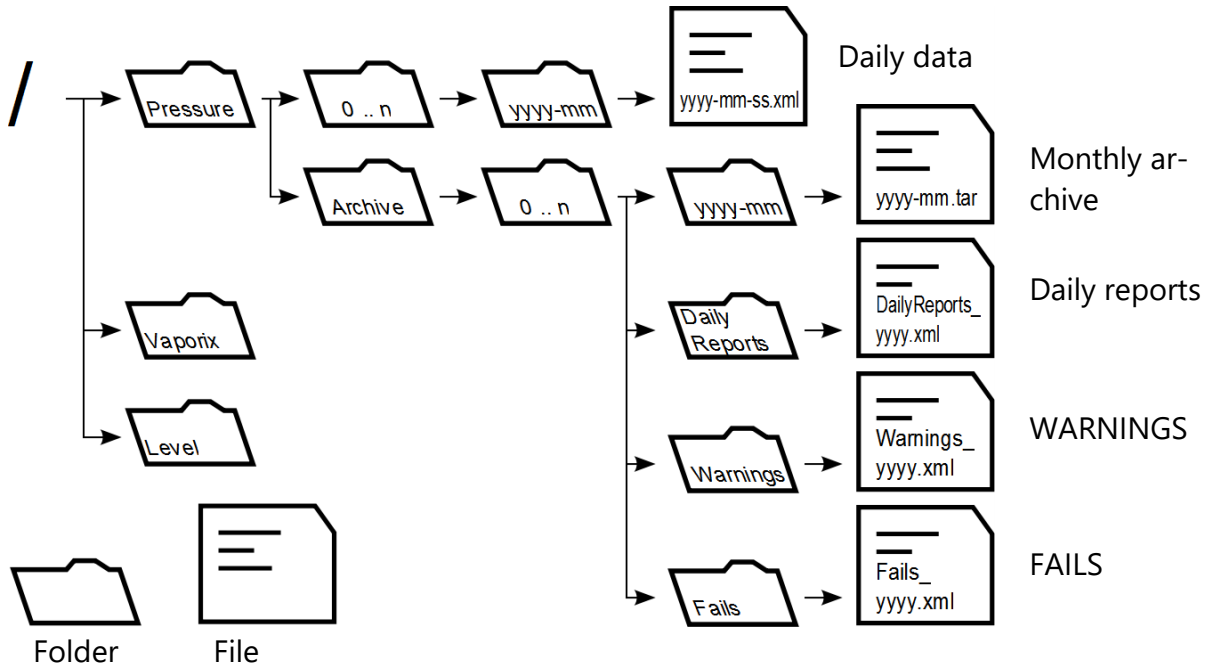


6.1.1 Download via WebDAV

The download of the history data is also possible with WebDAV.

With WebDAV, the data of the SECON-Client is integrated as a virtual drive on your PC/Mac and can be opened and saved with a file manager.

Based on the root directory the structure of the directory is displayed as follows:



0 ... n	Folder for data arranged according to pressure sensor positions
yyyy, mm, dd	Placeholders for the year, month and day
xml	File is available in XML format
tar	File is available as tar archive and must be unpacked

For details about the WebDAV connection see the Technical Documentation:

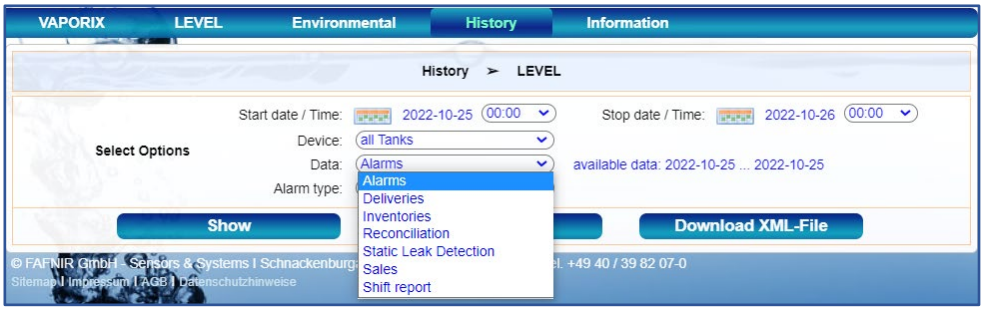
SECON-Client Administrator, chapter WebDAV, art. no. 350340

6.2 Level

The "History - LEVEL" menu provides access to the stored level sensor data.

The following data can be selected and filtered according to various criteria:

Tanks, Alarms, **Deliveries**, **Tank Inventory**, **Reconciliation**, **Static Leakage Detection**, **Sales (POS)**, and **Shift Report**.



The following distinction is made for displaying **alarms**:

- **Inactive alarms**: expired alarms that have been cancelled by the system
- **Active alarms**: currently existing unconfirmed and confirmed alarms

6.3 Environmental

The "History - Environmental" menu provides access to the stored environmental sensor data.

The following environmental sensors can be selected with a Start and Stop date / Time: **All Devices**, **Interstitial**, **Manhole Sump**, **Dispenser Sump**, **LD (Leakage Detection) Tank / Product Pipe**, **Oil Separator**, **VISY-Input**, **VISY-Output**, **Pressure Sensor VPS-L.**

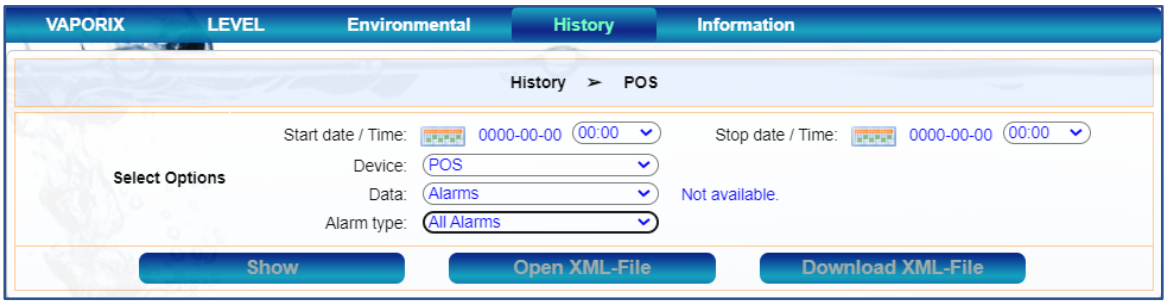
The following distinction is made for displaying the alarms:

- **Inactive alarms**: expired alarms that have been cancelled by the system
- **Active alarms**: currently existing unconfirmed and confirmed alarms

☞ *The pressure sensors VPS-T and VPS-V as well the leakage detection LD Manhole Sump are no longer available.*

6.4 POS

The "History - POS" menu provides access to the stored cash register (POS) alarms.



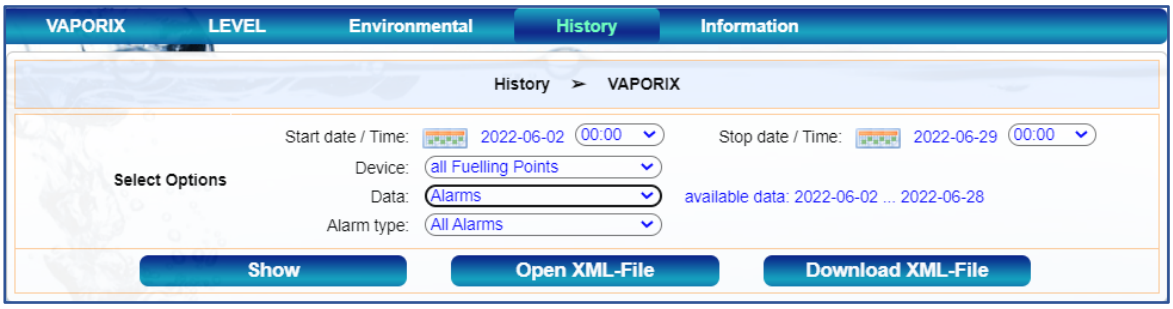
The following distinction is made for displaying the **alarms**:

- **Inactive alarms**: expired alarms that have been cancelled by the system
- **Active alarms**: currently existing unconfirmed and confirmed alarms

6.5 VAPORIX

The "History - VAPORIX" menu provides access to the stored vapour recovery data.

The following data can be selected with a Start and Stop date / Time for all or for specific fueling points: **Alarms**, **Service via Dongle**, or **Diagrams**.



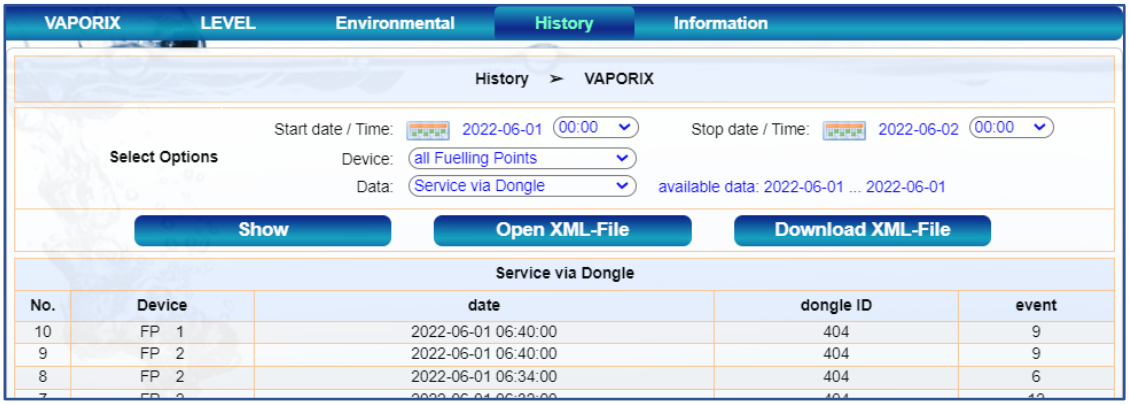
The following distinction is made for displaying the **alarms**:

- **Inactive alarms**: expired alarms that have been cancelled by the system
- **Active alarms**: currently existing unconfirmed and confirmed alarms

For the meaning of the VAPORIX Warnings and alarms, see the Technical Documentation:

VAPORIX Flow and Control, art. no. 207083

Selecting "**Service via Dongle**" in the “Data” filed shows the list of service works:



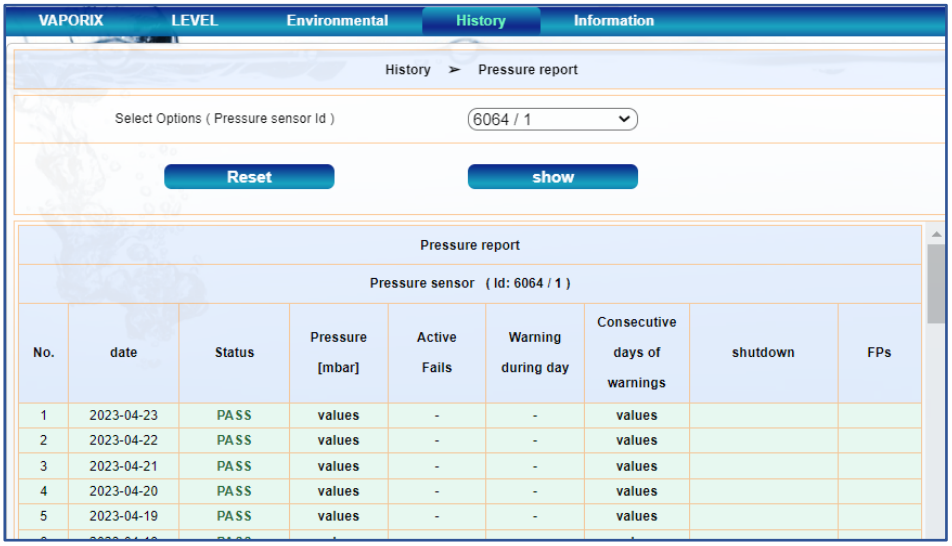
More details to the “Service via Dongle” you will find in the Technical Documentation:

VAPORIX Service Dongle, art. no. 207082

By selecting "**Diagrams**" in the "Data" field, the graphical view is selected for a specific device and period and is displayed with the "Show Diagram" button.

6.6 Pressure Report

The "History - Pressure Report" menu provides the stored data of the VPS-V pressure sensor.



☞ *Without the Pressure Sensor VPS-V no pressure data is shown by the "History - Pressure Report" menu.*

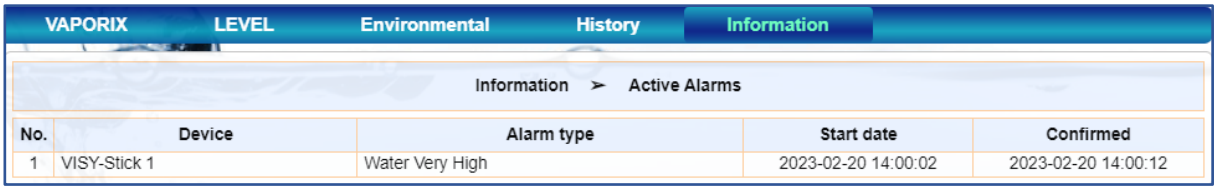
For more details on the Pressure Alarms see chapter:
3.3.1 Country-specific evaluation of the pressure sensor data (AU/IL)

7 Menu "Info“

In this menu, information about the Active Alarms, the Station, Manuals/Documents, and the Software Version is displayed.

7.1 Active alarms

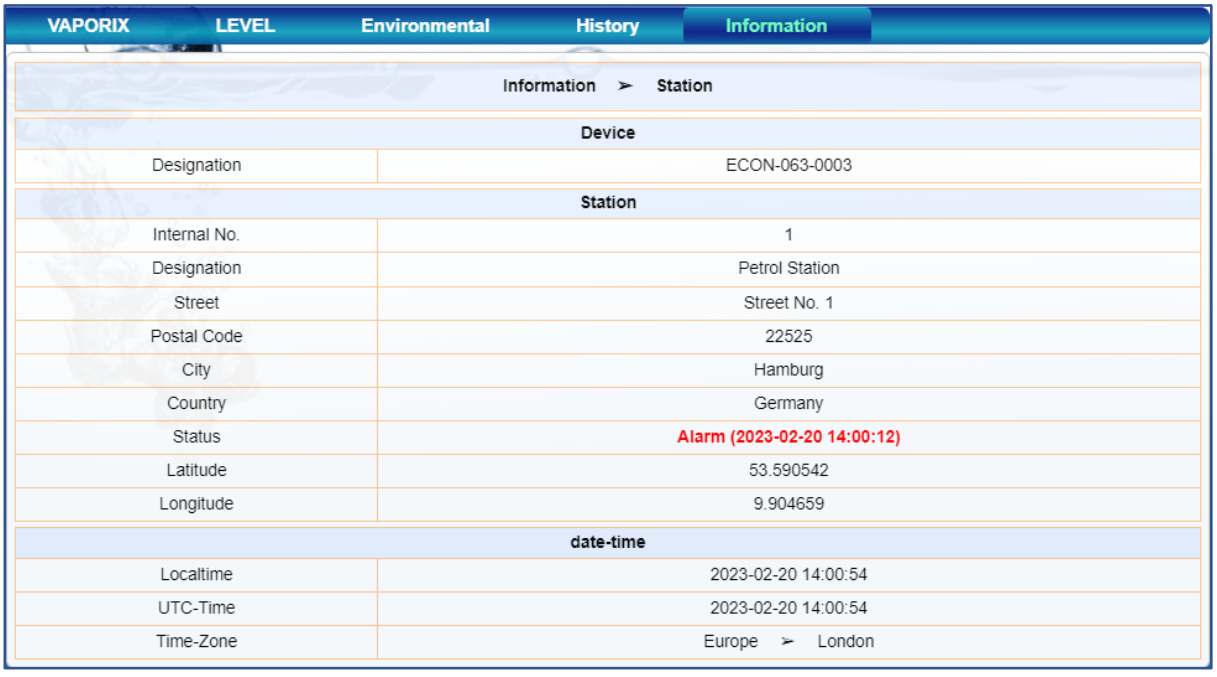
List of the currently existing unconfirmed and confirmed alarms



No.	Device	Alarm type	Start date	Confirmed
1	VISY-Stick 1	Water Very High	2023-02-20 14:00:02	2023-02-20 14:00:12

7.2 Station

Information about the station data and the configured SECON-Client device:



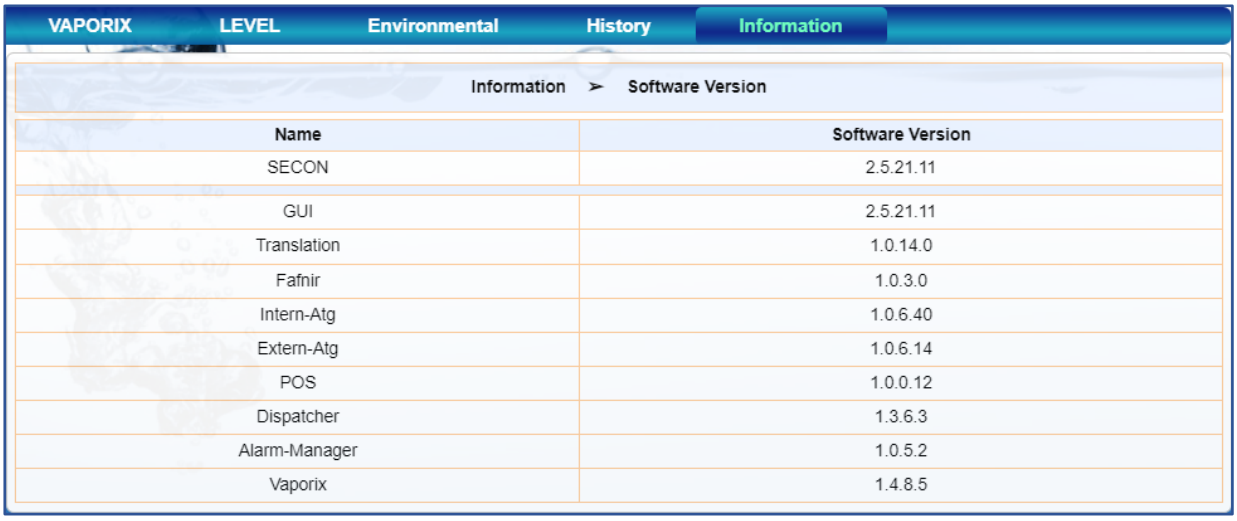
Device	
Designation	ECON-063-0003
Station	
Internal No.	1
Designation	Petrol Station
Street	Street No. 1
Postal Code	22525
City	Hamburg
Country	Germany
Status	Alarm (2023-02-20 14:00:12)
Latitude	53.590542
Longitude	9.904659
date-time	
Localtime	2023-02-20 14:00:54
UTC-Time	2023-02-20 14:00:54
Time-Zone	Europe ➢ London

7.3 Manuals and Documentation

The SECON-X system includes the following manuals:

SECON-Client (hardware device)	Art. no. 350076
SECON-Client Administrator (local and remote access)	Art. no. 350340
SECON-Client User (local access)	Art. no. 350263
SECON-Client User (remote access)	Art. no. 350175
SECON-Server Installation	Art. no. 350112
SECON-Server Administrator	Art. no. 350088
SECON-Server User	Art. no. 350377
SECON-X Autocalibration	Art. no. 350342
SECON-X Reconciliation	Art. no. 350344
VAPORIX Flow/Control	Art. no. 207083
VISY-Command	Art. no. 207184
VPS pressure sensors	Art. no. 350204

7.4 Software Version



Blank Page

Blank Page

Blank Page

FAFNIR GmbH
Schnackenburgallee 149 c
22525 Hamburg, Germany
T: +49/40/39 82 07–0
E-mail: info@fafnir.de
Web: www.fafnir.com