



**SVANTEK**



**USER MANUAL**



# **SvanNET**

ON-LINE MONITORING  
SOLUTIONS

Warsaw, 2020-11-02  
Rev. 1.12

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# 1 INTRODUCTION

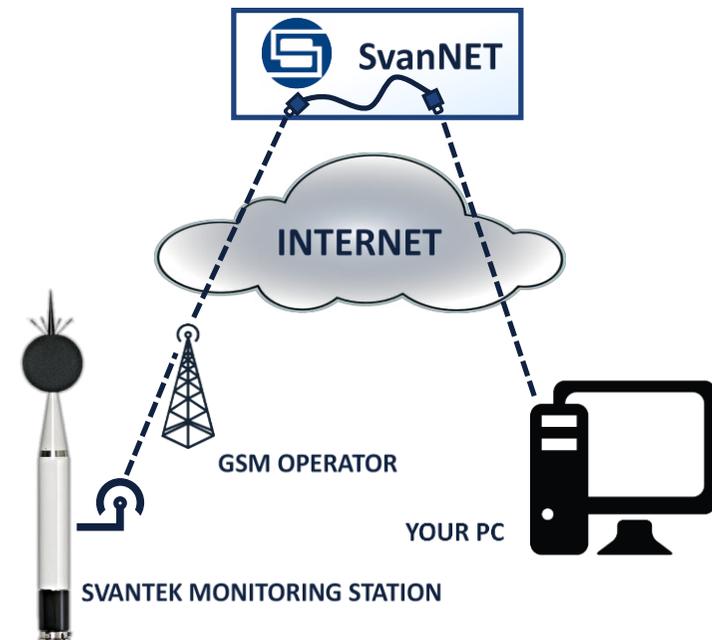
**SvanNET** is a web-service that supports multi-point connection with Svantek's noise, vibration, meteo and dust monitoring stations. To ensure the reliability and data security the SvanNET has been located on the Microsoft Azure™, the cloud platform working through global network of Microsoft-managed data centers.

To support noise & vibration monitoring SvanNET provides on-line connection services such as web interface, access to data files in the monitoring station or status alarms. The monitoring checklist includes measurement status, alarms indication, power source including battery charge, external power information as well as the GSM signal strength.

SvanNET is an on-line solution which means it doesn't require software installation and is accessible through a web browser.

SvanNET connection supports all types of SIM cards with a 3G modem regardless of having a public or private IP. Connection over the SvanNET allows users to:

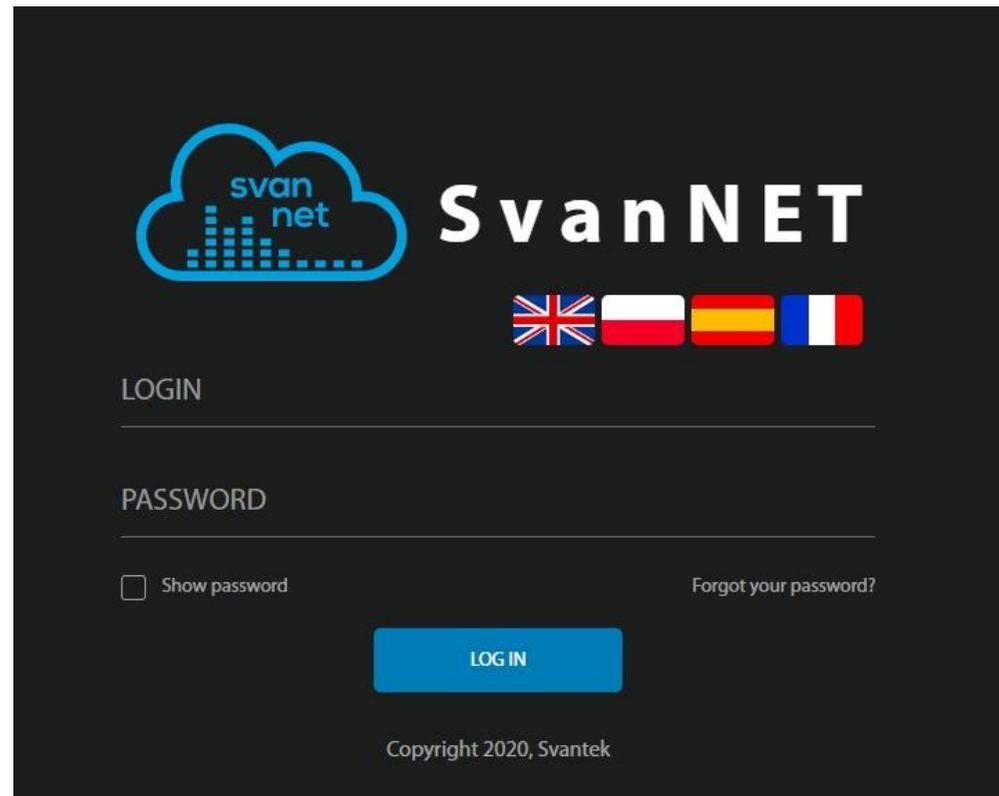
- use a mobile phone or a tablet to watch real time measurement results,
- manually download files and reconfigure stations,
- manually download files and reconfigure stations using SvanPC++\_RC module,
- use the SvanPC++\_RC application based on MS Windows® for automatic control of monitoring stations, data archiving, automatic web publication, etc.



Before starting to use SvanNET web-service:

1. Ensure you have an access to your SvanNET account and your stations are assigned to it. You can either create an account yourself or ask your local distributor for assistance.
2. Set up connections of your measurement devices with SvanNET (see user manuals dedicated for the measurement instruments). Successful connection with SvanNET is indicated by the  icon on the SVANTEK instrument's display.
3. To access SvanNET, log in to your account at: <https://www.svannet.com/panel-login.php>

Before logging in, select your language by clicking the appropriate flag.



Once logged in, you can use the web interface to control monitoring stations.

## 2 SVANNET PROJECTS

SvanNET Projects is a payable extension offering fully automated management of multi-point alarms for noise and vibration monitoring stations. Tools such as Automatic Files Download, Data Storage, Advanced Alarms, Data Sharing and Reporting enable unattended monitoring. The functionality of SvanNET Projects allows to group monitoring stations so that alarms and reports are defined for each project separately. The data files are also grouped automatically in accordance with Project assignments.

### 2.1. Automatic Files Download (AFD)

The Automatic Files Download maintains the remote connection with monitoring stations and downloads the measurement data for each project separately. The AFD ensures that data is safely downloaded and shared before clearing the memory in the monitoring stations. The Automatic Files Download can export data to FTP server both in the original Svantek format or converted to the CSV text format. The uploaded data can be easily used as the user's website content.

### 2.2. Advanced Alarms

The SvanNET Projects tools are capable to analyse data files downloaded by AFD in order to generate E-mail Alarms based on exceeding the level thresholds in specified time periods.

### 2.3. Data Storage

The main advantage of SvanNET Data Storage is a quick access to the measurement data that can be conveniently browsed and downloaded by the time range. The data is stored on the Microsoft Azure™ cloud platform ensuring reliable connection on the global scale.

## 2.4. Sharing access levels

SvanNET allows to create different Projects each with a different Location and Level of Security that prevents users from getting access to information they're not authorized to see.

Multiple levels of security for different users account offers possibility to limit the access to three levels:

Administrator: browse Project View | browse Data Files | delete from Data Files | modify Station Configuration | modify Project Configuration | modify Project Sharing | modify Project Automatic Download

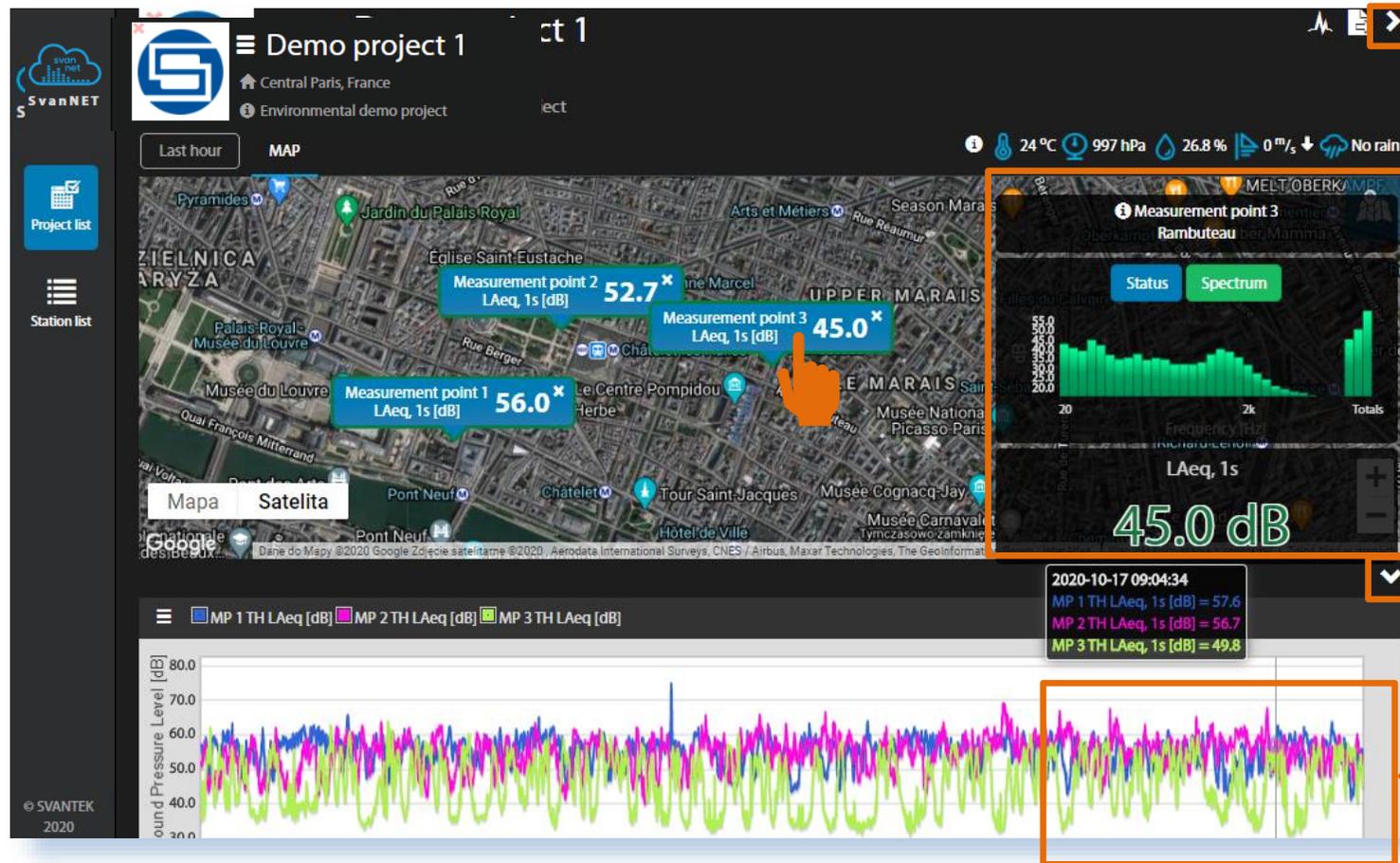
Manager: browse Project View | browse Data Files | delete from Data Files | modify Station Configuration | modify Project Automatic Download

Guest: browse Project View

The screenshot displays the SvanNET interface for 'Project - Demo project 1'. The interface is dark-themed and includes a sidebar on the left with 'Project list' and 'Station list' icons. The main content area shows two project cards. The first card, 'DEMO PROJECT 1', is for 'CENTRAL PARIS, FRANCE' and 'ENVIRONMENTAL DEMO PROJECT', owned by 'OWNER'. It lists three measurement points: 'MEASUREMENT POINT 1 - SV 200A S/N 12345' (Louvre-Rivoli), 'MEASUREMENT POINT 2 - SD 277A SVAN 977 S/N 23456' (Les Halles), and 'MEASUREMENT POINT 3 - SV 307 S/N 67890' (Rambuteau). The second card, 'DEMO PROJECT 2', is for 'MANHATTAN, NEW YORK, UNITED STATES OF AMERICA' and 'BUILDING VIBRATION DEMO PROJECT', with 'MANAGER ACCESS'. It lists two measurement points: 'MEASUREMENT POINT 1 - SD 258A SVAN 958A S/N 45678' (Brooklyn Bridge - City Hall) and 'MEASUREMENT POINT 2 - SD 258A SVAN 958AG S/N 56789' (Brooklyn Bridge - Gold St). Each measurement point has a set of icons for actions like notifications, status, configuration, and sharing. On the right side, there is a vertical menu with buttons for 'VIEW', 'STATUS', 'CONFIGURATION', 'SHARING', 'AUTOMATIC DOWNLOAD', and 'DATA FILES'. The top right corner shows user profile, notification, and share icons. The bottom left corner has the copyright notice '© SVANTEK 2020'.

## 2.5. Start SvanNET - Project VIEW

When you open SvanNET a start-up project opens, with measurement points on the map appointed to this project.



- Click the arrow to toggle project/station main menu.
- Click the measurement point on the map to open additional window with current broadband result and spectrum.
- Click the arrow to toggle the results plots.
- Click the desired time point to see results for all measurement points in the cursor box.

**SELECT RESULTS**

Channel 1 2

Profile 1 2

|                                     |                   |                     |
|-------------------------------------|-------------------|---------------------|
| <input type="checkbox"/>            | SR Ltm3 [dB]      | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR Lden [dB]      | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR LEPd [dB]      | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR LApeak [dB]    | 2020-10-22 12:12:03 |
| <input checked="" type="checkbox"/> | SR LAeq [dB]      | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR LAFmin [dB]    | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR LAFmax [dB]    | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR LAFTeq [dB]    | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR LAFe [dB]      | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR LAF (SPL) [dB] | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR L90 [dB]       | 2020-10-22 12:12:03 |
| <input type="checkbox"/>            | SR L80 [dB]       | 2020-10-22 12:12:03 |

OK CANCEL

**SELECT RESULTS**

|                                     |              |                   |
|-------------------------------------|--------------|-------------------|
| <input checked="" type="checkbox"/> | MP 1 Results | TH LAeq (Ch1, P1) |
| <input checked="" type="checkbox"/> | MP 2 Results | TH LAeq (Ch1, P1) |
| <input checked="" type="checkbox"/> | MP 3 Results | TH LAeq (Ch1, P1) |

OK CANCEL

**SELECT RESULTS**

Channel 1 2

Profile 1 2

SR LAeq [dB]

OK CANCEL

- Click  to change the measurement result in the pop-up box uploaded from the Channel and Profile.
- Click the result you wish to plot and then click **OK**.
- Click  to add the plot.

The measurement results may be measured and presented on the plot with **SR** (Summary results) or **TH** (Time history) steps.

- Click **x**, to delete the plot.

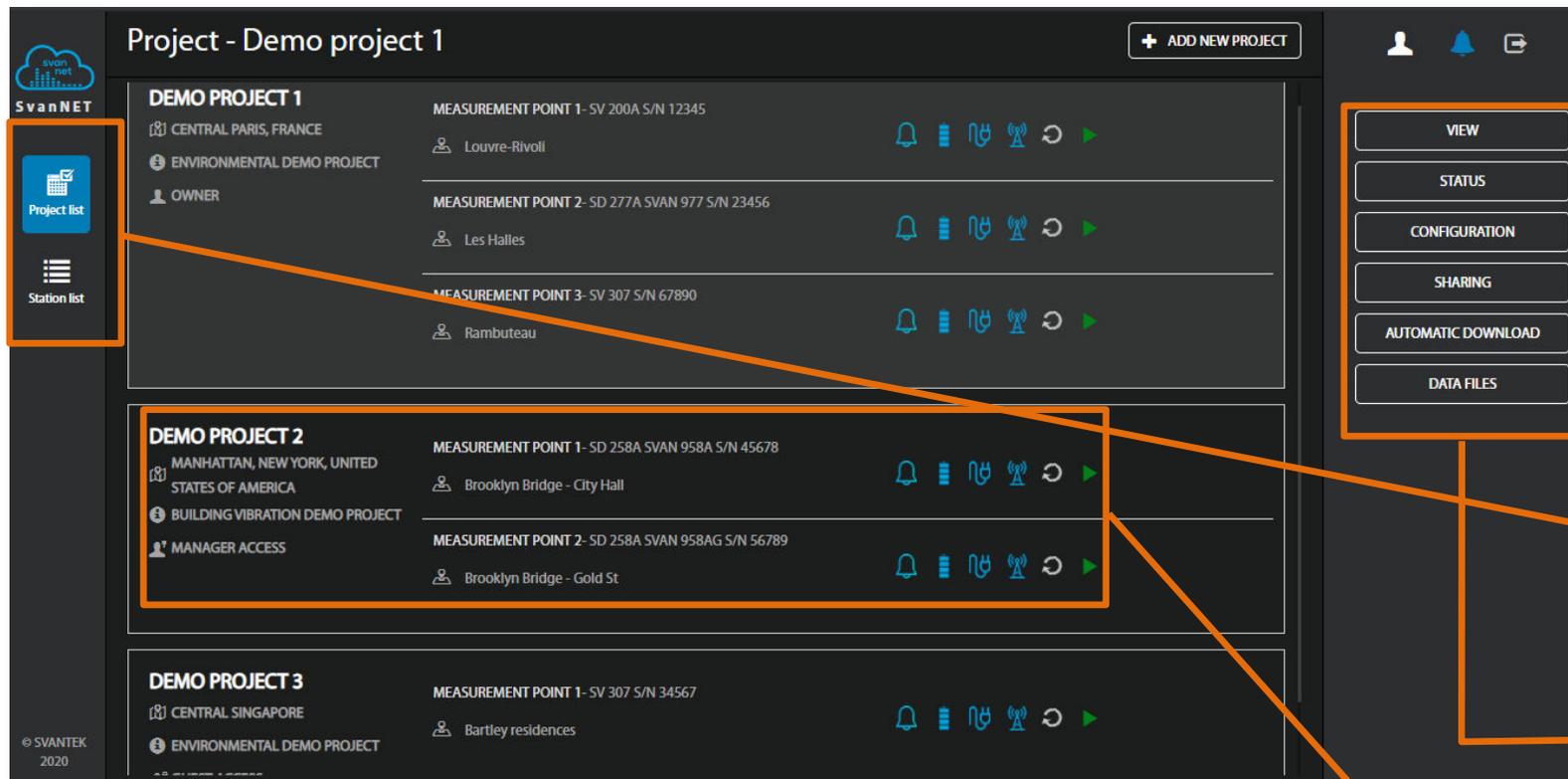


**Note:** Summary results usually have longer step (minutes or hours).



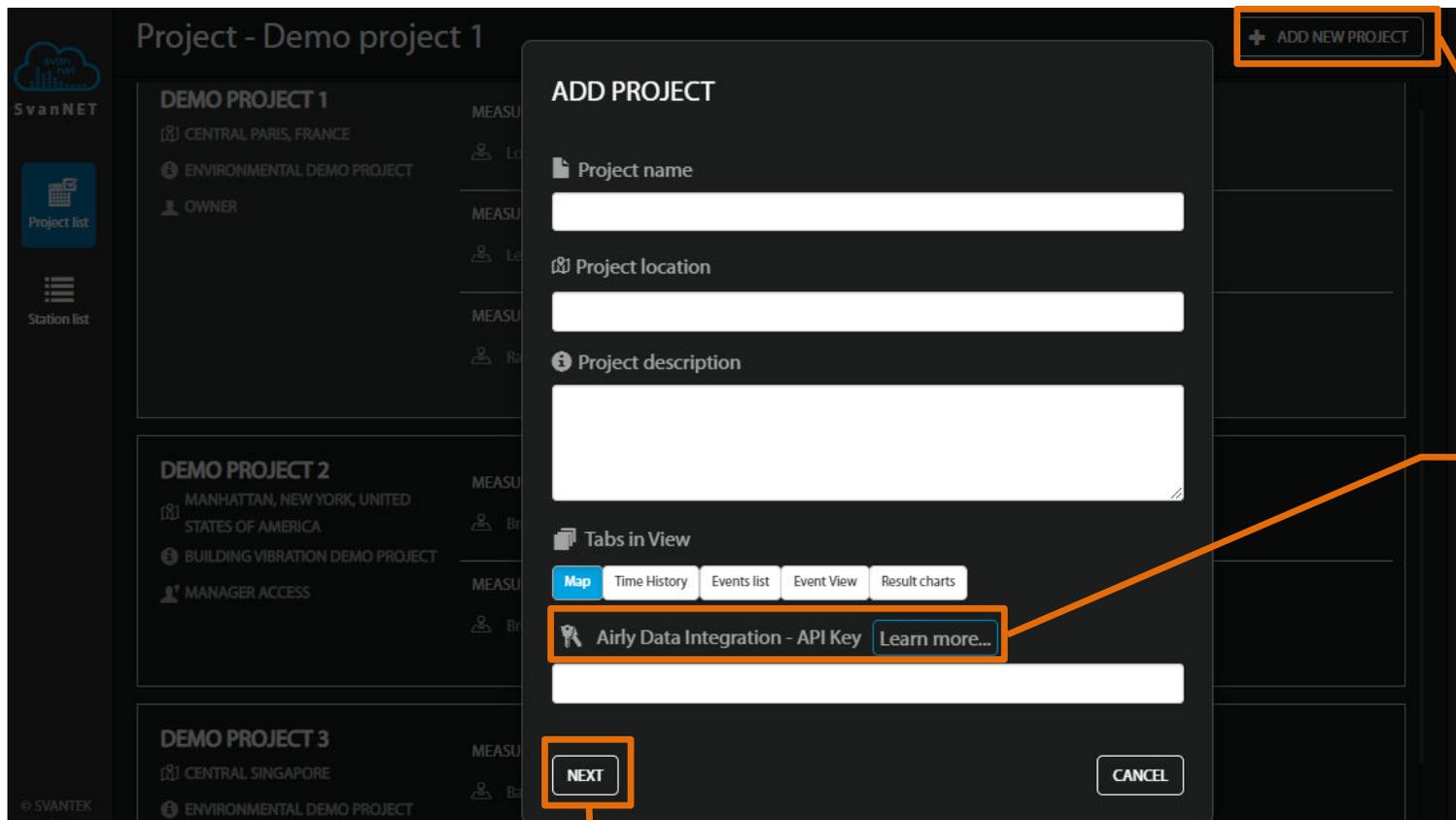
## 2.6. Project list

To open the Project list, use the left side bar.



The Project list is divided into three parts:

- Icons on the left-hand side allow you to choose whether you want to work with a particular station or with a Project. Wherever you are you can just click to see your station or ongoing project and manage them.
- Tool panel for the selected Project. Its content depends on the Access level.
- Information about the Project.



To add new project:

- Click **+ Add new project** and in the **ADD PROJECT** pop-up box, fill out all the details and select the **Tab**s you want to display in **View**

Airly Data Integration is an opportunity to connect dust and weather sensor to collect its data and display that in your Svannet Project as well.

- Click the **NEXT** button to add measurement points.

### ADD MEASUREMENT POINT

Point name

Point short name

Point description

Geolocation

Latitude  Longitude

Station

### SELECT COORDINATES

Search for ...

Latitude  Longitude

Project - Demo project 1

SvanNET

Projectlist

Station list

#### DEMO PROJECT 1

MEASUREMENT POINT 1- SV 200A S/N 12345

Louvre-Poli

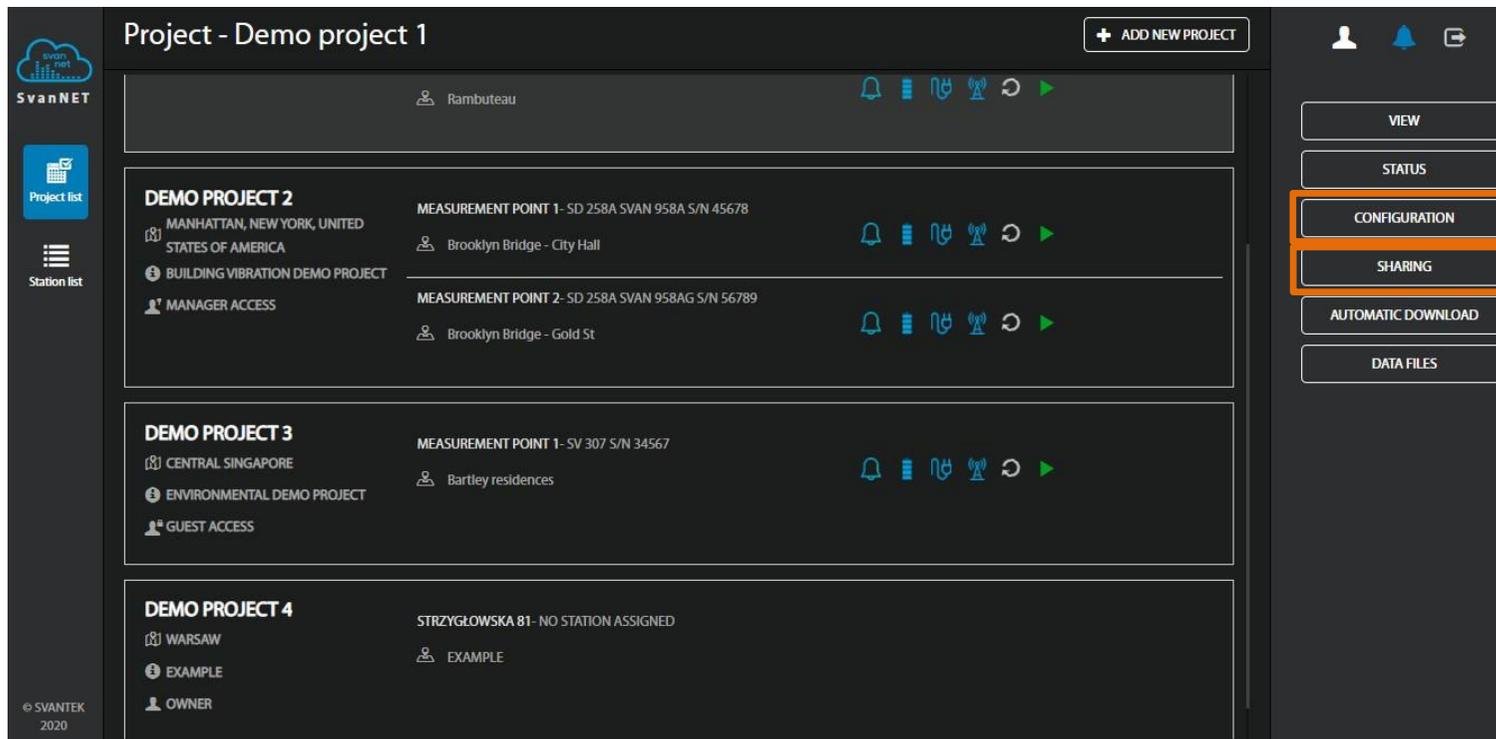
MEASUREMENT POINT 2- SD 277A SVAN 977 S/N 23456

Les Halles

MEASUREMENT POINT 3- SV 307 S/N 67890

Paradeau

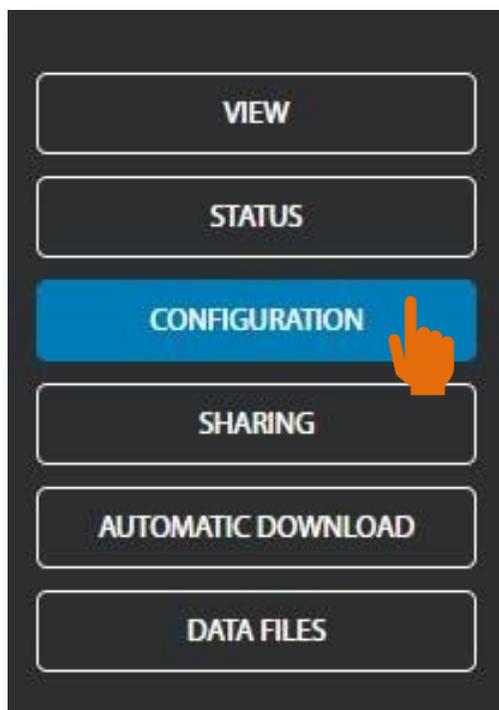
- In the ADD MEASUREMENT POINT box, enter: **Point name, Point description, Point short name, Latitude and Longitude** of the monitoring station **Geolocalization**.
- Click **Pick from map**, find localization of your station on the map and click **APPLY**.
- Assign the station from the list of your stations and click OK to confirm made the measurement point parameters.



When new project is created you can:

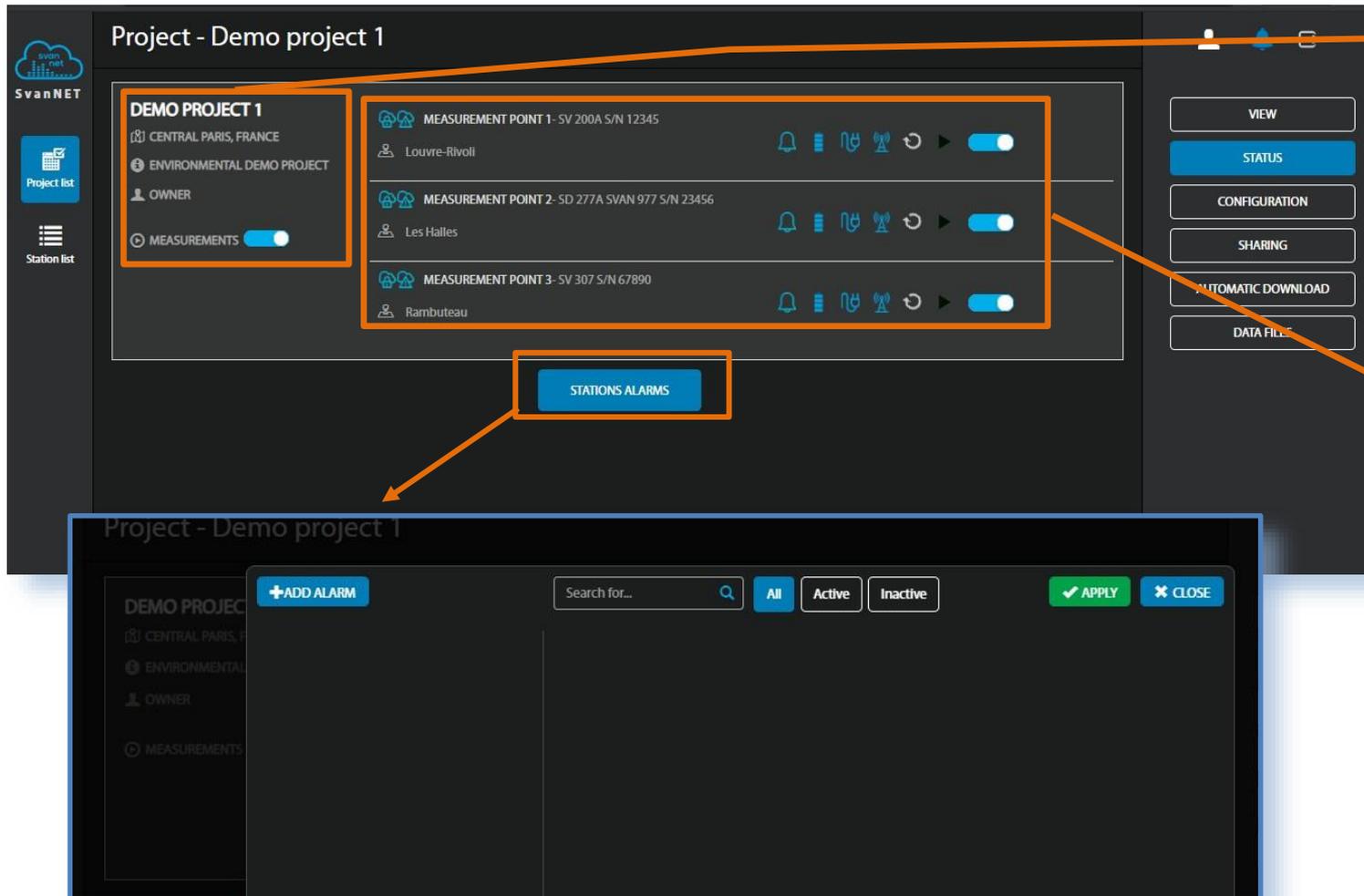
- add new measurement points by clicking the **CONFIGURATION** button (see Chapter [2.6.2](#)),
- add new users by clicking the **SHARING** button (see Chapter [2.6.3](#)).

The Tool panel structure depends on the type of access. The Tool panel for the ADMINISTRATOR enables all available functions. To switch the function, click on the project and then point cursor on the appropriate button (it will change its colour to blue) and click it.



- The blue **PROJECT LIST** button just informs you that you are in the Project view.
- The **VIEW** button switches you to the Project VIEW (see Chapter [2.5](#)) in which you can view measurement results.
- The **STATUS** button switches you to the Project STATUS view (see Chapter [2.6.1](#)) in which you can check the Project and instruments status and start/stop measurements.
- The **CONFIGURATION** button switches you to the Project CONFIGURATION view (see Chapter [2.6.2](#)) in which you can add/delete and configure measurement points.
- The **SHARING** button switches you to the Project SHARING view (see Chapter [2.6.3](#)) in which you can add new users with specific access rights.
- The **AUTOMATIC DOWNLOAD** button switches you to the Project AUTOMATIC DOWNLOAD view (see Chapter [2.6.4](#)) in which you can configure automatic downloading.
- The **DATA FILES** button switches you to the Project DATA FILES view (see Chapter [2.6.5](#)) in which you can manually download files from measurement points.

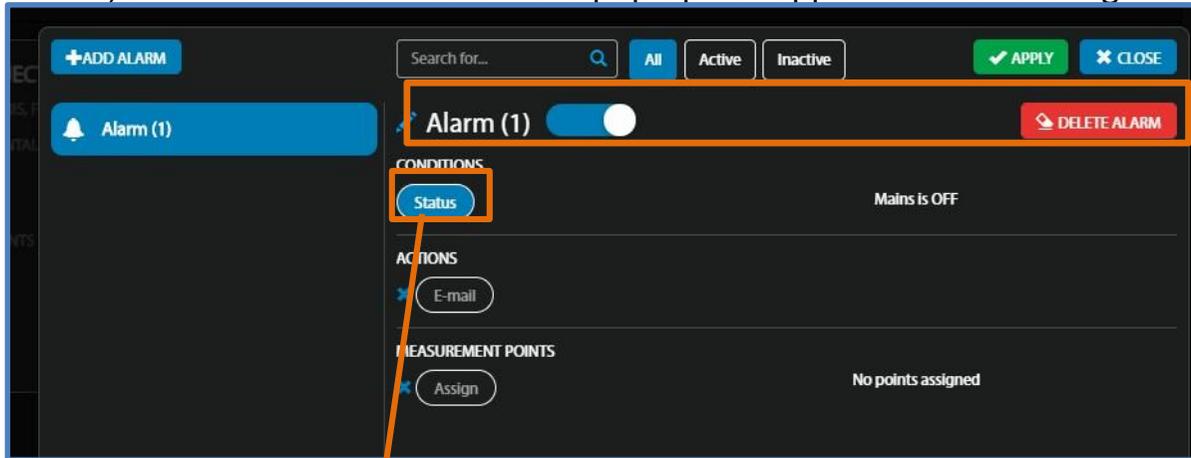
### 2.6.1. STATUS view (all access levels)



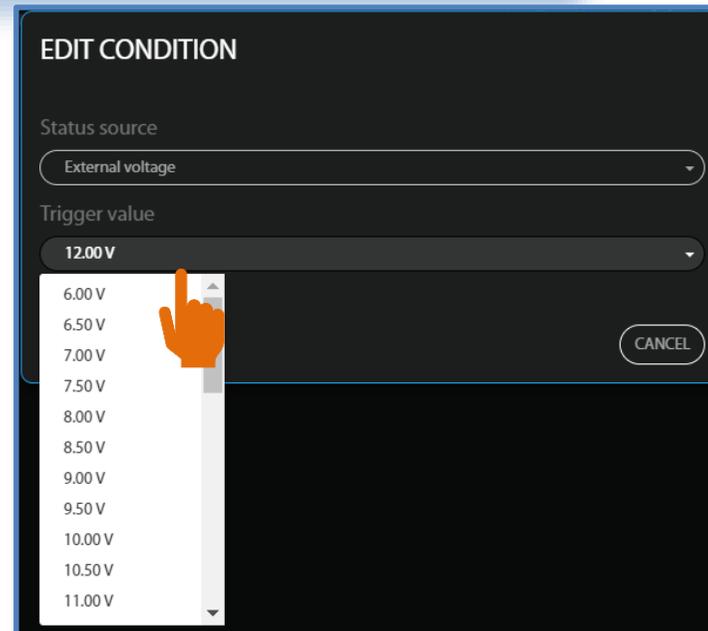
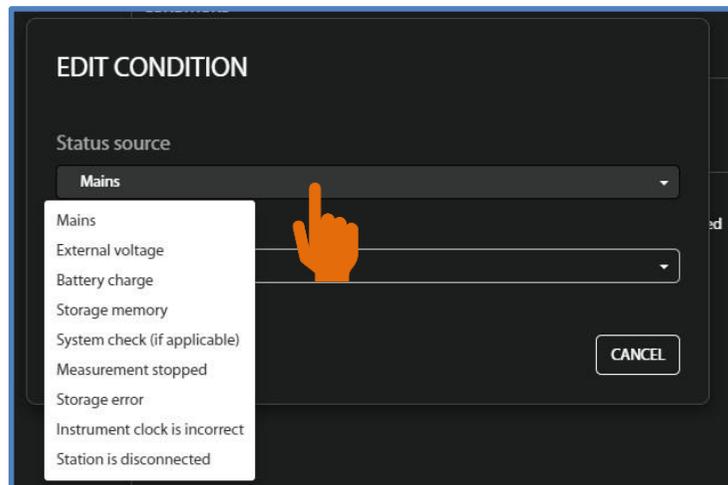
- This section presents the Project related information. You can also start/stop measurements for all measurement points simultaneously.
- This section presents measurement points related information - names and serial numbers of the instruments and their status. You can also start/stop measurements for each measurement point individually.

- Click the **STATIONS ALARM** button to configure alarms Conditions and related Actions for the measurement points.

To add new alarm, click the **Add alarm** text in the pop-up box appeared after clicking the **STATIONS ALARM** button.



- In this line you can switch on/off or delete the Alarm.
- Click the **Status** button and select **Status source**: Mains, External voltage, Battery charge, Storage memory, System check, Measurement stopped, Storage error, Instrument clock is incorrect.
- Click the **Trigger value** selector and choose the required threshold level for the selected **Status source**.



ALARMS contain ACTIONS function which can send emails to specified recipients, and refer to MEASUREMENT POINTS.

The image illustrates the configuration process for an alarm in the Svannet system. It consists of three main screenshots:

- Alarm Configuration:** The first screenshot shows the 'Alarm (1)' configuration screen. The 'CONDITIONS' section is set to 'Status' with the condition 'Mains is OFF'. The 'ACTIONS' section has 'E-mail' selected. The 'MEASUREMENT POINTS' section has 'Assign' selected. A hand icon points to the 'Assign' button.
- Edit E-mail Recipients:** The second screenshot shows the 'EDIT E-MAIL RECIPIENTS' dialog box. The 'E-mail recipients (comma separated)' field contains 'user1@svantek.com.pl; user2@svantek.com.pl'. The 'OK' button is highlighted.
- Assign Stations:** The third screenshot shows the 'ASSIGN STATIONS' dialog box. The station 'SV 200A S/N 12345' is selected, and its toggle is turned on. The 'OK' button is highlighted.
- Final Alarm Configuration:** The fourth screenshot shows the completed alarm configuration. The condition is 'External voltage below 12.00V'. The email recipients are 'user1@svantek.com.pl' and 'user2@svantek.com.pl'. The assigned station is 'SV 200A S/N 12345'.

- Click the **E-mail** button to enter/edit e-mail recipients.
- Click the **Assign** button to assign alarm to the station(s).
- Made selections are displayed in the SVANNET STATION STATUS ALARMS box.

## 2.6.2. CONFIGURATION view (Owner/Administrator access level)

The screenshot shows the SvanNET interface for a project named 'Demo project 1'. The main area displays two measurement points with their respective 'Edit settings' and 'Edit station configuration' buttons. A sidebar on the left contains 'Project list' and 'Station list' buttons. A right sidebar contains buttons for 'VIEW', 'STATUS', 'CONFIGURATION', 'SHARING', 'AUTOMATIC DOWNLOAD', and 'DATA FILES'. Two callout boxes are overlaid: 'MODIFY PROJECT' and 'MODIFY MEASUREMENT POINT'.

**MODIFY PROJECT**

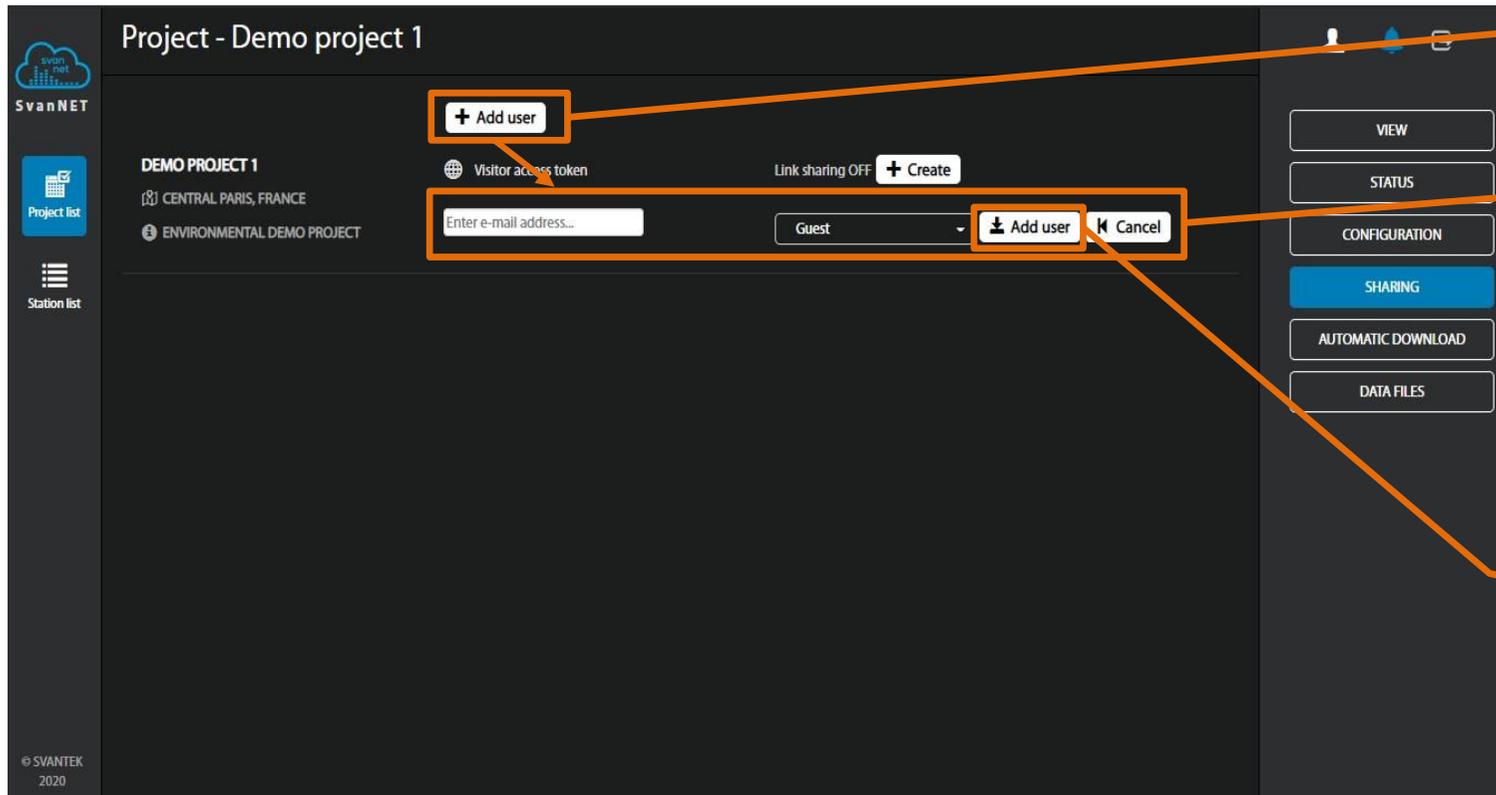
- Project name: Demo project 1
- Project location: Central Paris, France
- Project description: Environmental demo project
- Tabs in View: Map, Time History, Events list, Event View, Result charts
- Airly Data Integration - API Key: [Redacted] [Learn more...](#)
- Buttons: DELETE PROJECT, OK, CANCEL

**MODIFY MEASUREMENT POINT**

- Point name: Measurement point 1
- Point short name: MP 1
- Point description: Louvre-Rivoli
- Geolocalization: Latitude 48.859774, Longitude 2.341741, [Pick from map](#)
- Station: None
- Buttons: DELETE MEASUREMENT POINT, OK, CANCEL

- Click **CONFIGURATION** than **EDIT PARAMETERS** to modify **Project name**, **Project location** and **Project description** in the **MODIFY PROJECT** box.
- Click **Edit settings** or **Add measurement point** to modify or add the **Point name**, **Point description**, **Point short name**, **Geolocalization** and assign the **Station** to this measurement point in the **MODIFY/ADD MEASUREMENT POINT** box.

### 2.6.3. SHARING view (Owner access level)

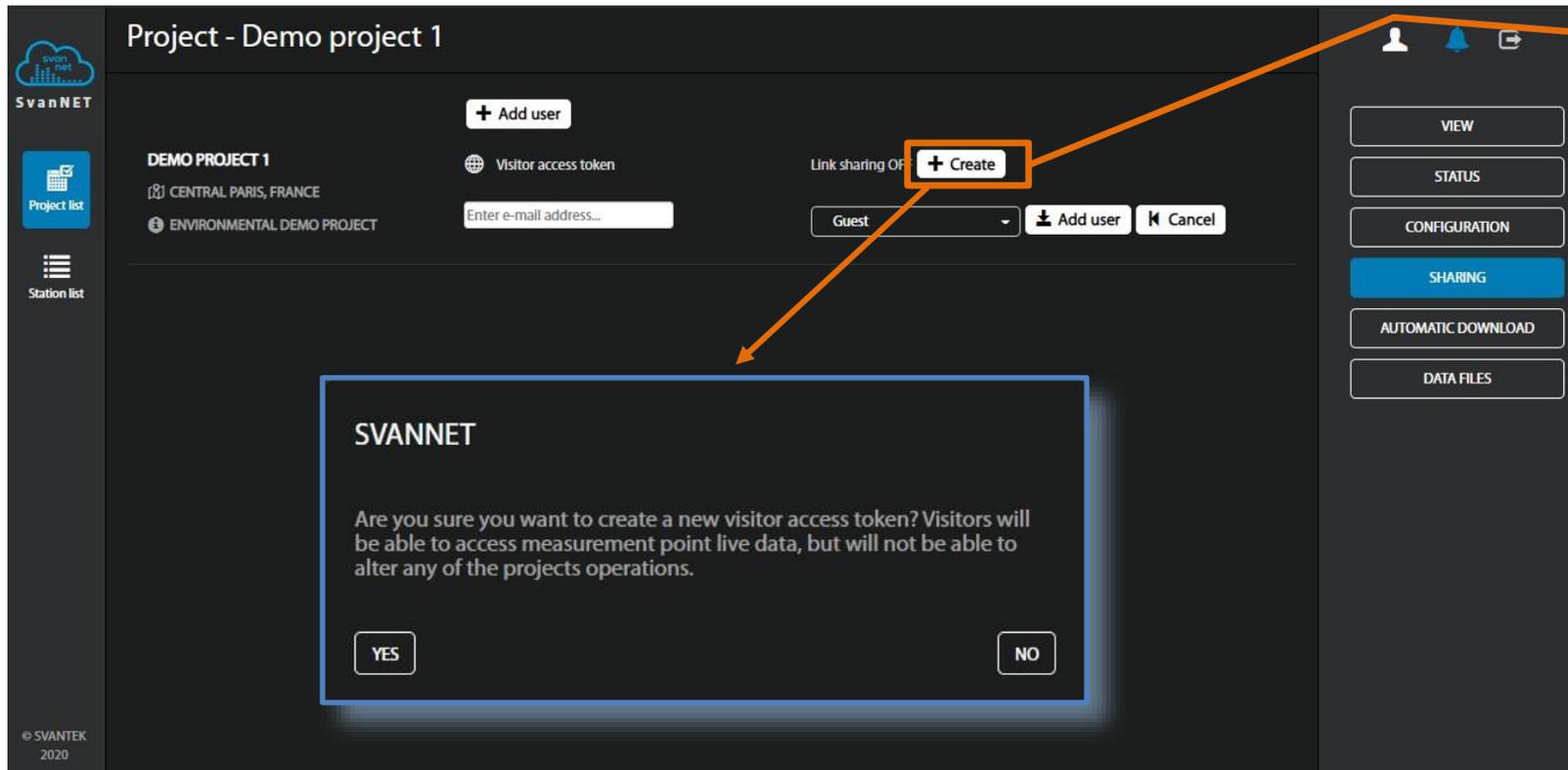


- Click **+Add user** to add new access to the project.
- In the section that will appear after clicking **+Add user**, enter e-mail address, select access level (**Administrator**, **Manager** or **Guest**) and
- click **Add user** to add new user or **Cancel** to delete it.



**Note:** To login to SvanNet you have to use your email as an login. If an account with a given email address exists, then the user will be invited to the Project; if not - an invitation to create an account on SvanNET will be sent to the given e-mail and the invitation to the Project will be attached after creating the account.

One exceptional feature of SvanNET is project link sharing. The function of link sharing gives public access to a customized project, where users can view the measurement data from specific measurement points.



- Click **+Create** to create sharing link and click **YES** in the confirmation box.

The screenshot shows the Svannet interface for 'Project - Demo project 1'. The main area displays 'DEMO PROJECT 1' with location 'CENTRAL PARIS, FRANCE' and 'ENVIRONMENTAL DEMO PROJECT'. A 'Visitor access token' section includes a 'Get link' button (highlighted with an orange box), 'Link sharing ON', 'Replace', and 'Delete' buttons. Below this is an 'Add user' button and a 'Cancel' button. A sidebar on the right contains buttons for 'VIEW', 'STATUS', 'CONFIGURATION', 'SHARING', 'AUTOMATIC DOWNLOAD', and 'DATA FILES'. Two modal windows are shown at the bottom: the left one displays the generated link 'https://www.svannet.com/project.php?token=demo3142db9c208e1aeb29' with 'Open in new tab' and 'Copy link address' buttons; the right one is a confirmation dialog asking 'Are you sure you want to replace the current visitor access token with a new one?' with 'YES' and 'NO' buttons.

After creating your link, you can:

- copy the link to the clipboard clicking **Get link**,
- replace the current visitor access token with the new one clicking **Replace** or
- delete the current access token clicking **Delete**.

## 2.6.4. AUTOMATIC DOWNLOAD view (Owner/Administrator access level)

The screenshot displays the configuration interface for 'Project - Demo project 1'. Key sections include:

- AUTOMATIC DOWNLOAD:** A toggle switch is turned on.
- DOWNLOAD PERIOD:** Set to 'CONTINUOUS'.
- FILE TYPES:** 'Results', 'Logger', 'Wave', and 'CSV' are selected.
- FILE UPLOAD DESTINATION:** Set to 'None'.
- STORAGE CLEANING:** A dropdown menu is open, showing options from 'DISABLED' to '6 or more days old'.

The 'ENTER CUSTOM REMOTE DESTINATION DETAILS' pop-up window contains the following fields:

- Type:** FTP
- Host name:** Site address[port]
- User name:** Server authentication login
- Password:** Server authentication password
- Remote folder:** Remote subfolder to upload files to
- File upload types:** Results, Logger, Wave, CSV, Results CSV, Logger CSV
- Buttons:** Edit Auto Export, OK, CANCEL

- Click this switch to toggle automatic download on/off.
- In these fields you can define download period and select types of files for automatic download.
- Click **FILE UPLOAD DESTINATION** to enter custom remote destination details in the pop-up box: Type, Host name, User name, Password, Remote folder, File upload types (Instrument data and wave files or CSV exported data).

- Select **STORAGE CLEANING** mode to set up the schedule for file deletion. You can choose to delete files from “1 day and older to 1 year and older”

FTP data export is based on two exporting methods.

- **File upload types**  
Automatically uploads selected file types that has been collected by Svannet.
- **Auto-Export**  
automatically uploads selected type of data (measurements, unit status etc) depending on time selected for an upload.

### ENTER CUSTOM REMOTE DESTINATION DETAILS

Type  
FTP

Host name  
Site address[:port]

User name  
Server authentication login

Password  
Server authentication password

Remote folder  
Remote subfolder to upload files to

**File upload types**

Results   Logger   Wave   CSV   Results CSV   Logger CSV

**Edit Auto Export**

OK   CANCEL

### EDIT AUTO EXPORT

**+ Add auto export**

OK   CANCEL

### EDIT AUTO EXPORT

Mode: Daily **Edit results**

Complete only:

Sorting: Asc

Empty columns: Off

Battery info: Off

Battery history: Off

Time format: Date & time

Naming: data\_%s\_%t.csv

Start time: 2020-10-20

Measurement point 1 - (SV 200A S/N 12345)

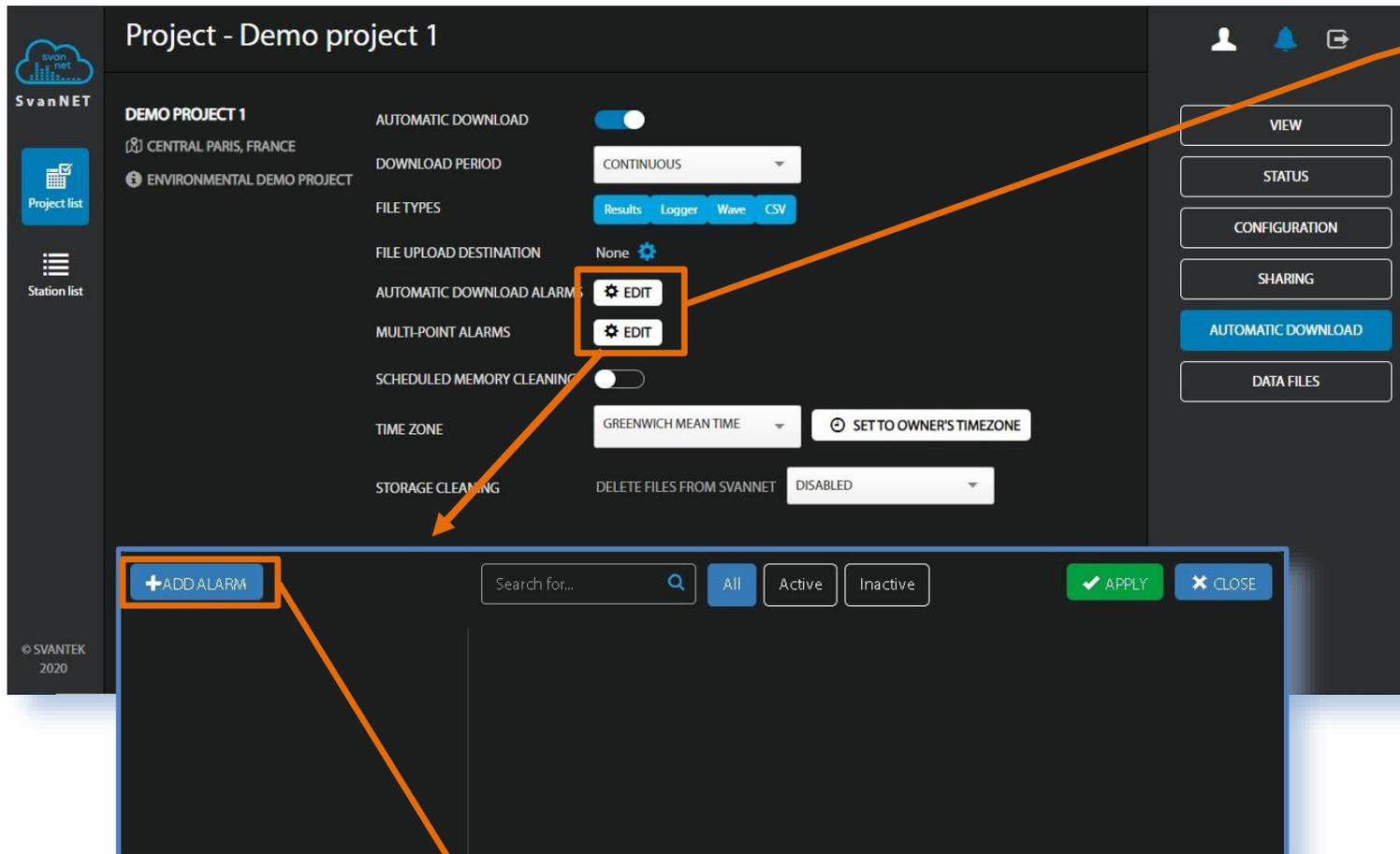
Measurement point 2 - (SD 277A SVAN 977 S/N 23456)

Measurement point 3 - (SV 307 S/N 67890)

**Export now** 2020-10-20 Measurement poi...

**+ Add auto export**

OK   CANCEL



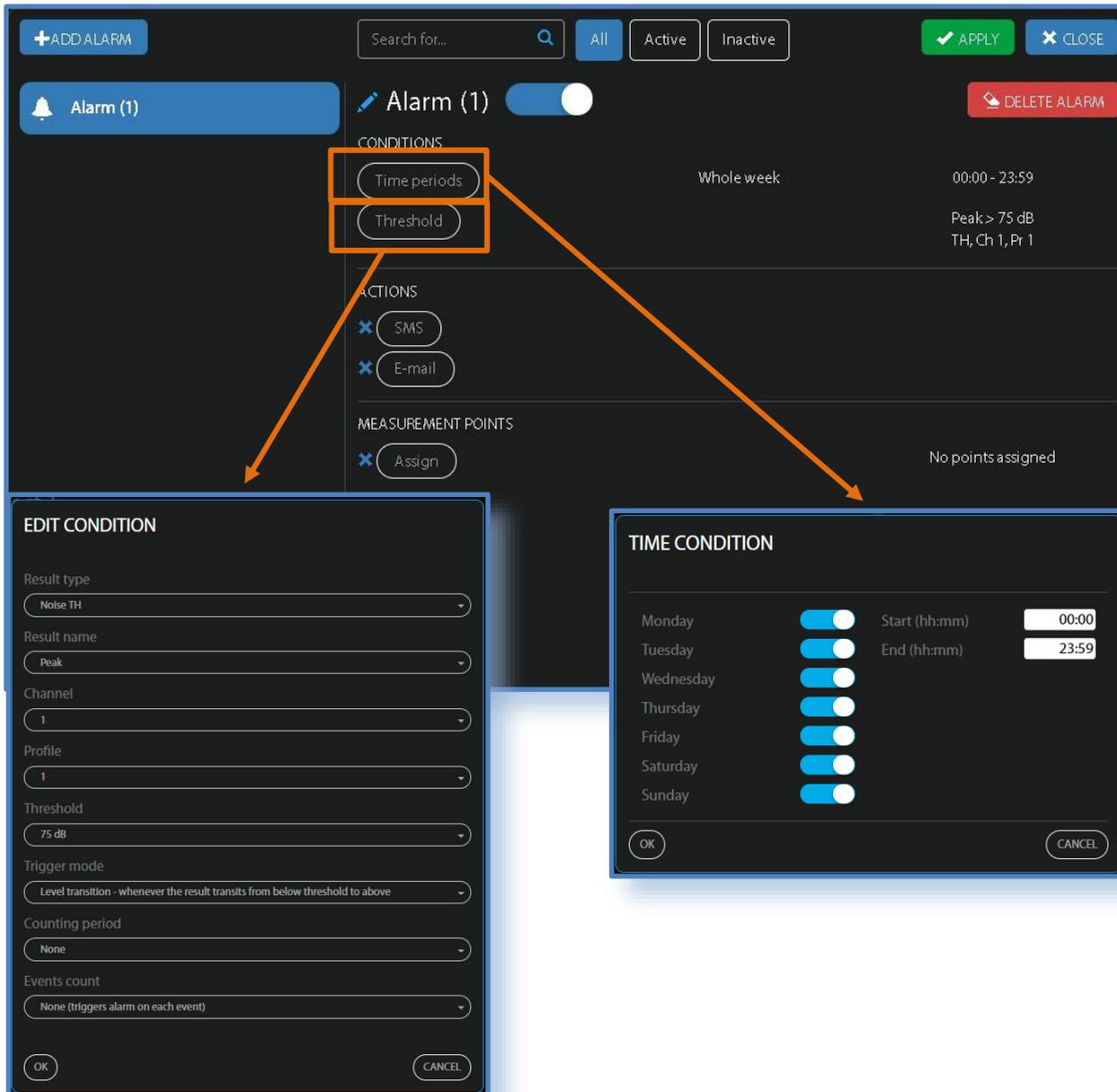
- Click **EDIT** to configure **AUTOMATIC DOWNLOAD ALARMS** or **MULTI-POINT ALARMS**.

Automatic download alarms are generated based on the information contained in the downloaded files (selected FILE TYPES).

Multi-point alarms are generated when several automatic download alarms occur within specified time interval.

- To configure automatic download or multi-point alarm, click **+Add alarm** in the pop-up box.

ALARMS are being generated when specific CONDITIONS appear and it triggers the ACTIONS, like SMS or E-mail notifications.



- Click **Time periods** to configure periodical alarms which will appear in the defined times and days of the week
- Click **Threshold** to configure alarm conditions related to the measurements. In the EDIT CONDITIONS box, you can define: **Result type**, **Result name**, **Channel**, **Profile**, **Threshold**, **Trigger mode**, **Counting period**, **Events count**

As type of the result that will be compared with the threshold level (**Result type**) you can select:

- time-history or summary results for noise measurements (**Noise TH, Noise SR**),
- time-history or summary results for acceleration vibration measurements (**Vib Acc TH, Vib Acc SR**),
- time-history or summary results for velocity vibration measurements (**Vib Vel TH, Vib Vel SR**),
- time-history or summary results for displacement vibration measurements (**Vib Dil TH, Vib Dil SR**).
- time-history or summary results for dose measurements (**Dose TH, Dose SR**)

Noise TH  
Noise SR  
Vib Acc TH  
Vib Acc SR  
Vib Vel TH  
Vib Vel SR  
Vib Dil TH  
Vib Dil SR  
Dose TH  
Dose SR

The result (measured in the selected **Channel** and **Profile**) that will be compared with the **Threshold** level (**Result name**) depends on the selected **Result type**:

- **Noise TH**: Peak, Max, Min, Leq, Spectrum-Peak, Spectrum-Max, Spectrum-Min or Spectrum-Leq;
- **Noise SR**: Peak, Max, Min, Spl, Leq, Lden, Ltm3, Ltm5, Spectrum-Peak, Spectrum-Max, Spectrum-Min or Spectrum-Leq;
- **Vibration**: Peak, P-P, Max, RMS, Spectrum-Peak, Spectrum-RMS.

Peak  
Max  
Min  
Leq  
Spectrum - Peak  
Spectrum - Max  
Spectrum - Min  
Spectrum - Leq

When Spectrum result is selected, additional position **Frequency** appears in the EDIT CONDITION box enabling setting the frequency (central octave/third octave or FFT) which will be considered while comparing the result with the threshold.

**Trigger mode** defines the way the threshold level is compared with the result:

- Level transition – whenever the result transits from below threshold to above,
- Level trigger – whenever the result's value is higher that threshold.

Level transition - whenever the result transits from below threshold to above  
Level trigger - whenever the result's value is higher than threshold

**Counting period** and **Events count** define additional conditions for triggering the event. Counting period is a time-frame during which it is possible to:

- average the result (**Counting period** is other than None and **Events count** is None) or
- fix the number of threshold level exceeding (**Counting period** is other than None and **Events count** is other than None).

Counting periods start at 00:00 of the local time. After finishing of the previous period, the next one starts.

Alarm (1)

CONDITIONS

Time periods: Whole week, 00:00 - 23:59

Threshold: Peak > 75 dB, TH, Ch 1, Pr 1

ACTIONS

MEASUREMENT POINTS

No points assigned

EDIT SMS RECIPIENTS

SMS recipients (comma separated)

User1, User2

OK CANCEL

EDIT E-MAIL RECIPIENTS

E-mail recipients (comma separated)

user1@svantek.com.pl; user2@svantek.com.pl

OK CANCEL

ASSIGN MEASUREMENT POINTS

Measurement point 1 - (SV 200A S/N 12345)

Measurement point 2 - (SD 277A SVAN 977 S/N 23456)

Measurement point 3 - (SV 307 S/N 67890)

OK CANCEL

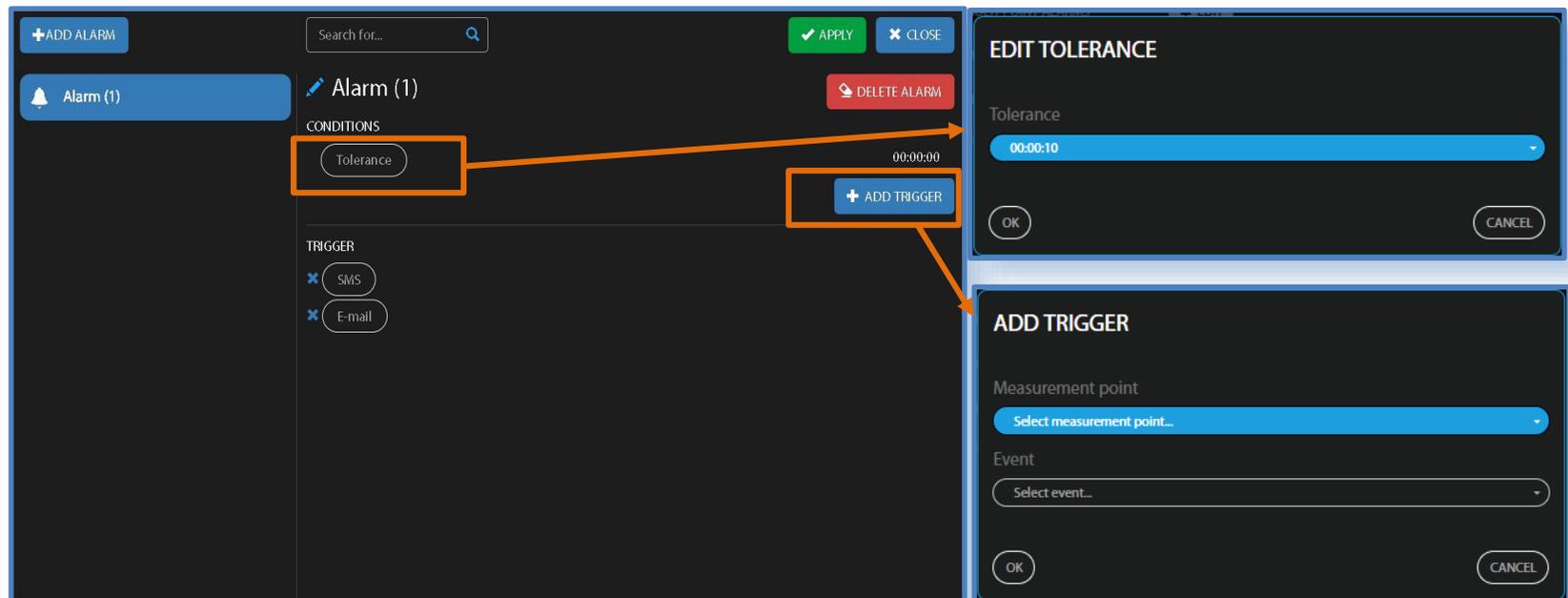
ACTIONS

MEASUREMENT POINTS

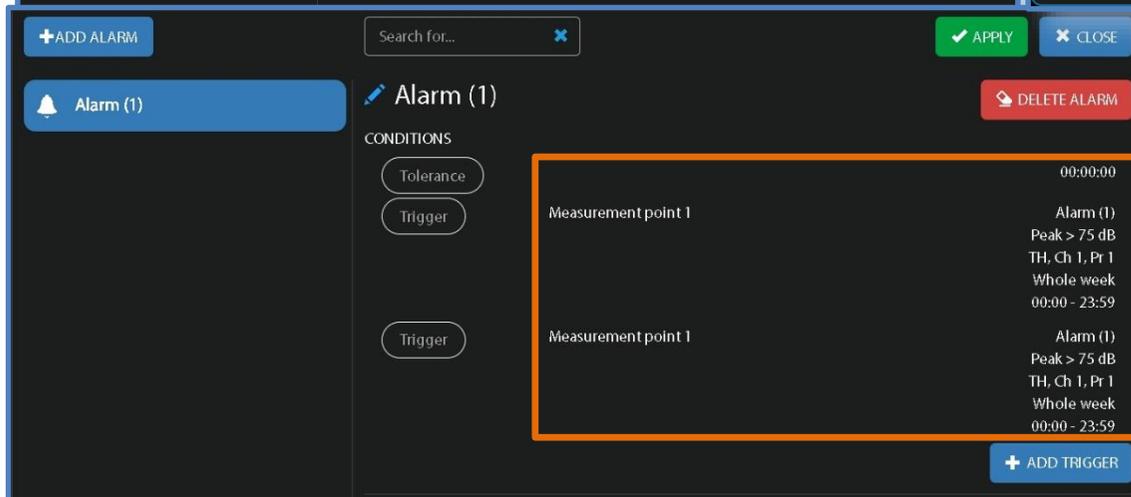
user1@svantek.com.pl user2@svantek.com.pl

Assign Measurement point 1

- Click the **SMS** button to enter/edit SMS recipients.
- Click the **E-mail** button to enter/edit e-mail recipients.
- Click the **Assign** button to assign alarm to the station(s).
- Made changes are displayed in the **PROJECT ALARMS** box.



- Click the **Tolerance** button to select in the EDIT TOLERANCE pop-up box the time interval that will cover alarms for the selected points.
- Click the **+ Add trigger** button to select in the ADD TRIGGER pop-up box the measurement point and the event definition for the selected point.
- Made selections are displayed in the PROJECT ALARMS box.



In the presented example the multipoint alarm will be generated if in both points 1 and 2 the Peak value exceeds the threshold level of 75 dB.

MEMORY CLEANING is important feature of SvanNET especially when the wave recording is activated, or you are going to use CSV files. Currently, memory cleaning requires stopping the measurement for some period of time. You can program memory cleaning schedule and enable instrument internal clock synchronization during the memory cleaning break.

- Click this switch to toggle memory cleaning schedule configurator on/off.
- Select cleaning mode (Hourly, Daily, Weekly or Monthly) and configure the cleaning schedule.
- Click this field and select the minimum discrepancy in time which will initiate time synchronization.

When setting up the time zone please keep in mind that the clear time and time sync are based on the time zone that is selected.

- Click **APPLY CHANGES !**

### 2.6.5. DATA FILES view (Owner/Administrator and Manager access levels)

All data is safely stored on the SvanNET server and access is secured using SSL encryption which ensures safety of transmission. With user login and password, you are assured that any user only has access to appropriate data. Downloading data from SvanNET is fast and easy. You can download all or just selected results.

Project - Demo project 1

Storage usage: 47 kB | File count: 2

Demo project 1 - ALL PROJECT FILES

Show filters

| NAME                             | TYPE   | UPLOAD DATE & TIME  | TOTAL SIZE | DOWNLOAD |
|----------------------------------|--------|---------------------|------------|----------|
| mp-2-20180103_06_00_20_L82.SVL   | Logger | 2018-01-03 11:45:21 | 4.12 MB    | Download |
| mp-1-20180101_00_00_00_L3520.SVL | Logger | 2018-01-01 09:17:03 | 2.40 MB    | Download |
| mp-1-20171231_00_00_00_L3520.SVL | Logger | 2018-01-01 00:00:12 | 6.33 MB    | Download |

Demo project 1 - ALL PROJECT FILES

- Measurement point 1 - (SV 200A S/N 12345)
- Measurement point 2 - (SD 277A SVAN 977 S/N 23456)
- Measurement point 3 - (SV 307 S/N 67890)

VIEW

STATUS

CONFIGURATION

SHARING

AUTOMATIC DOWNLOAD

DATA FILES

Authenticate dropbox

Delete files older than...

Results Loggers Waves CSVs

This view presents list of files that were created by the instruments of the measurement points.

- Click here to search for files in specific projects or all projects.
- Click here to download this file.
- Click here to connect SvanNET to your Drop Box Account.

Data is available in SvanTek file formats  
As well as in .csv formats

Project - Demo project 1

SvanNET Storage usage: 47 kB File count 3, Selected: 1

Demo project 1 - ALL PROJECT FILES

| NAME  | TYPE   | UPLOAD DATE & TIME  | TOTAL SIZE | DOWNLOAD |
|---|--------|---------------------|------------|----------|
| <input type="checkbox"/> m-2-20180103_06_00_20_L82.SVL              | Logger | 2018-01-03 15:45:21 | 4.12 MB    |          |
| <input checked="" type="checkbox"/> m-2-20180101_00_00_00_L3530.SVL | Logger | 2018-01-01 09:07:03 | 2.40 MB    |          |
| <input type="checkbox"/> m-1-20171231_00_00_00_L3529.SVL            | Logger | 2018-01-01 00:00:12 | 6.33 MB    |          |

VIEW  
STATUS  
CONFIGURATION  
SHARING  
AUTOMATIC DOWNLOAD  
DATA FILES

- Download files
- Download files as CSV
- Send files to FTP
- Send files to FTP as CSV
- Send files to dropbox
- Send files to dropbox as CSV
- Delete files from SvanNET

- If you check one or more boxes the download options appear on the Tool bar.

- These options apply to all checked files and allow:  
**Download files, Download files as CSV, Send files to FTP, Send files to FTP as CSV, Send files to dropbox, Send files to dropbox as CSV and Delete files from SvanNET.**

## 3 CONFIGURING INSTRUMENTS

### 3.1. Station list

**Station list** displays information about all stations assigned to the user account – turned on and off. You can select the required station by clicking the line with its name. The selection is marked as grey horizontal bar.

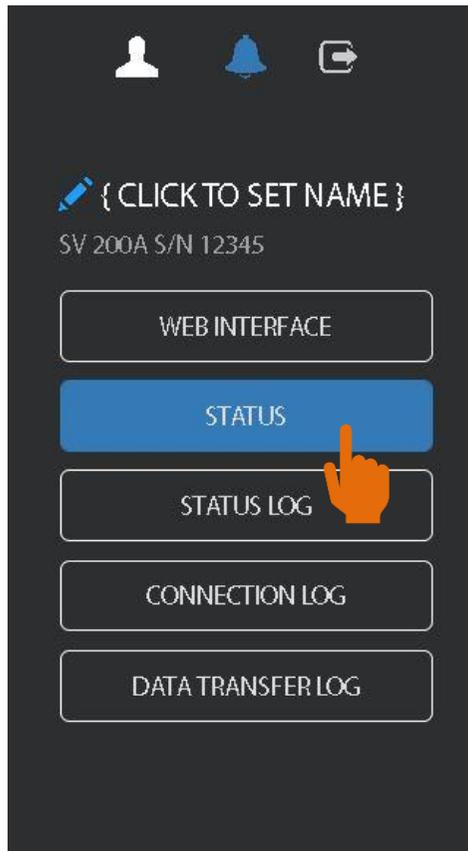
The screenshot displays the 'Station list - S/N 67890' interface. At the top, there is a list of three stations: SV 200A S/N 12345, SD 277A SVAN 977 S/N 23456, and SV 307 S/N 67890. The third station is highlighted with a grey horizontal bar. A hand icon points to this bar, and a callout box shows 'Station Information' with 'Designation: SV 307 S/N 67890'. Below the list, there are five callout boxes providing details for the selected station: 'Alerts' (no alerts), 'Station status' (status - online), 'Battery state' (more than 50%), 'Power source' (mains), and 'Connection state' (connected to svannet, gsm signal quality: good). On the right side, there is a sidebar with a user profile icon, a notification bell, and a refresh icon. Below these are buttons for 'WEB INTERFACE', 'STATUS', 'STATUS LOG', 'CONNECTION LOG', and 'DATA TRANSFER LOG'. A link '{ CLICK TO SET NAME }' is also present.

The station bar except the station name and its serial number includes five icons that indicate station states. When the station is disconnected from SvanNET all icons are of grey colour.

- Click the station name to display station information or status

The „bell” icon can be blue if there are no warnings, red if there is a warning (e.g. if the station battery is low) or grey if the station is not connected to SvanNET.

The Tool panel provides some functions for station control. To switch the function, point cursor on the appropriate button (it will change its colour to blue) and click it.



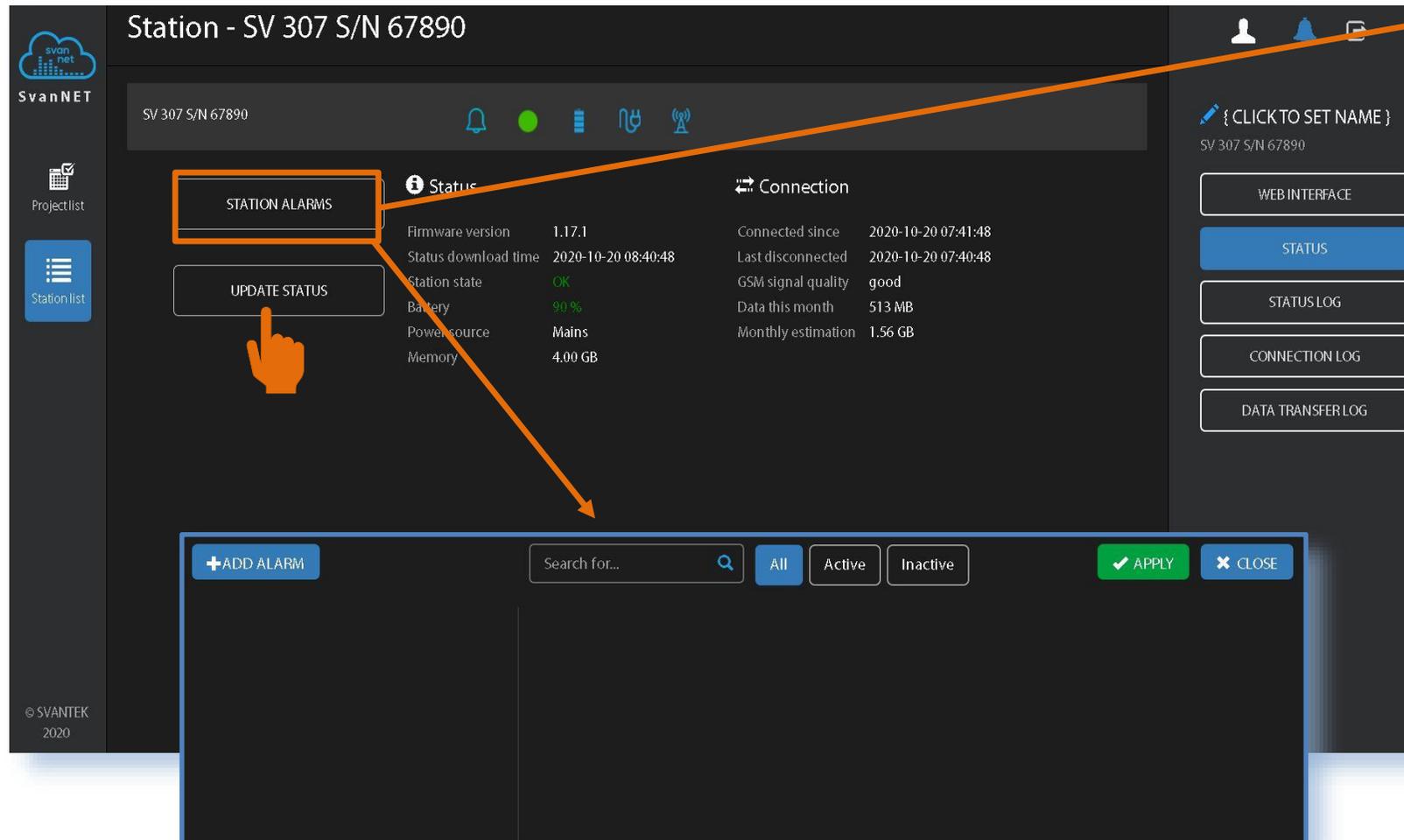
- You can click  to set the new station name instead of the default.
- The **WEB INTERFACE** button switches you to the **Live data** view (see Chapter [3.2](#)) in which you can view measurement results and use additional tools to configure station parameters, download data files, start/stop measurements and perform station checking. This button is available for the stations connected to SvanNET.
- The **STATUS** button switches you to the Station STATUS view (see Chapter [3.1.1](#)) in which you can check the station status and configure status alarms.
- The **STATUS LOG** button switches you to the Status log view (see Chapter [3.1.2](#)) in which you can check the power source (type and charge level), memory free space, GSM signal quality and history of system checking.
- The **CONNECTION LOG** button switches you to the Status log view (see Chapter [3.1.2](#)) in which you can check the history of station connections.
- The **DATA TRANSFER LOG** button switches you to the Data transfer log view (see Chapter [3.1.2](#)) in which you can check the history of data transfers (uploads).



**Note:** Further screens depend on the type of instrument. In this manual, description of screens for **SV 307** monitoring station is given. The description of screens for other instruments is given in their user manuals.

### 3.1.1. STATUS view

This screen is used for checking the instrument status (firmware version, battery charging, memory etc.), its connection status and for configuring stations alarms.



- Click the **STATIONS ALARMS** button to configure status alarms (see Chapter [2.6.1](#)).
- Click the **UPDATE STATUS** button to update instrument's status.

### 3.1.2. LOG views

Status log - 06 - Global Tower MP2 SV 200A S/N 65123

Date from... Date to... 30

1 / 396

| Date & time         | Status             | Battery | Power source    | Charge / discharge time              | Free space | GSM signal quality  | Last system check       | GPS Info                       | Extended Status                                 |
|---------------------|--------------------|---------|-----------------|--------------------------------------|------------|---------------------|-------------------------|--------------------------------|---|
| 2020-10-22 11:09:44 | Mains disconnected | 94 %    | Station battery | 47 hour(s) and 18 minute(s) to empty | 14 GB      | Very good (-87 dBm) | Failed or not performed | Lat: 53.006057, Lon: 21.913889 | 54.70, Fx1, B94, D0, ex2C00, Rx200, 06:12:17:53 |
| 2020-10-22 10:54:43 | Mains disconnected | 95 %    | Station battery | 66 hour(s) and 24 minute(s) to empty | 14 GB      | Very good (-89 dBm) | Failed or not performed | Lat: 53.006057, Lon: 21.913889 | 33.90, Fx1, B95, D0, ex2C00, Rx200, 06:12:07:23 |
| 2020-10-22 10:39:22 | Mains disconnected | 95 %    | Station battery | 62 hour(s) and 48 minute(s) to empty | 14 GB      | Very good (-87 dBm) | Failed or not performed | Lat: 53.006057, Lon: 21.913889 | 35.40, Fx1, B95, D0, ex2C00, Rx200, 06:11:56:39 |

WEB INTERFACE  
STATUS  
STATUS LOG  
CONNECTION LOG  
DATA TRANSFER LOG

Connection log - 06 - Global Tower MP2 SV 200A S/N 65123

Date from... Date to... Station SvanPC++ WWW 30

1 / 32

Total time: 1 days, 2 hours, 44 minutes, 21 seconds, online: 1 days, 2 hours, 41 minutes, 34 seconds, offline: 2 minutes, 47 seconds

| Date & time         | Result       | Address     | Version       | Reason                      |
|---------------------|--------------|-------------|---------------|-----------------------------|
| 2020-10-22 09:14:50 | Success      | 5.184.3.113 | SV 200 1.05.6 |                             |
| 2020-10-22 09:14:36 | Disconnected | 5.184.3.113 | SV 200 1.05.6 | Status/WWW response failure |
| 2020-10-22 07:41:15 | Success      | 5.184.3.113 | SV 200 1.05.6 |                             |
| 2020-10-22 07:41:04 | Disconnected | 5.184.3.113 | SV 200 1.05.6 | Status/WWW response failure |
| 2020-10-22 05:56:20 | Success      | 5.184.3.113 | SV 200 1.05.6 |                             |
| 2020-10-22 05:55:46 | Disconnected | 37.47.32.31 | SV 200 1.05.6 | Status/WWW response failure |
| 2020-10-22 04:03:39 | Success      | 37.47.32.31 | SV 200 1.05.6 |                             |

WEB INTERFACE  
STATUS  
STATUS LOG  
CONNECTION LOG  
DATA TRANSFER LOG

Data change log - 06 - Global Tower MP2 SV 200A S/N 65123

Date from... Date to... Monthly Weekly Daily Hourly 30

Current month: 3.75 GB Estimated: 5.28 GB - All times shown are expressed in Greenwich Mean Time

| Date & time    | Total transfer | Station upload | SvanPC++ upload | Direct web interface upload | SvanNET data |
|----------------|----------------|----------------|-----------------|-----------------------------|--------------|
| 2020 October   | 3.75 GB        | 3.72 GB        | 649 bytes       | 0 bytes                     | 25 MB        |
| 2020 September | 23 kB          | 19 kB          | 2.27 kB         | 0 bytes                     | 1.97 kB      |
| 2020 August    | 21 kB          | 16 kB          | 4.54 kB         | 0 bytes                     | 597 bytes    |
| 2020 July      | 11 kB          | 11 kB          | 0 bytes         | 0 bytes                     | 454 bytes    |
| 2020 June      | 0 bytes        | 0 bytes        | 0 bytes         | 0 bytes                     | 0 bytes      |
| 2020 May       | 0 bytes        | 0 bytes        | 0 bytes         | 0 bytes                     | 0 bytes      |
| 2020 April     | 4.54 kB        | 2.12 kB        | 2.27 kB         | 0 bytes                     | 150 bytes    |
| 2020 March     | 0 bytes        | 0 bytes        | 0 bytes         | 0 bytes                     | 0 bytes      |
| 2020 February  | 18 kB          | 14 kB          | 2.47 kB         | 0 bytes                     | 832 bytes    |

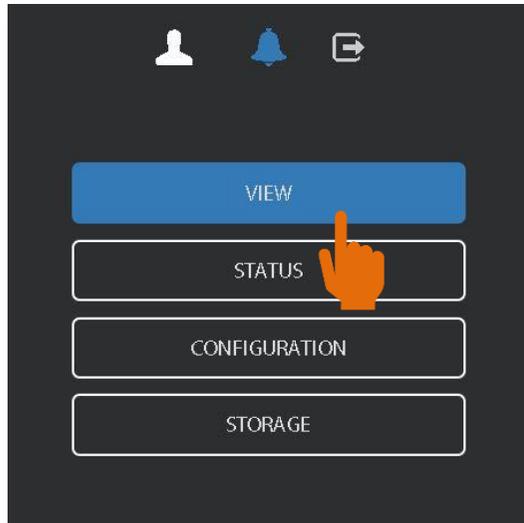
WEB INTERFACE  
STATUS  
STATUS LOG  
CONNECTION LOG  
DATA TRANSFER LOG

There are three station logs, that register system events, connections and data transfer.

- In this field you can select the required period of records and maximum number of presented records.
- Use these buttons to navigate through pages of records.
- Click here to refresh the log.
- Select the period for data transfer presentation: **Monthly, Weekly, Daily or Hourly.**

## 3.2. WEB INTERFACE

**WEB INTERFACE** provides live data viewing, instrument controlling and configuring through buttons: **VIEW**, **STATUS**, **CONFIGURATION** and **STORAGE**.



- The **VIEW** button switches you to the Live data view (see Chapter [3.2.1](#)) in which you can view broadband results, 1/1 or 1/3 octave spectra and time-history results.
- The **STATUS** button switches you to the station status view (see Chapter [3.2.2](#)) in which you can check the station status and start/stop measurements.
- The **CONFIGURATION** button switches you to the station Configuration view (see Chapter [3.2.3](#)) in which you can configure measurement and instrument parameters and perform calibration or check measurements.
- The **STORAGE** button switches you to the Storage view (see Chapter [3.2.4](#)) in which you can download files manually.



**Note:** Content of the **Configuration** tabs depends on the selected parameters. The task of this manual is not the presentation of all possible combinations of parameters, but an indication of the principles of working with SvanNET.

### 3.2.1. VIEW results

The **VIEW** button opens the **Live data** view which consists of two tabs: **OVERVIEW** and **SPECTRUM RESULTS**.

The screenshot displays the SvanNET 'Live data' interface. The top navigation bar shows 'OVERVIEW' and 'SPECTRUM RESULTS' tabs. The main content area is divided into several sections:

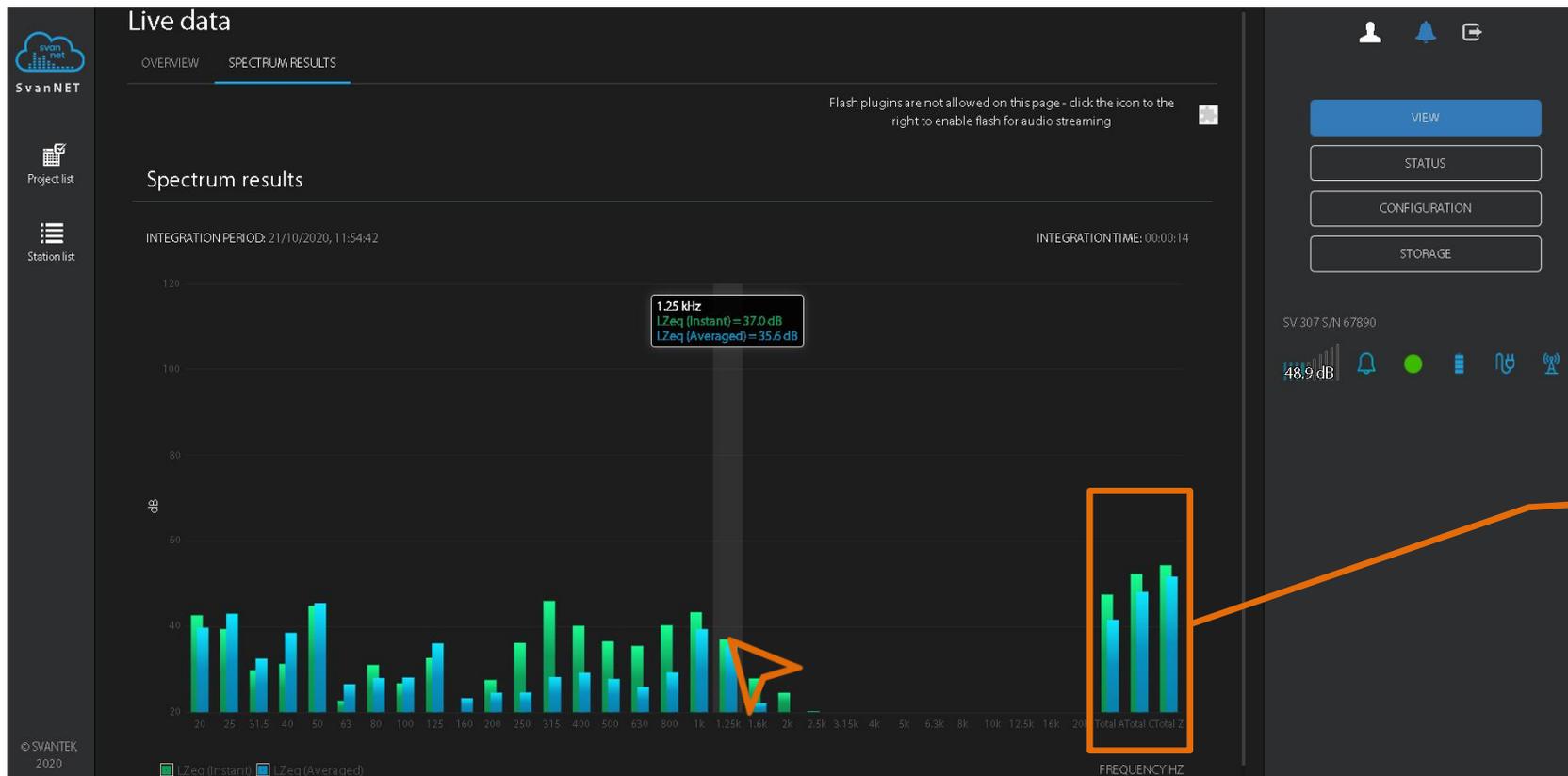
- Instantaneous results:** Shows a bar chart with a current value of 30.9 dB. Below the chart is a dropdown menu set to 'LZeq (Profile 1)'.
- Summary results:** A table showing current and previous values for three profiles. The 'LZFmax (Profile 1) [dB]' row is highlighted with an orange box.
- Map:** A map showing the instrument's location with a red pin and a value of 30.9 dB.
- Right-hand navigation:** A vertical menu with buttons for 'VIEW', 'STATUS', 'CONFIGURATION', and 'STORAGE'.

| Profile                 | Current | Previous |
|-------------------------|---------|----------|
| LZeq (Profile 1) [dB]   | 54.8    | 59.8     |
| LCpeak (Profile 1) [dB] | 87.1    | 95.2     |
| LZFmax (Profile 1) [dB] | 75.9    | 78.2     |

The **OVERVIEW** tab displays the map with the instrument's position and current results:

- **Instantaneous Results** calculated and refreshed with the time equal to 1 second and
- **Summary Results** for three profiles measured and refreshed every second (**Current**) and with the **Integration time (Previous)**.
- Click the appropriate selector and choose the required result.

The **SPECTRUM RESULTS** tab displays 1/1 or 1/3 octave spectra. Spectra are refreshed every second.

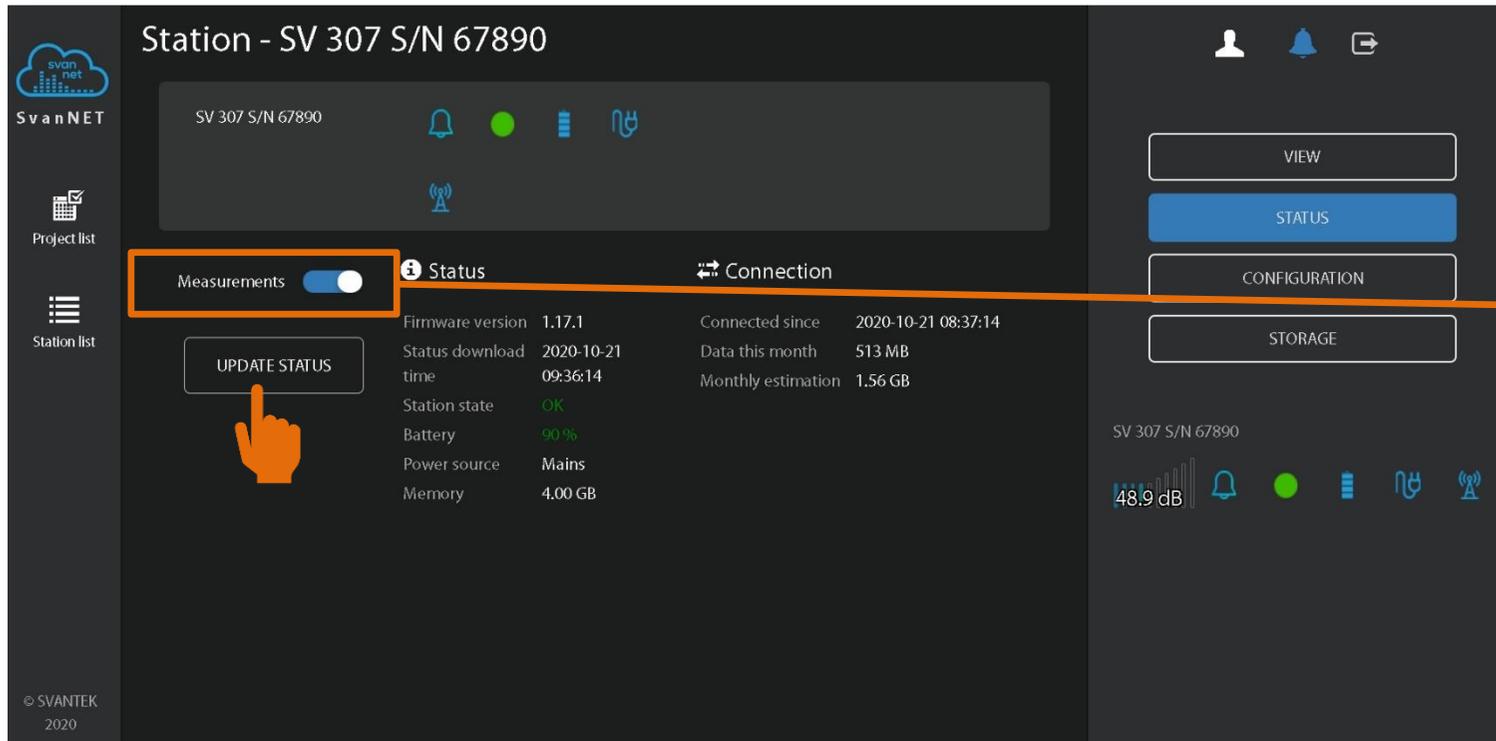


- Point your mouse cursor on the plot to readout the values of instantaneous and averaged results for each 1/1 or 1/3 octave band.
- Point your mouse cursor on the last three bars of the plot to readout the values of instantaneous and averaged three Total results.



**Note:** Spectrum can only be displayed, when Octave 1/1 or Octave 1/3 measurement functions has been selected in the Configuration → Measurement setup tab.

### 3.2.2. STATUS view



This STATUS view differs from the STATUS view available from the Station list in that instead of STATIONS ALARMS you can:

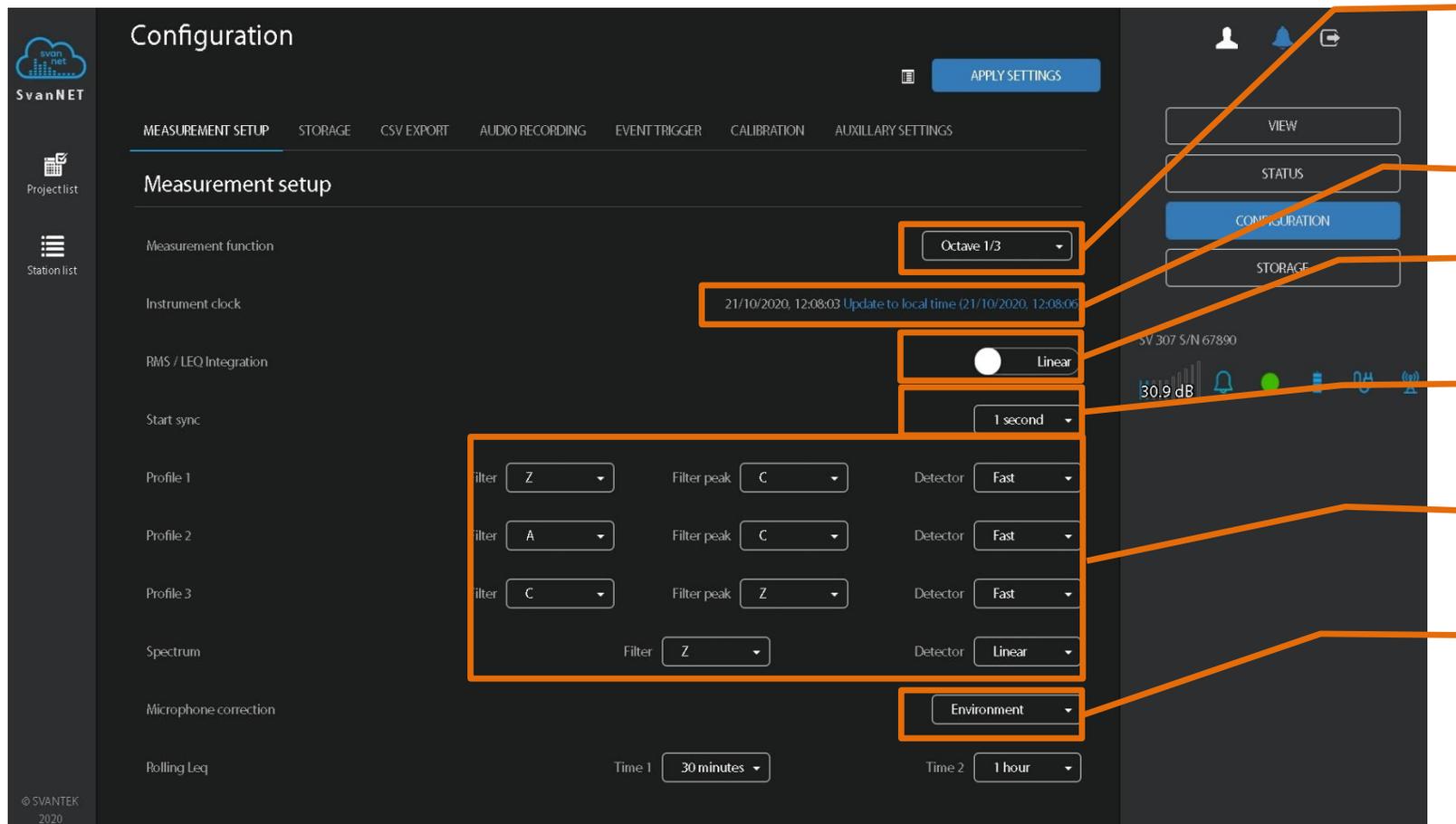
- start/stop measurements,
- update instrument's status clicking the **UPDATE STATUS** button.

### 3.2.3. CONFIGURATION view

Configuration view consists of several tabs that enable configuration of: measurement parameters (**MEASUREMENT SETUP**), data saving (**STORAGE**), export of measurement data into CSV files (**CSV EXPORT**), audio recording (**AUDIO RECORDING**), calibration of the instrument (**CALIBRATION**) and auxiliary settings (**AUXILIARY SETTINGS**).

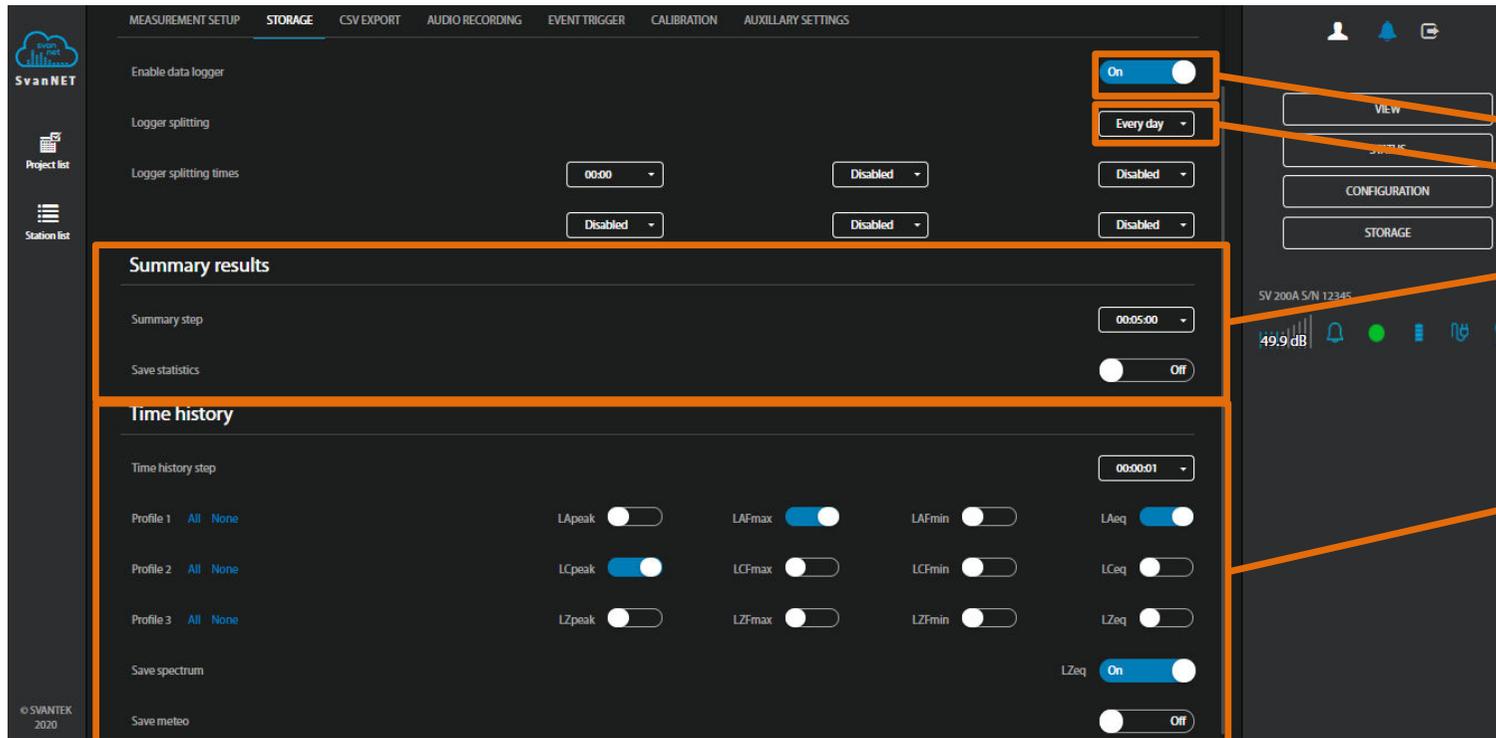
#### MEASUREMENT SETUP tab

In this tab, you can:



- select **Measurement function: Level Meter, Octave 1/1 or Octave 1/3**,
- update **Instrument clock**,
- select the type of **RMS/LEQ Integration: Linear or Exponential**,
- set synchronisation of the measurement start with RTC,
- select **Filter** and **Detector** type for profiles and spectrum,
- Switch **Microphone correction On/Off** or select **Environment** or **Airport** compensation.

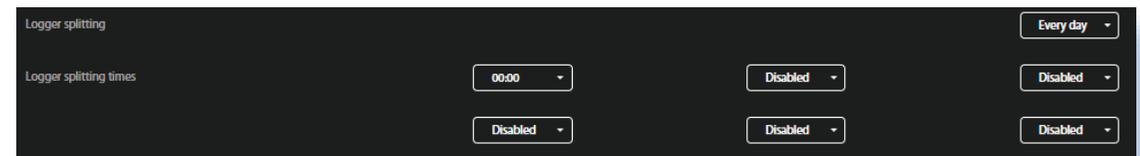
## STORAGE tab



In the **CONFIGURATION** tab, you can:

- switch on data logging,
- configure splitting of the logger file,
- configure of **Summary results** measurement: **Integration period**, **Repetition cycles** and **Statistics levels**,
- define measurement **Step** and select results to be saved as **Time history**.

The **Logger splitting** position enables splitting of the time history files and selecting the splitting mode: Every 15 m, Every 30 m, Every 1 h and Every day. If Every day is selected, you can then define up to six points during a day when splitting will take place.



## CSV EXPORT tab

In the **CSV EXPORT** tab, you can configure direct export of measurement data into CSV files (Comma Separated Values) and saving them in the instrument's memory.

The screenshot shows the SvanNET Configuration interface with the CSV EXPORT tab selected. The interface is dark-themed and features a top navigation bar with 'MEASUREMENT SETUP', 'STORAGE', 'CSV EXPORT', 'AUDIO RECORDING', 'EVENT TRIGGER', 'CALIBRATION', and 'AUXILIARY SETTINGS'. The 'CSV EXPORT' tab is active, displaying a table of settings for three profiles (Profile 1, Profile 2, Profile 3). Each profile has columns for 'CALIBRATION' and 'AUXILIARY SETTINGS'. The 'CALIBRATION' column includes 'Time', 'LZF (SPL)', 'Ltm3', 'LAF (SPL)', 'Ltm3', and 'LCF (SPL)'. The 'AUXILIARY SETTINGS' column includes 'LCpeak', 'LZeq', 'Ltm5', 'LEPd', 'RLAeq, 30 m', 'LZpeak', 'LCEq', 'Ltm5', 'LEPd', 'RLAeq, 30 m', 'LZFmax', 'LZE', 'Lnn', 'RLAeq, 1 h', 'LZFmin', 'Lden', 'OVL', 'RLAeq, 1 h', and 'LCFmin'. A 'Spectrum' section at the bottom has 'Averaged', 'Maximum', 'Minimum', and 'Peak' options. On the right side, there are buttons for 'VIEW', 'STATUS', 'CONFIGURATION', and 'STORAGE'. A status bar at the bottom right shows 'SV 307 S/N 67890' and '37.9dB'.

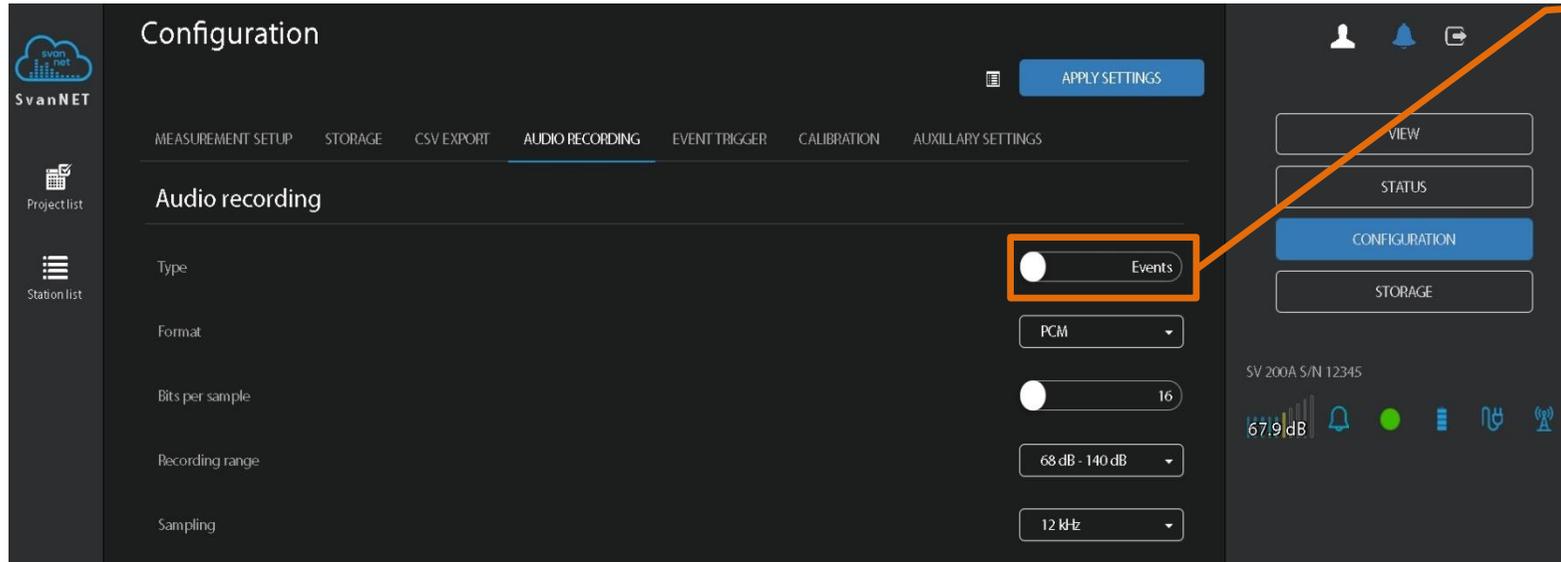
- You can select results to be exported for each profile individually.
- If the **Octave 1/1** or **Octave 1/3** function is enabled, **Maximum**, **Minimum** and **Averaged** spectra for each integration period can also be exported in the CSV format.



**Note:** CSV files can be quite large, and it is advised to use this feature when absolutely necessary.

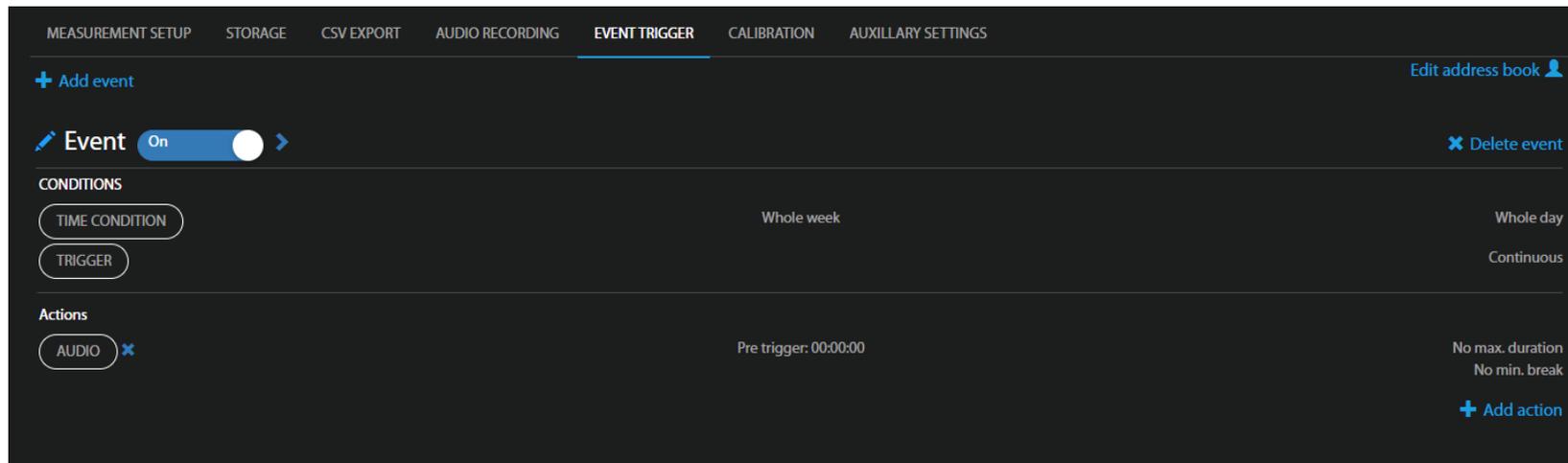
## AUDIO RECORDING tab

In the **AUDIO RECORDING** tab, you can configure an audio signal recording in a separate \*.wav type file.



- Click the **Type** selector to select the type of audio recording mode: **Event/Wave**

These modes require different sets of parameters in **Event Trigger** tab and use different ways of signal recording (triggering). You can also set up format, quality and time of the wave that will be recorded.



- **Wave** mode allows you to save the audio as standard separated .wav file.
- **Event** mode will save the wave in the SVL measurement file that can be opened in SVANPC++.

## EVENT TRIGGER tab

The screenshot displays the 'EVENT TRIGGER' configuration interface. On the left, a 'TRIGGER CONDITIONS' panel shows 'No conditions' and an 'Add' button with options for '+ Threshold', '+ Spectrum', '+ Meteo', and '+ System'. Below this are 'OK' and 'CANCEL' buttons. The main configuration area has three sections: 'Source' with a dropdown set to 'LAeq, 1 s (Pr 1)', 'Mode' with a dropdown set to 'Level +', and 'Threshold' with a dropdown set to '75 dB'. Each of these three dropdowns is highlighted with an orange box. To the right, a waveform graph shows a signal fluctuating around a horizontal line labeled '75 dB'. Two vertical lines mark the 'Start audio' (green) and 'Stop audio' (blue) points. Orange lines connect the 'Start audio' label to the 'Level +' dropdown, the '75 dB' label to the 'Threshold' dropdown, and the 'Stop audio' label to the 'LAeq, 1 s (Pr 1)' dropdown.

For example,

- **Level + / Level –** modes mean that the audio recording starts when the value of the **Source (LAeq)** measured in the Profile 1 by **Trigger period** (with value equal to Logger step, 0.5 ms, 0.1 seconds or 1 second) is greater/ lower than the threshold level (**Threshold**). In other cases, the recording doesn't start, but if it has been already started it can be continued until the **Recording time** has elapsed.

If during the **Recording time** a trigger condition appears, the recording will be prolonged for another **Recording time** from the moment of that trigger condition and so on. The trigger can be related to the values other than **noise or vibration** level. It can be set up to rely on **Meteo, Spectrum, System** values and others, also the outcome can become an **SMS alarm, Marker, E-mail alarm or I/O alarm**.

## CALIBRATION tab

Configuration

APPLY SETTINGS

MEASUREMENT SETUP STORAGE CSV EXPORT AUDIO RECORDING EVENT TRIGGER CALIBRATION AUXILIARY SETTINGS

Calibration

Calibration factor 0.00 dB

Automatic system check

Enabled

Time 02:00

Weekdays Monday Tuesday Wednesday Thursday Friday Saturday Sunday

Last result Failed or not performed Perform system check

In the **CALIBRATION** tab, you can:

- check the current calibration factor,
- switch on the **Automatic system check** and
- set time and days of the week when the system check will be performed automatically,
- manually **Perform system check**.

When **Automatic system check** enabled the calibration factor of the instrument will be periodically verified using built-in speaker.



**Note:** System check cannot be considered as a calibration. Calibration factor will not be updated during Automatic system check procedure.

## AUXILIARY SETTINGS tab

MEASUREMENT SETUP STORAGE CSV EXPORT AUDIO RECORDING EVENT TRIGGER CALIBRATION **AUXILIARY SETTINGS** FIRMWARE UPGRADE

**Station descriptions**

Station name  
Project name  
Location name

**Geolocalization**

Latitude  
Longitude

**External device**

External device

**GPS**

Gps enabled  
Synchronize time to GPS  
Timezone (BHAMM)  
Stop meas. to synchronize

**Powering**

External battery  
Battery charging mode

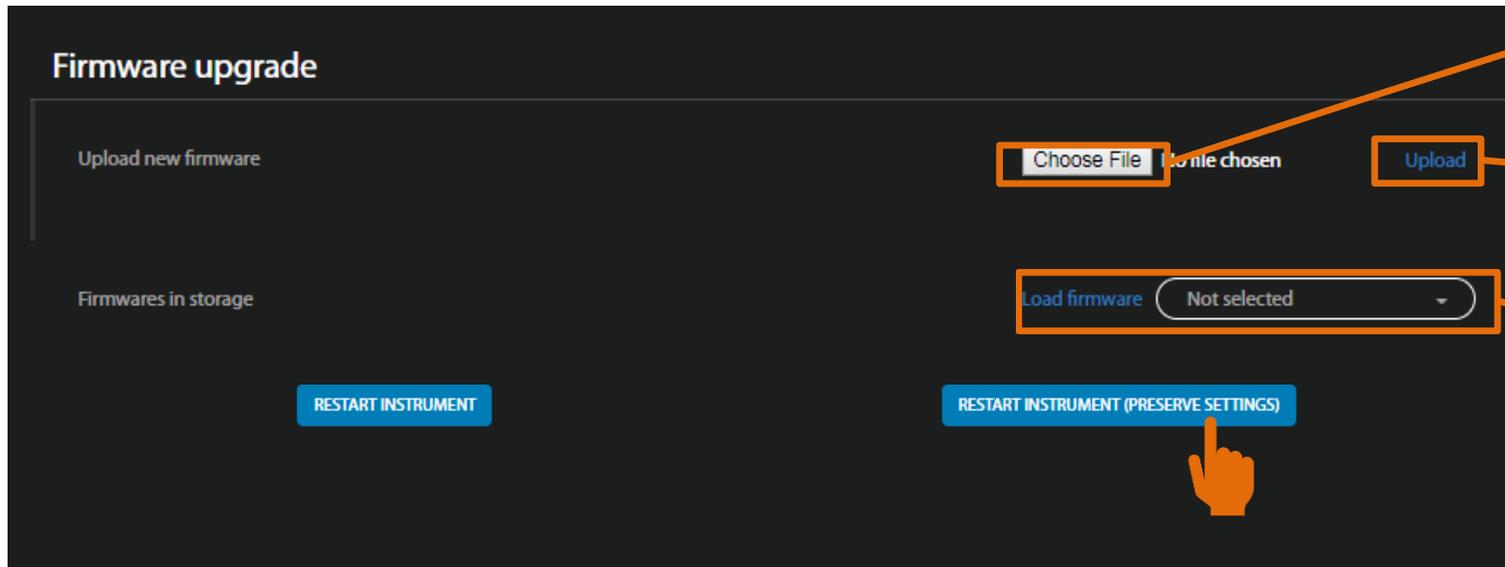
In the **AUXILIARY SETTINGS** tab, you can:

- enter **Station description: Station name, Project name and Location name,**
- enter the instrument's geographical location in Latitude and Longitude coordinates (if GPS is switched on),
- select the External device: weather station (**Meteo-SP 275 or Dust-ES 642**),
- enable **GPS** time synchronization ,
- change **Powering** setup for an instrument connected to the external battery or modify the battery charging mode.

## FIRMWARE UPGRADE tab



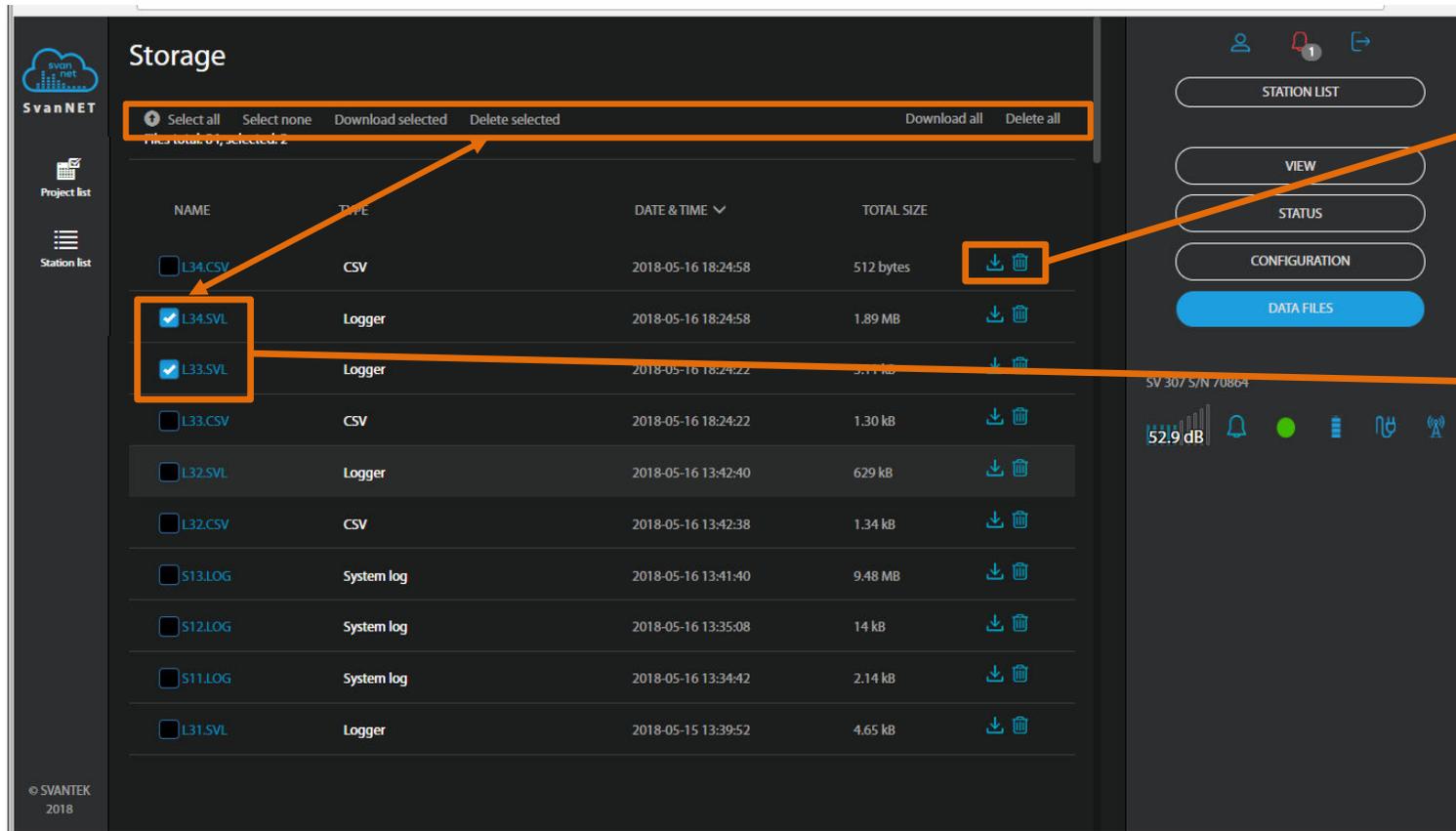
**Note:** Before upgrading the instrument firmware make sure the measurement is stopped.



- Click the browse button and select the new firmware \*.bin file on the PC.
- Upload the selected file by clicking the **Upload** button.
- After the upload is finished select new firmware package in the firmware selector and click the **Load firmware** button.
- Click the **Restart instrument (PRESERVE SETTINGS)** button to finalize the process and keep your current settings. Wait 60 seconds for the connection to renew. The measurements will start automatically.

### 3.2.4. DATA FILES view

If you click the **DATA FILES** button being in the WEB INTERFACE mode, you will shift to the **Storage** view which presents a list of files saved in the instrument's SD-card memory. The list includes only files from a single directory on the memory card and it initially shows the content of the current working directory.



In the **Storage** view, you can:

- download or delete individual files by clicking the righthand icons on the file line,
- select several or all files and download or delete selected files or all files,
- navigate through the folder structure by clicking the “folder up” button .

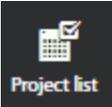


**Note:** In the case the **AUTOMATIC DOWNLOAD** function is switched on the **Storage** view becomes inactive.

## APPENDIX A – ICONS DESCRIPTION

The table below presents all icons, used in the SvanNET web-service, that enable next functionalities:

**Table A.1.** Icons with function

| Icon  | Description   |
|---|---|
| <br>Project list | – Toggle to the Project list                                  |
| <br>Station list | – Toggle to the Station list                                  |
|                  | – Toggle panel with available stations in the Project VIEW    |
|                 | – Add the plot in the Project VIEW                            |
|                | – Change the measurement result for plots in the Project VIEW |
|                | – Refresh data  |

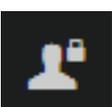
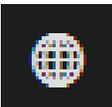
**Table A.1.** Icons with function (cont.)

| Icon  | Description                  |
|---|------------------------------|
|    | - Folder up                  |
|    | - Logout from SvanNET        |
|    | - User options               |
|    | - Download file              |
|    | - Delete file                |
|   | - View status connection log |
|  | - View station status log    |

**Table A.2.** Status icons

| Icon  | Description   |
|---|---|
|    | <ul style="list-style-type: none"> <li>Warning about emergency situations. The icon is blue if everything is OK, red when something is happening. When you click this icon on the station bar, the information about the problems related to the station will be shown. Icon at the top of the window, next to the user account, informs about the number of alarms for all stations and displays the list of stations with problems</li> </ul> |
|    | <ul style="list-style-type: none"> <li>Battery status. When you click this icon on the station bar, information about charging level will be displayed</li> </ul>   |
|    | <ul style="list-style-type: none"> <li>External power source status. When you click this icon on the station bar, information about external source will be displayed. If there is no external power the icon will be grey</li> </ul>   |
|    | <ul style="list-style-type: none"> <li>Automatic Download status: white, rotating icon means that downloading is in progress; blue, still - download is switched off or download not yet started</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Measurement status: green, blinking icon means that measurement is in progress; red, still square - no measurement</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Connection status. When you click this icon on the station bar, information about connection status and signal strength will be displayed</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>Information about the communication with the station: green - correct, in progress; yellow - the station doesn't respond to the command for a long time; red – the station is not connected to SvanNET</li> </ul>  |

**Table A.2.** Information icons

| Icon  | Description                       |
|---|-----------------------------------|
|    | – Project description             |
|    | – Project localization            |
|    | – User with administrator access  |
|    | – User with manager access        |
|    | – User with guest access          |
|   | – Activate the item               |
|  | – Location of the measuring point |
|  | – Access token                    |