



# LIQUIMECH — CONNECT

Mobile and Web App

## User Manual

V2.0.0



Smart Pump Control System

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# 1. Introduction

## 1.1. Overview

The Smart Pump Control System provides secure, efficient control of bulk water access and distribution alongside real-time data insights.

This manual provides step-by-step instructions for using the Liquimech Connect app to manage your Smart Pump Control System on Web, Android, and iOS platforms.

## 2. Launching the Liquimech Connect Web App

Upon launching the Liquimech Connect web app, you will be directed to the Sign-In window, which consists of three pages: Sign-In, Forgot Password, and Sign-Up.

### 2.1. Sign-In Page

- ❑ On the Sign-In page, enter your email address and password.
- ❑ If the credentials are correct, you will be taken to the main menu, which displays all available Liquimech Connect web apps.

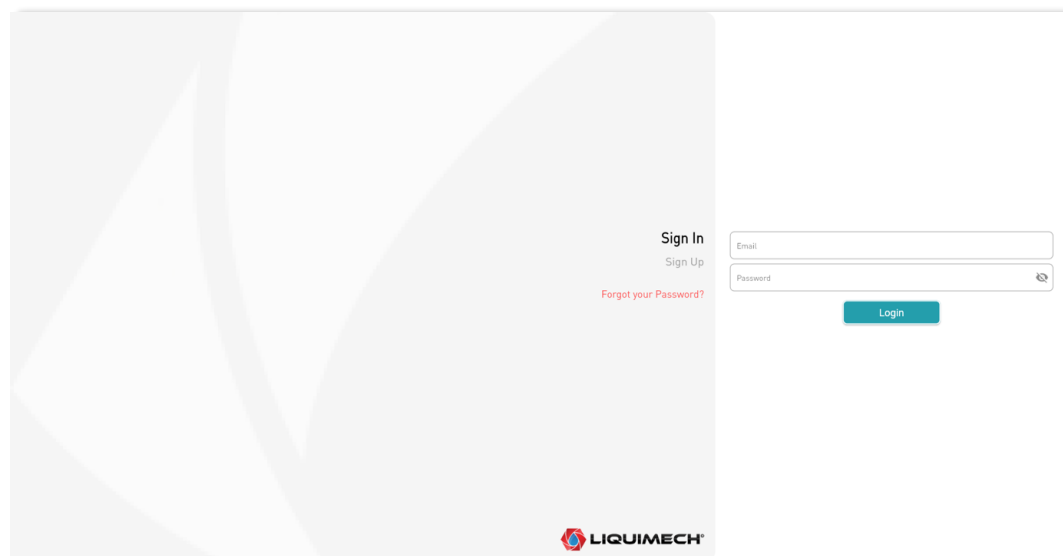


Figure 1: Entry Screen and Sign In.

## 2.2. Forgot Password Page

- ❑ On the Forgot Password page, enter your email address.
- ❑ An email with instructions to reset your password will be sent to the provided address.
- ❑ To return to the Sign-In page, click the "Sign-In" link.

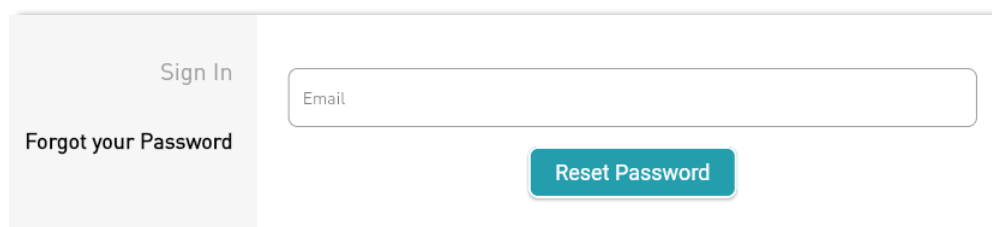


Figure 2: Forgot Password.

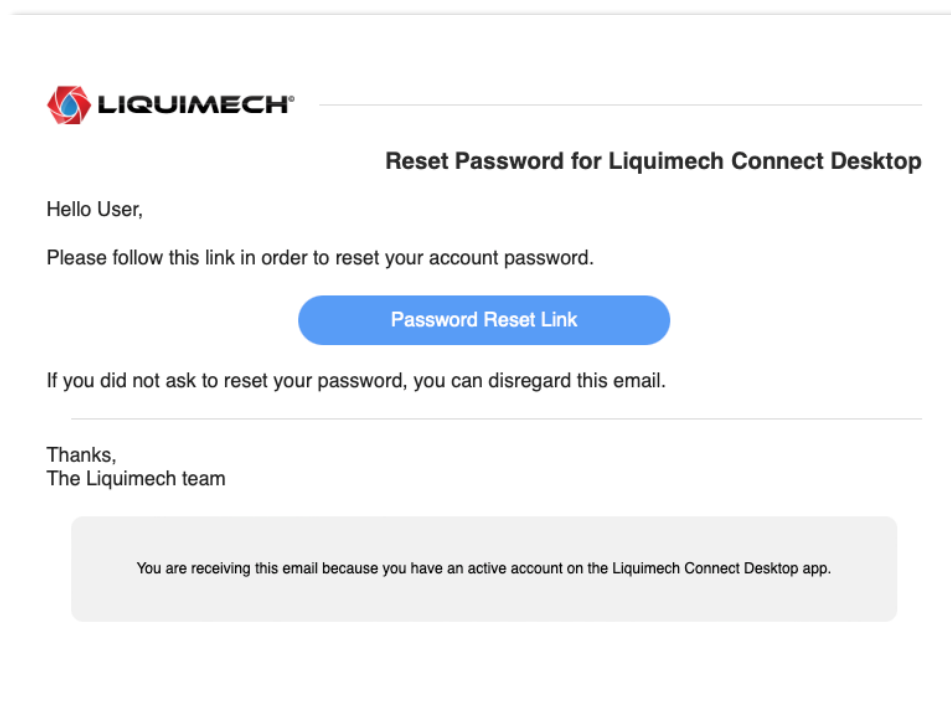
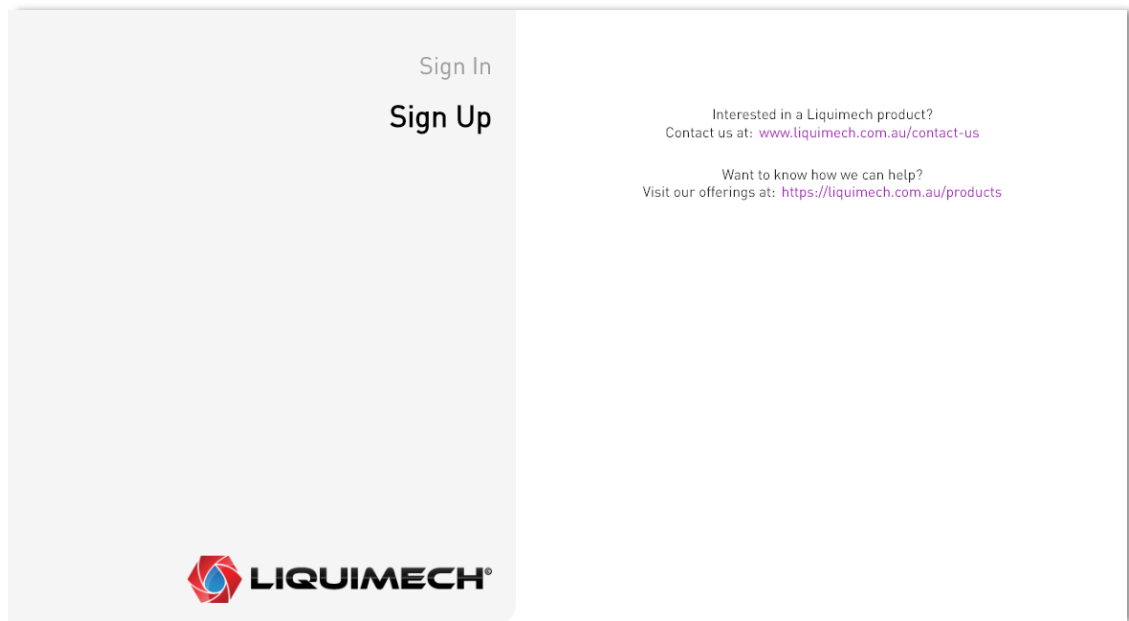


Figure 3: An email with instructions to reset your password.

## 2.3. Sign-Up Page

If you are interested in signing up, please contact the Liquimech team for assistance.



*Figure 4: Sign-up screen.*

## 3. Liquimech Connect Web App Overview

### 3.1. Main Menu

- ❑ The main menu displays a list of available web applications. Purchased apps are shown in colour, while unpurchased apps are greyed out. Selecting a non-accessible app will display a dialog.
- ❑ Click on a coloured app to access its features. When an accessible app is selected, a loading screen will appear.
- ❑ The logout button is located at the bottom left.

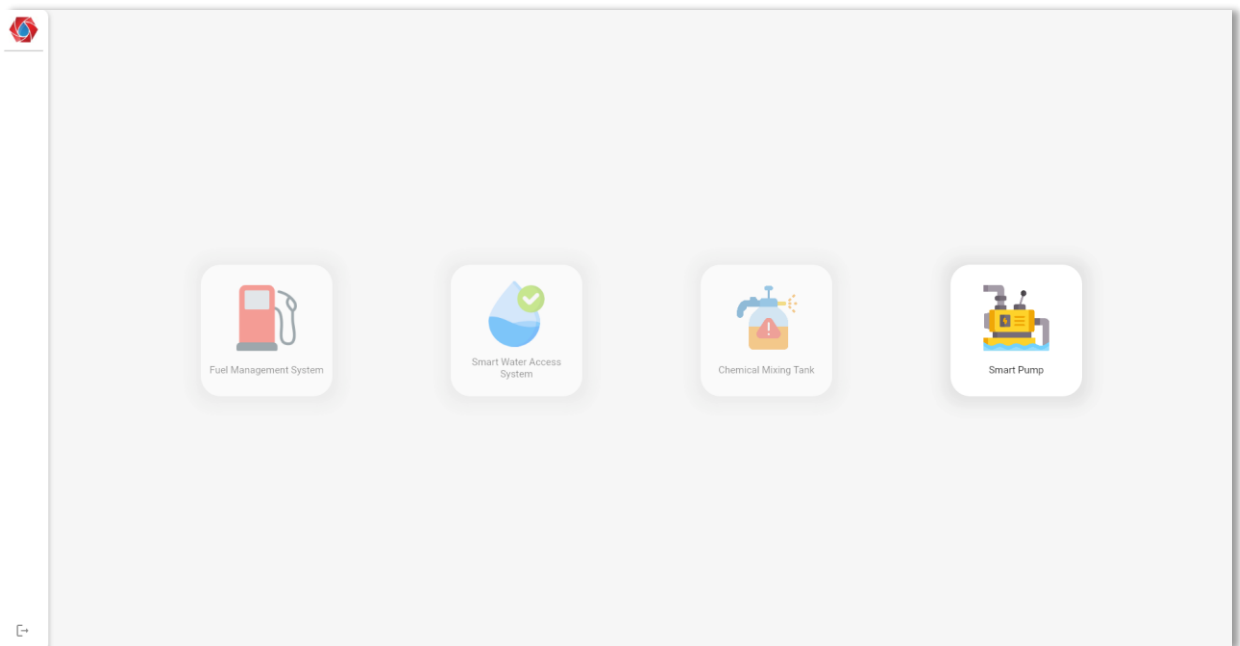
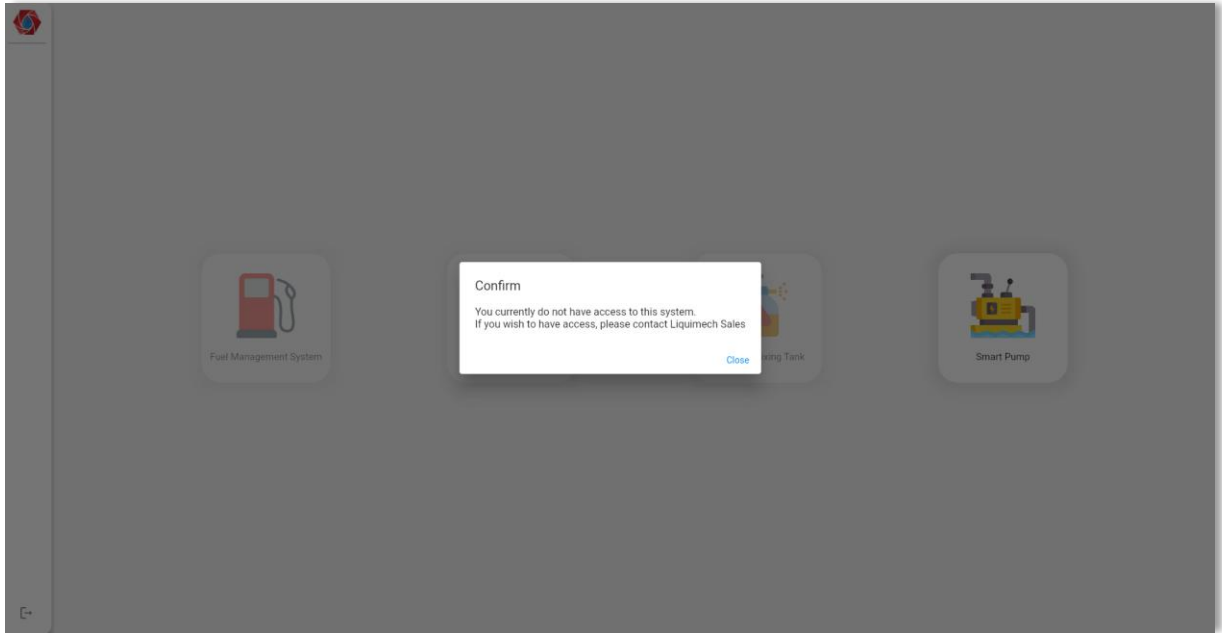
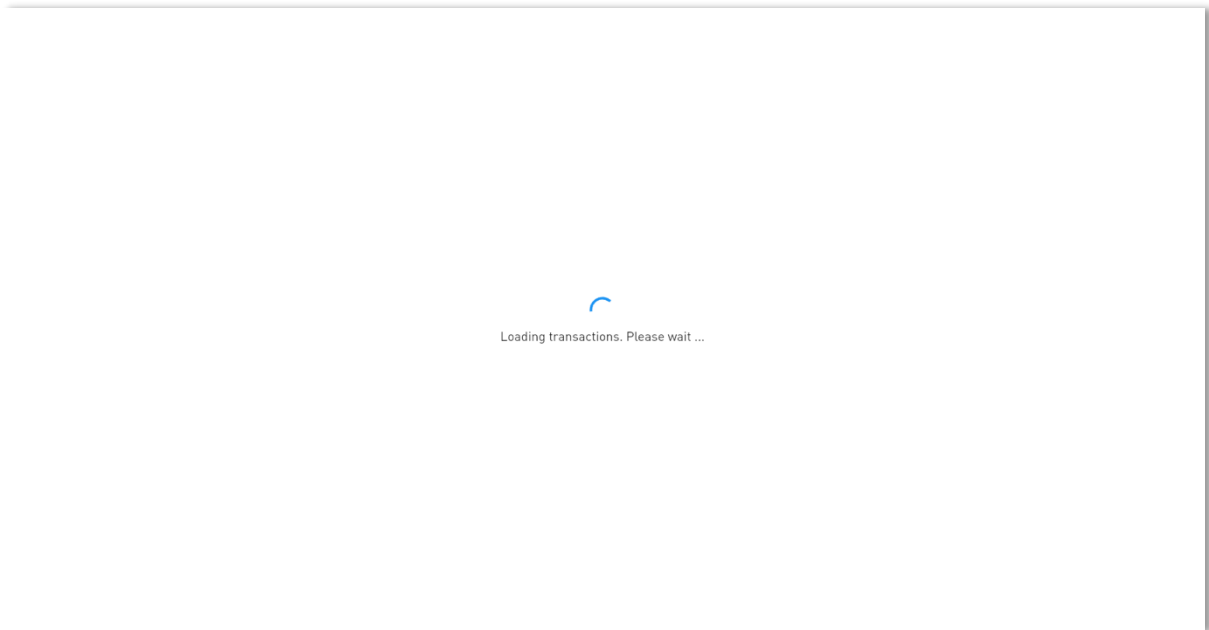


Figure 5: Main Menu Screen.



*Figure 6: Selecting a non-access app dialog.*



*Figure 7: Loading screen when an access app is selected.*

## 3.2. Sidebar

The sidebar provides a convenient way to navigate through the different sections of the Smart Pump Control System.

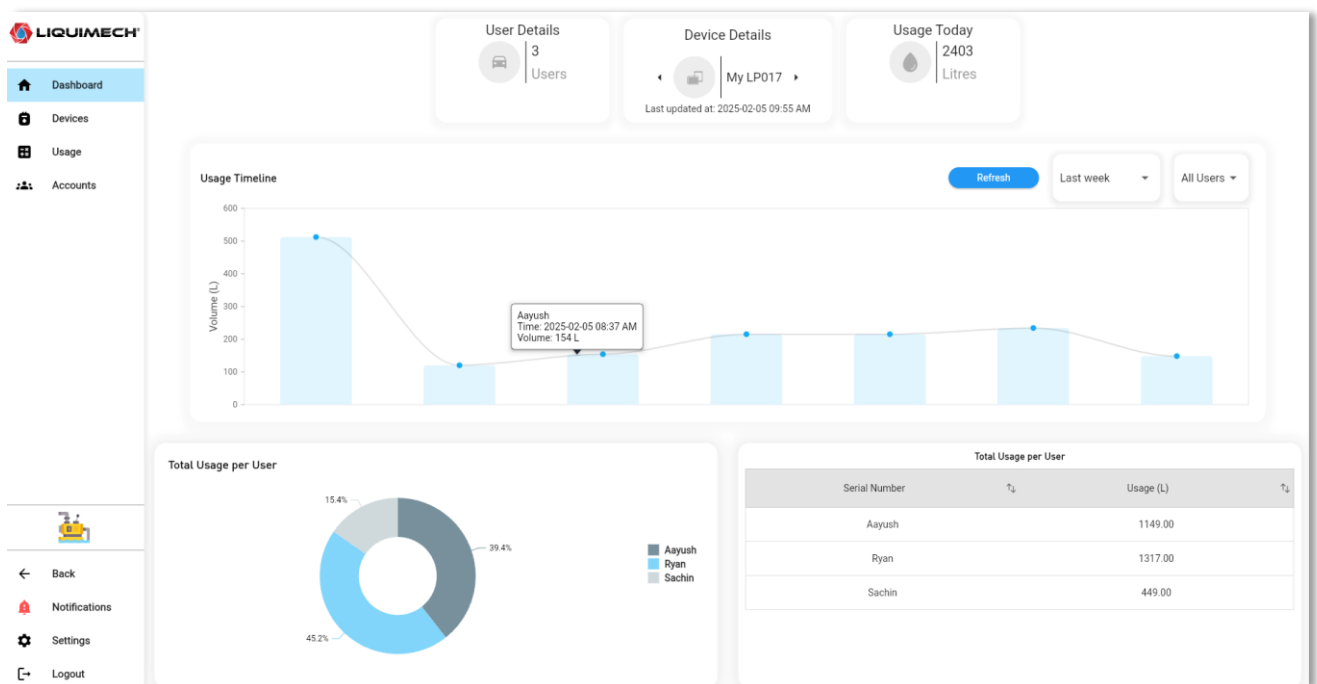


Figure 8: Dashboard screen.

## 3.3. Top Section

- ❑ Home: Returns you to the main dashboard.
- ❑ Devices: Displays information about the devices linked to the system.
- ❑ Usage: View details such as water consumption, date, time, etc.
- ❑ Accounts: Manage user accounts and access levels.



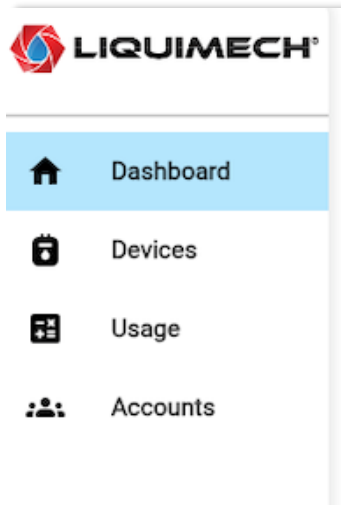


Figure 9: The top-left section of the banner allows navigation to the home (dashboard), devices, usage, and accounts pages.

### 3.4. Bottom Section

- ❑ Back: Returns to the main menu
- ❑ Notifications: Indicates whether notifications are present or absent.
- ❑ Settings: Access and modify system settings.
- ❑ Log Out: Securely exit the system.

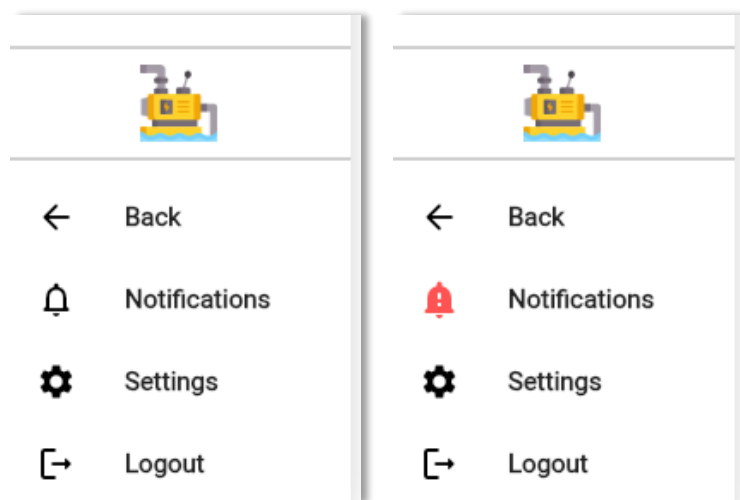


Figure 10: Bottom section of the left banner. Notifications when absent and present.

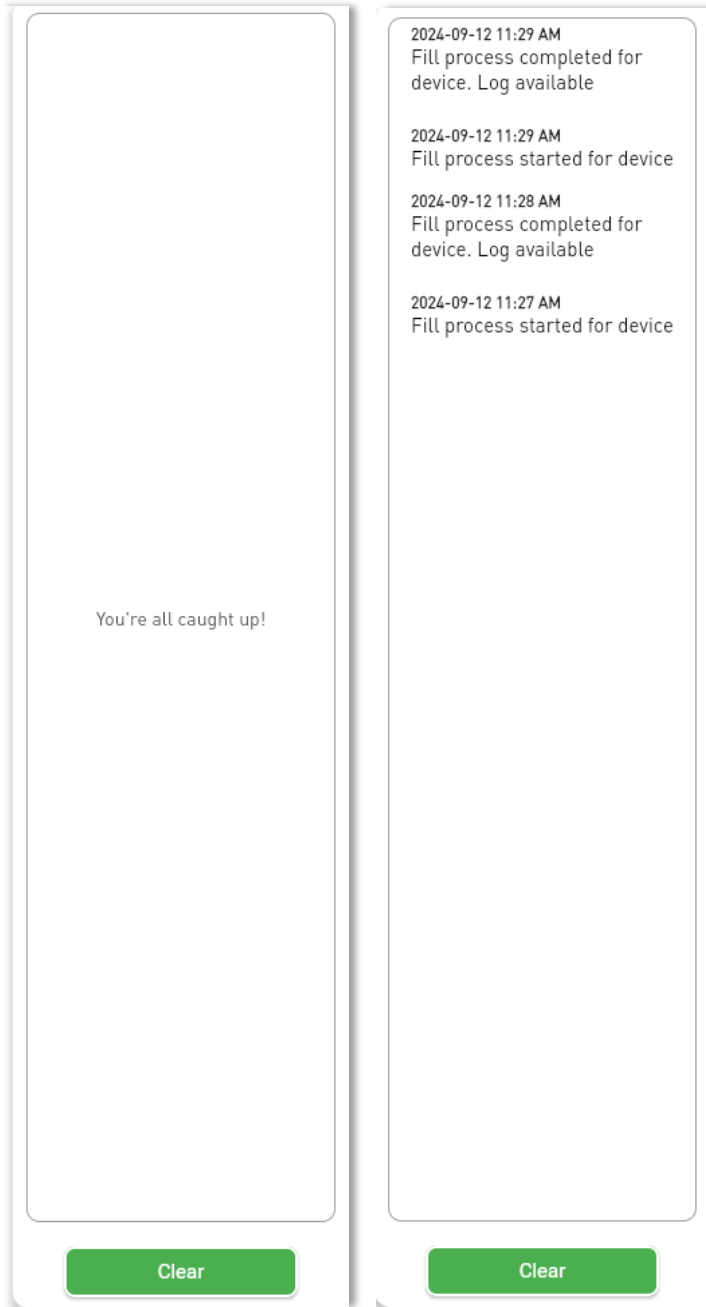


Figure 11: Notifications banner with and without notifications.

## 3.5. Settings Page Overview

The Settings page allows you to view and modify your account details.

### Account Information

- ❑ The first sub-menu displays current account information, including:
  - Username
  - Email address
  - App version
  
- ❑ If the account has access to a field device and the appropriate permissions (access level), users can edit the email address where monthly usage reports are sent.

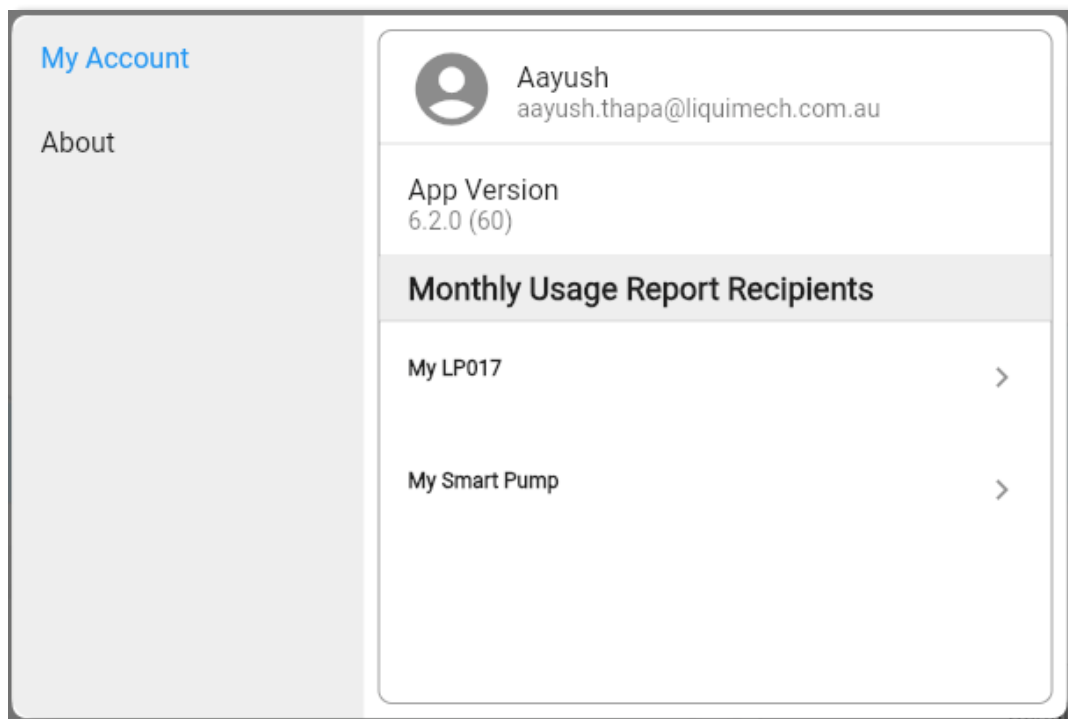
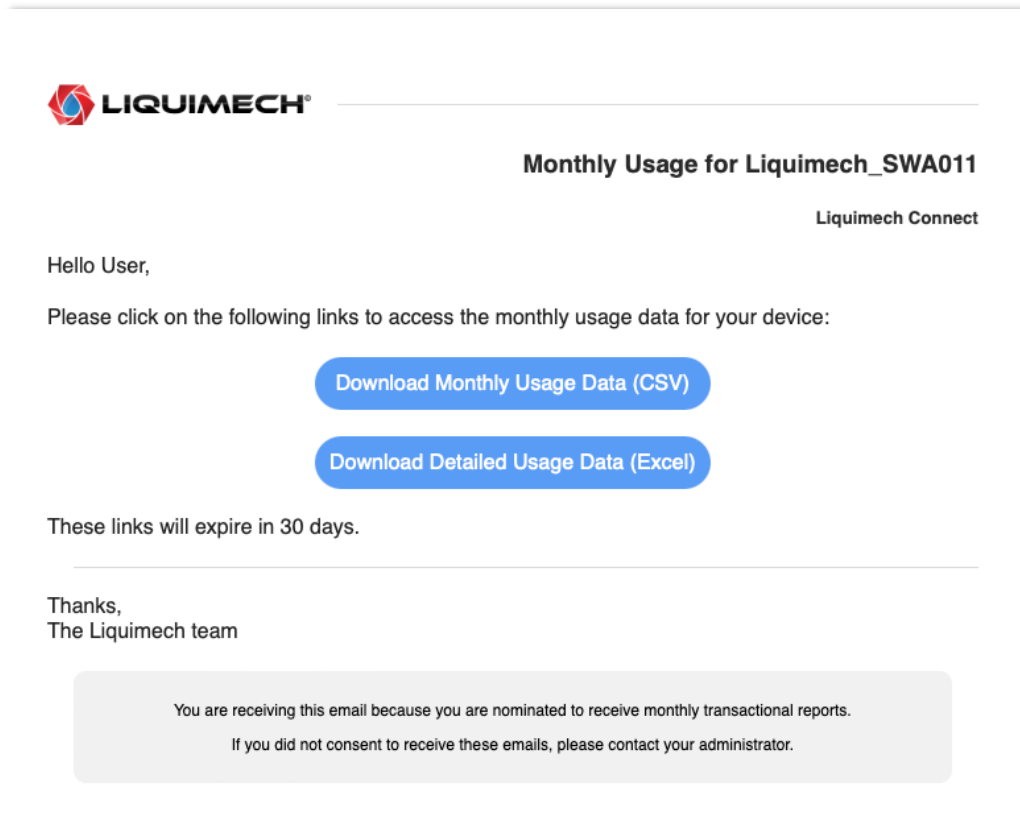


Figure 12: First sub-menu screen.

- ❑ The nominated email address will receive a monthly usage report on the first day of every month.



*Figure 13: Monthly Usage Report email.*

## 3.6. Dashboard

The dashboard serves as the central control panel for your Smart Pump Control System, providing a user-friendly interface for managing and monitoring your pump stations.

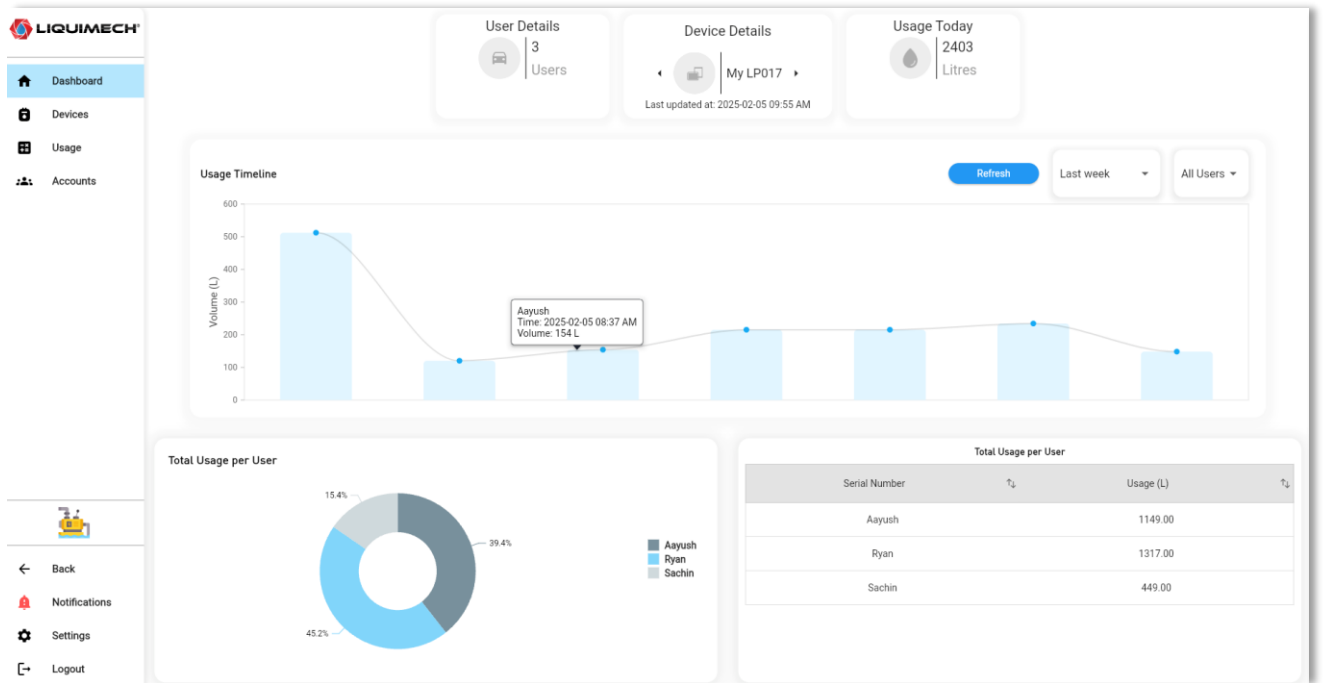


Figure 14: Dashboard screen.

### Info Cards

The top row contains info cards, displaying key data:

- ❑ **Users:** Shows users that have access to the device.
- ❑ **Device Status:** Displays device information.
- ❑ **Usage:** Displays the total daily water usage.

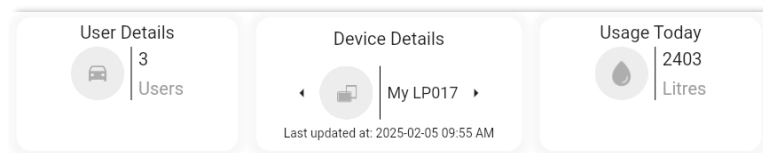


Figure 15: The top row info cards.

### 3.7. Usage Statistics

The middle row of the dashboard shows a usage statistics graph. The combo boxes in the top right allow you to filter data based on users and/or time. Use the refresh button to update the data.

*Note: When you hover over an entry, an info box is shown with the data.*

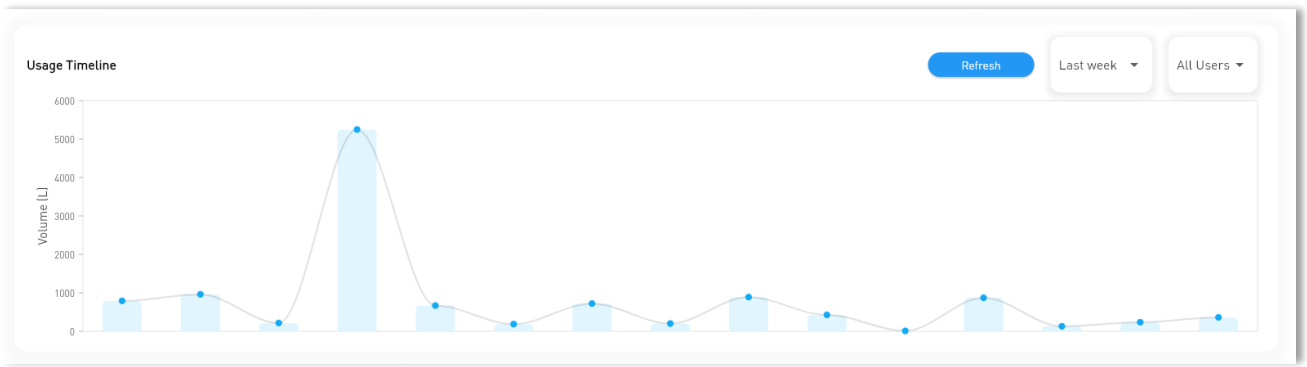


Figure 16: Usage statistics.

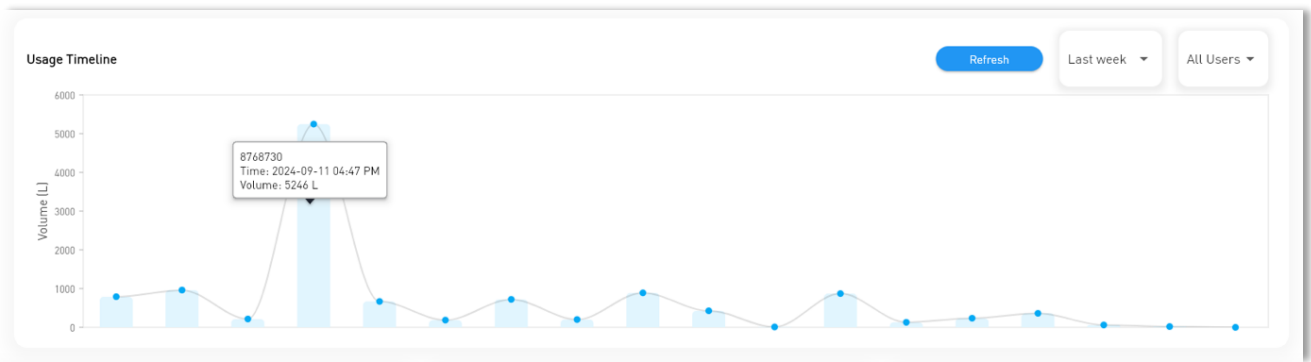


Figure 17: Usage statistics with info box.

- ❑ User Combo Box: Select a user to filter the data.
- ❑ Time Combo Box: Select a time range to filter the data.

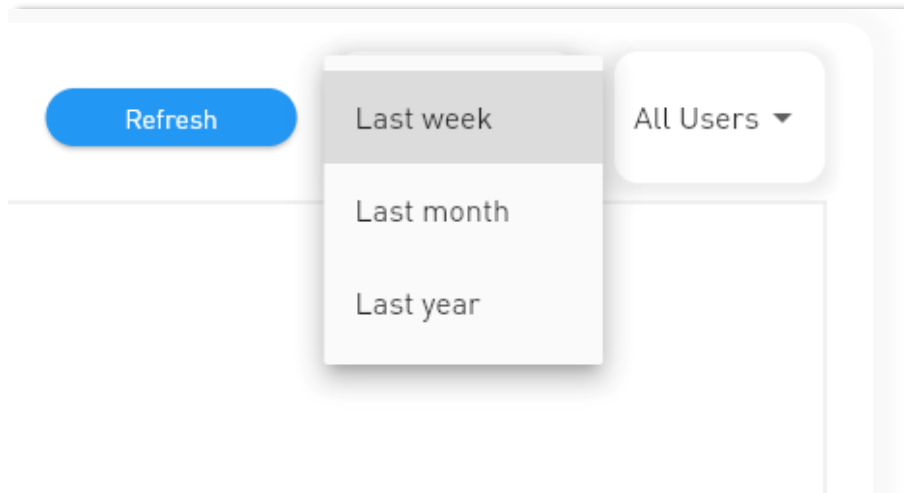


Figure 18: User combo box.

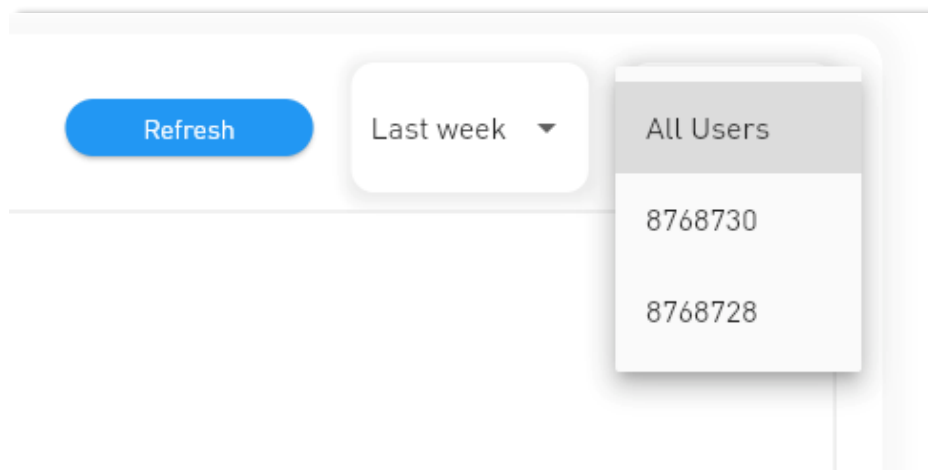
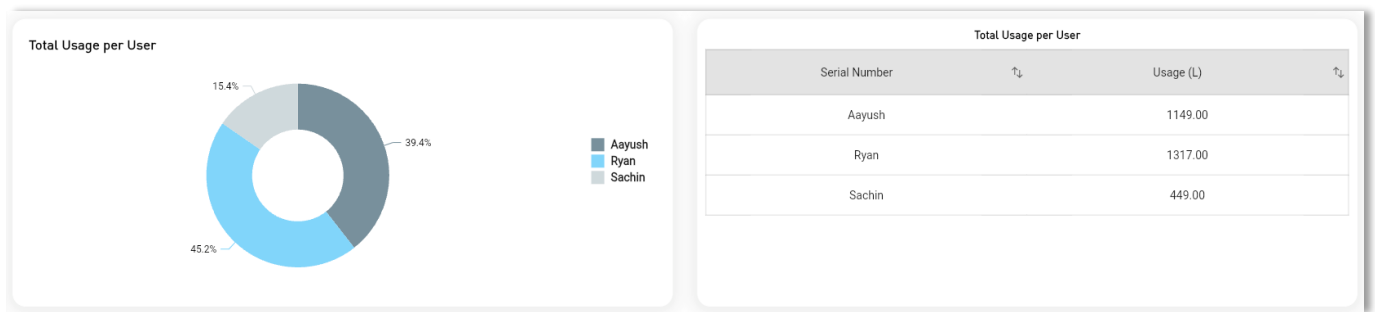


Figure 19: Time combo box.

## 3.8. Additional Statistics

The bottom row contains additional statistics such as total usage per user in the doughnut chart and tabular forms.



*Figure 20: Doughnut chart and usage table.*

- ❑ **Usage Doughnut Chart:** When you hover over a section, an info box is shown with the data. Users whose usages are below 2% are grouped under the 'Others' category to make the chart cleaner.
- ❑ **Usage Table:** This table does not group users into the 'Others' category but shows the total usage in litres for all users no matter their usage.



### 3.9. Devices Screen

Selecting the devices page icon on the sidebar takes users to the device's screen, showing an overview of all their devices. Shown information includes device lock and settings.

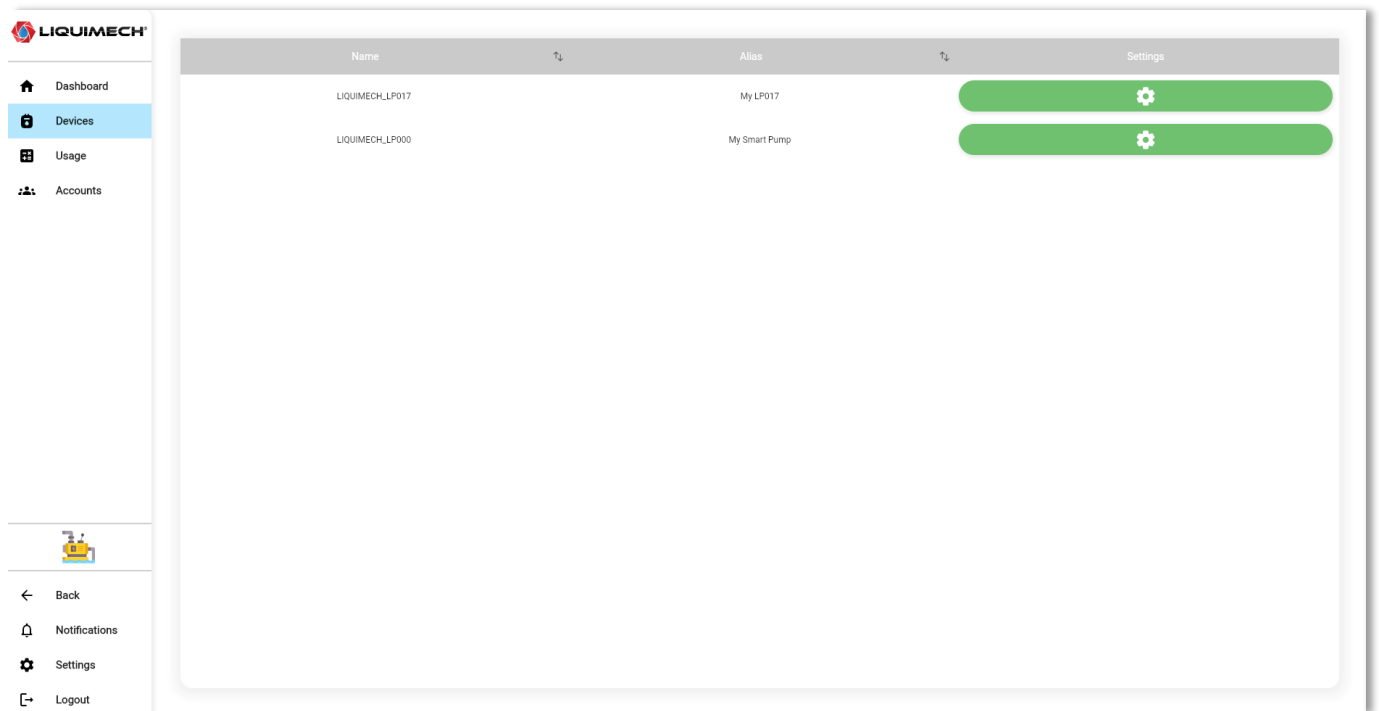


Figure 21: Devices Screen.

Selecting the settings shows the following dialog box, where the device alias can be configured.

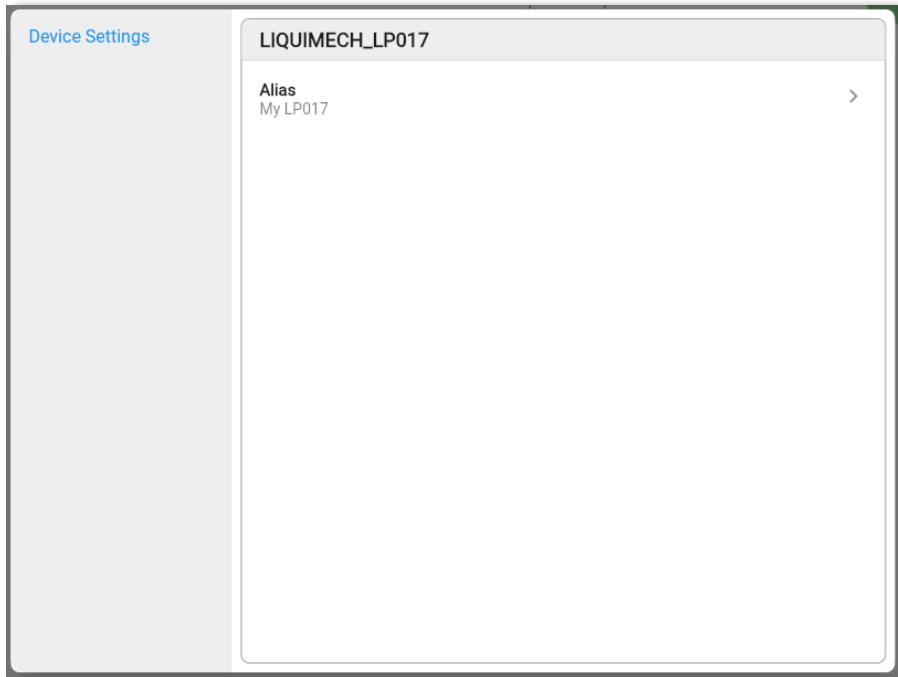


Figure 22: Device Settings.

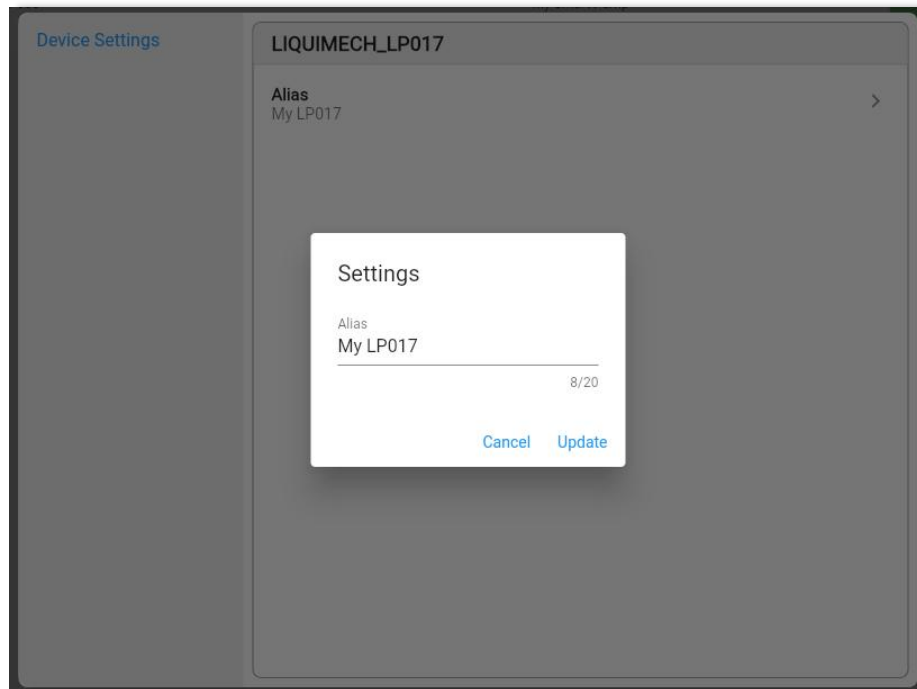


Figure 23: Alias Screen during the update.

## 3.10. Usage Screen

Selecting the usage button navigates to the usage screen, where all historic usages for the device can be viewed.

Serial Number	Alias	Company	Date and Time	Duration (sec)	Count (pulse)	Usage (L)
Ryan	Ryan	Liquimech	2025-02-05 09:42 AM	0	110.2	1102
Aayush	Aayush	Liquimech	2025-02-05 08:56 AM	24	14.8	148
Sachin	Sachin	Liquimech	2025-02-05 08:45 AM	0	23.4	234
Ryan	Ryan	Liquimech	2025-02-05 08:42 AM	0	21.5	215
Sachin	Sachin	Liquimech	2025-02-05 08:42 AM	50	21.5	215
Aayush	Aayush	Liquimech	2025-02-05 08:40 AM	35	21.5	215
Aayush	Aayush	Liquimech	2025-02-05 08:37 AM	46	15.4	154
Aayush	Aayush	Liquimech	2025-02-05 08:30 AM	86	12	120
Aayush	Aayush	Liquimech	2025-02-03 09:05 AM	0	51.2	512

Figure 24: Usage screen.

Each usage record includes the following details:

- The ID of the user that made the transaction.
- The amount of usage, measured in litres.
- The date and time of the transaction.
- The duration of the usage.
- The pulse count from the sensors.

*Note: To the right of the table, there are filters for time and user, allowing you to view specific transactions based on these criteria. The calendar widget enables the selection of a specific time frame.*

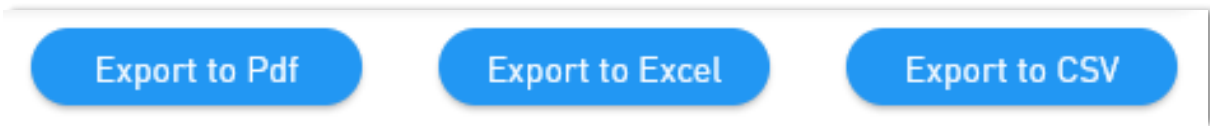


Figure 25: Usage screen: buttons below the table allow you to export the displayed data in PDF, Excel, or CSV formats.

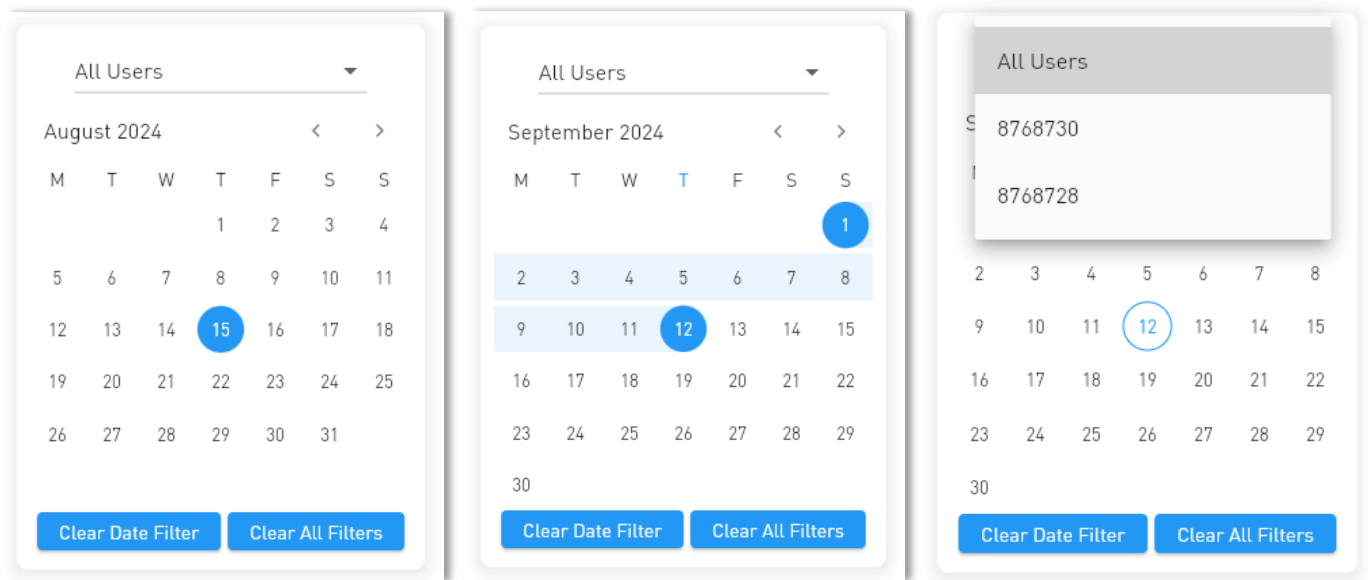


Figure 26: You can also apply user and time frame filters using the calendar widget to further refine the data.

### 3.11. Account Screen

Selecting the 'Accounts' option navigates to the accounts page, where all the registered accounts are shown.

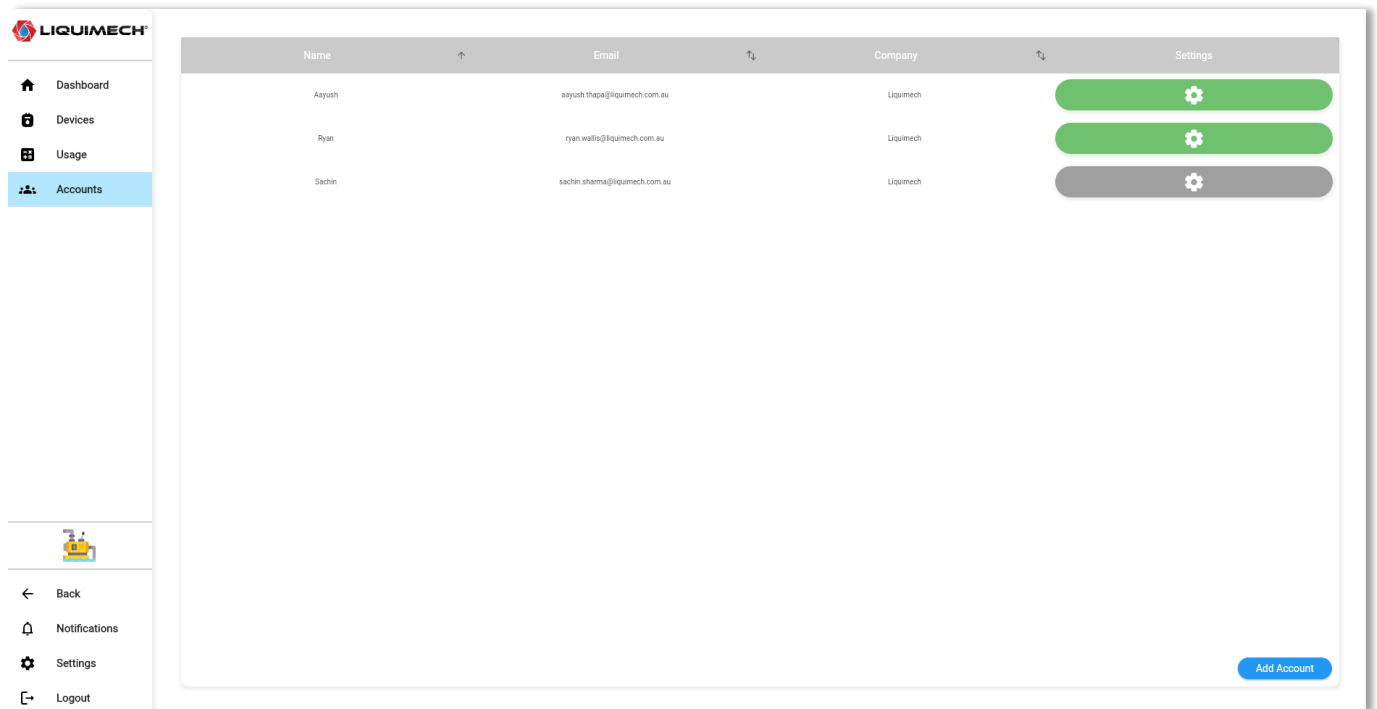


Figure 27: Account screen

Selecting the settings button shows a dialog box where the username, company, and access level of the account can be modified.

*Note: a user cannot view the account settings of a higher-level user.*

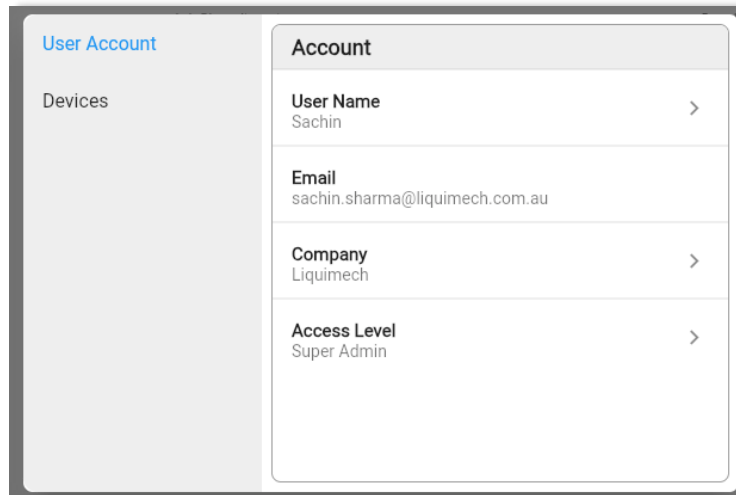


Figure 28: Settings dialog box

The devices sub-menu shows the list of devices that are available to the account.

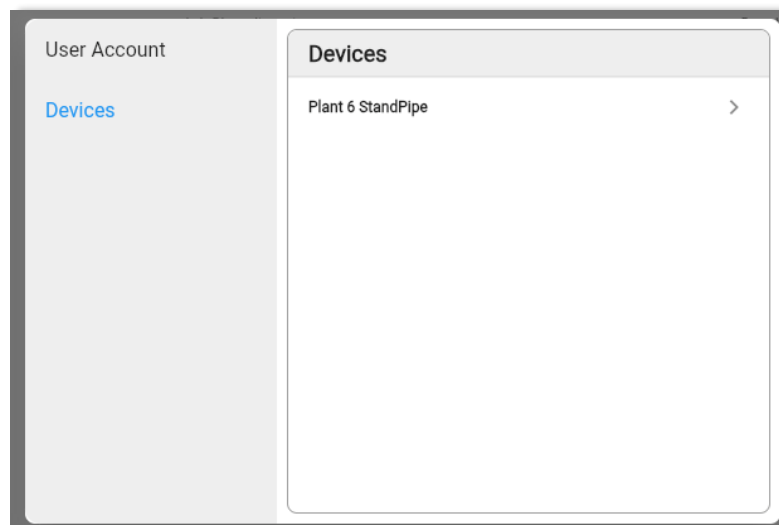


Figure 29: Sub-menu with the list of devices

To modify an account's access to a device, select the relevant device, which will display a dialog box to adjust whether the account has access to the device.

*Note: a user cannot modify their own device access.*

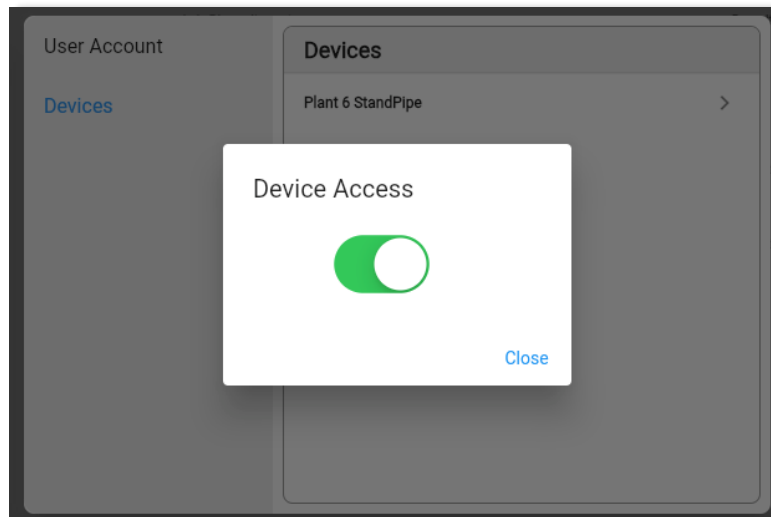


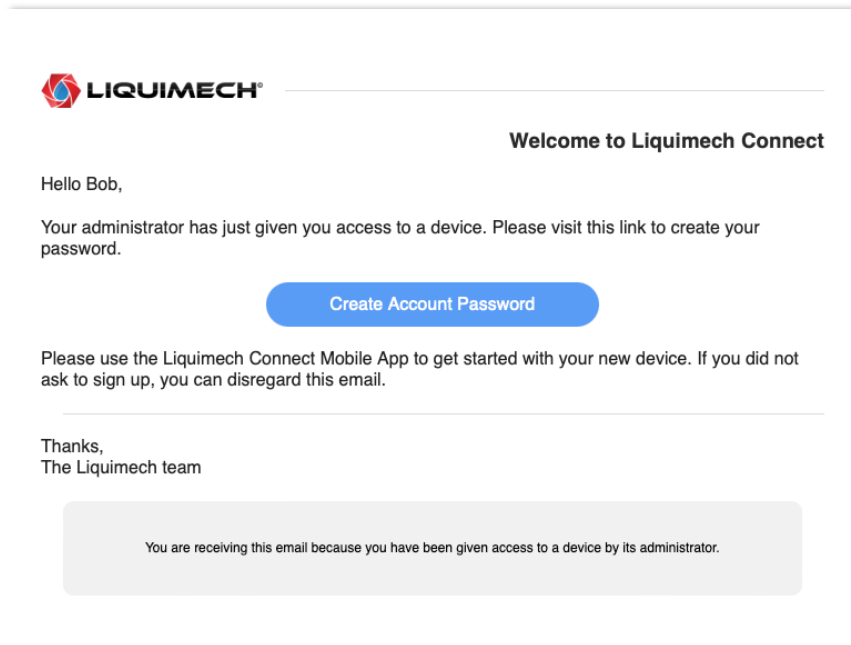
Figure 30: Dialog box to adjust access to the device.

Selecting the 'Add Account' button shows a dialog where a new account can be created.

A screenshot of a mobile application dialog box titled "Add New Account". It contains three input fields: "User Name" with a character count of 0/20 and a red error message "Cannot be empty" below it; "Company" with a character count of 0/30 and a red error message "Cannot be empty" below it; and "Email" with no character count or error message shown. At the bottom of the dialog box are two buttons: "Cancel" and "Add".

Figure 31: Dialog box to create a new account.

If a new user has been added, they will receive an email notifying them about their access.



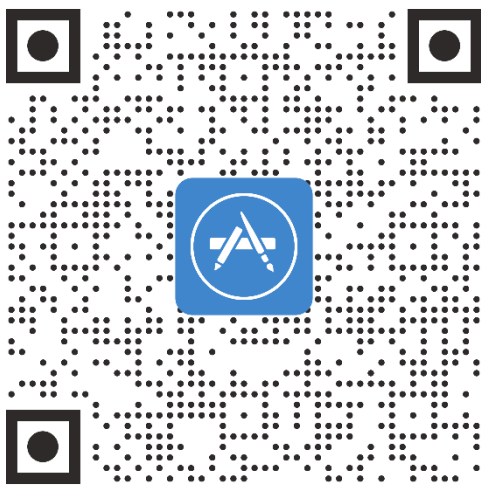
*Figure 32: Email notification sent to the newly added user.*



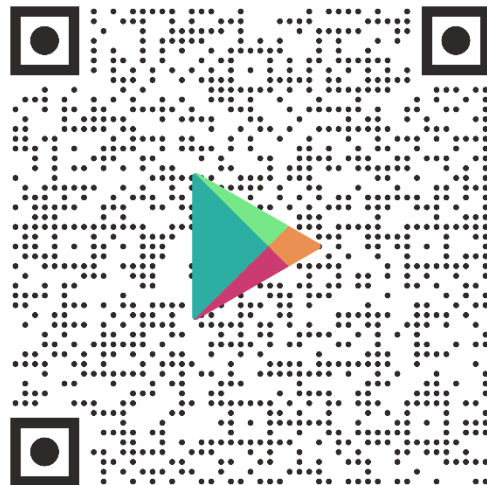
## 4. Liquimech Connect Mobile App: Getting Started

### 4.1 Downloading

Download the Liquimech Connect Mobile App from the App Store (iOS) or Google Play Store (Android).



App Store

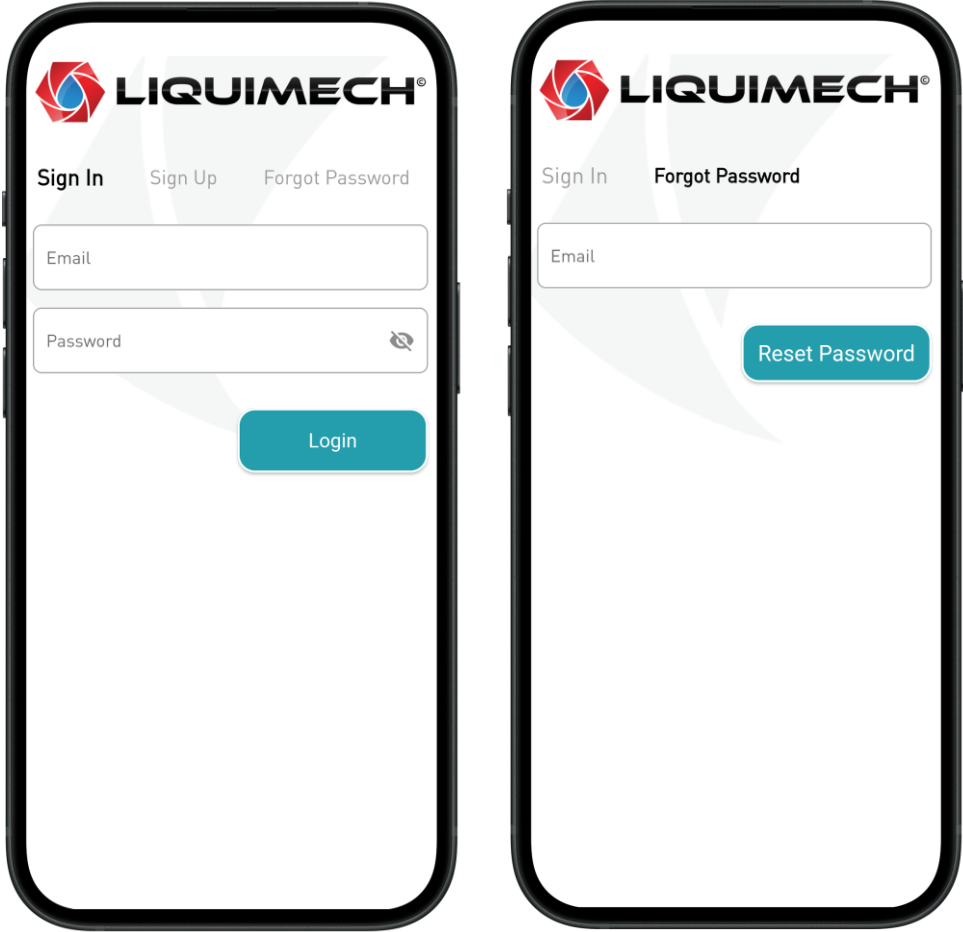


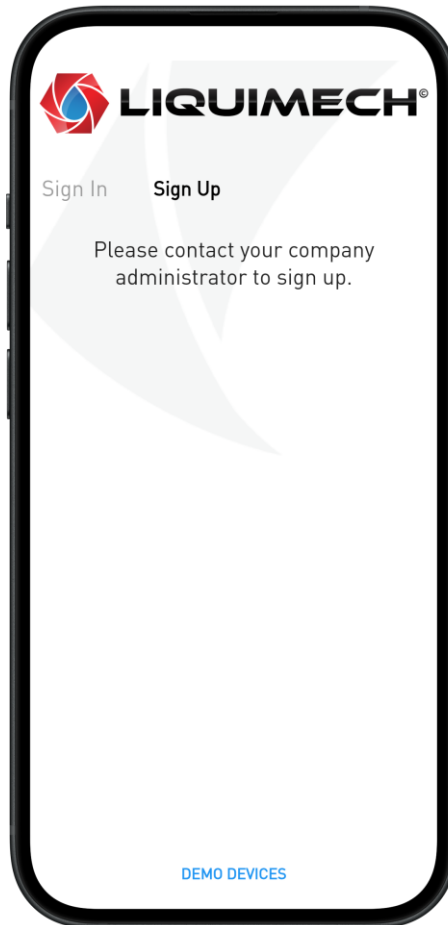
Google Play Store

# 5. Liquimech Connect Mobile App: Functionalities

## 5.1. Login Screen

The app's login screen allows users to sign in or recover their forgotten password. New users will be required to get their company administrator to create an account for them. Below are screenshots of the respective pages:





*Figure 33: Screenshots of the sign in, forgot password and sign up pages.*

### User Login

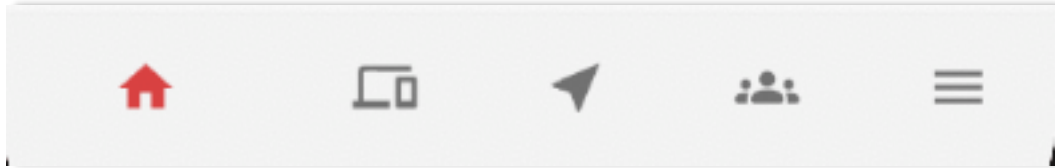
- Launch the app and enter your registered username and password.
- Tap "Login" to access the app.

### Forgot Password

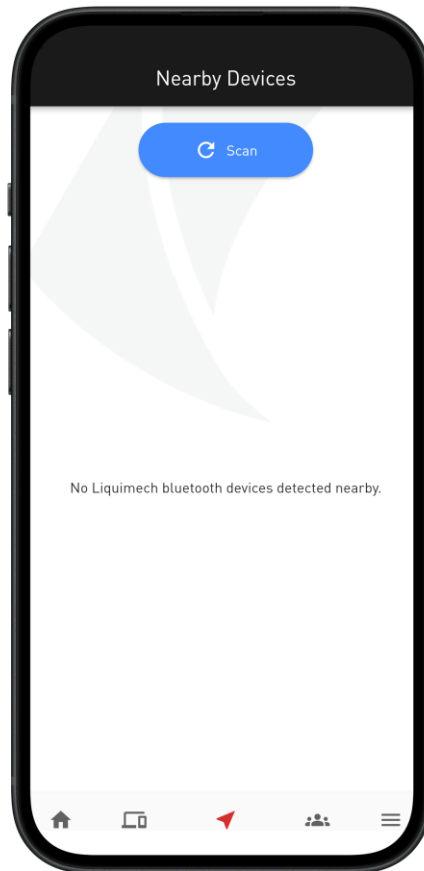
- If you forget or want to reset your password, tap "Forgot Password" on the login screen.
- Enter your registered email address and follow the instructions to reset your password.

## 5.2. Landing Screen

The landing screen consists of the following main sections, navigable via the navigation rail at the bottom of the screen:



*Figure 34: Navigation rail, from left to right: Home, Devices, Nearby Devices, Users and Settings.*



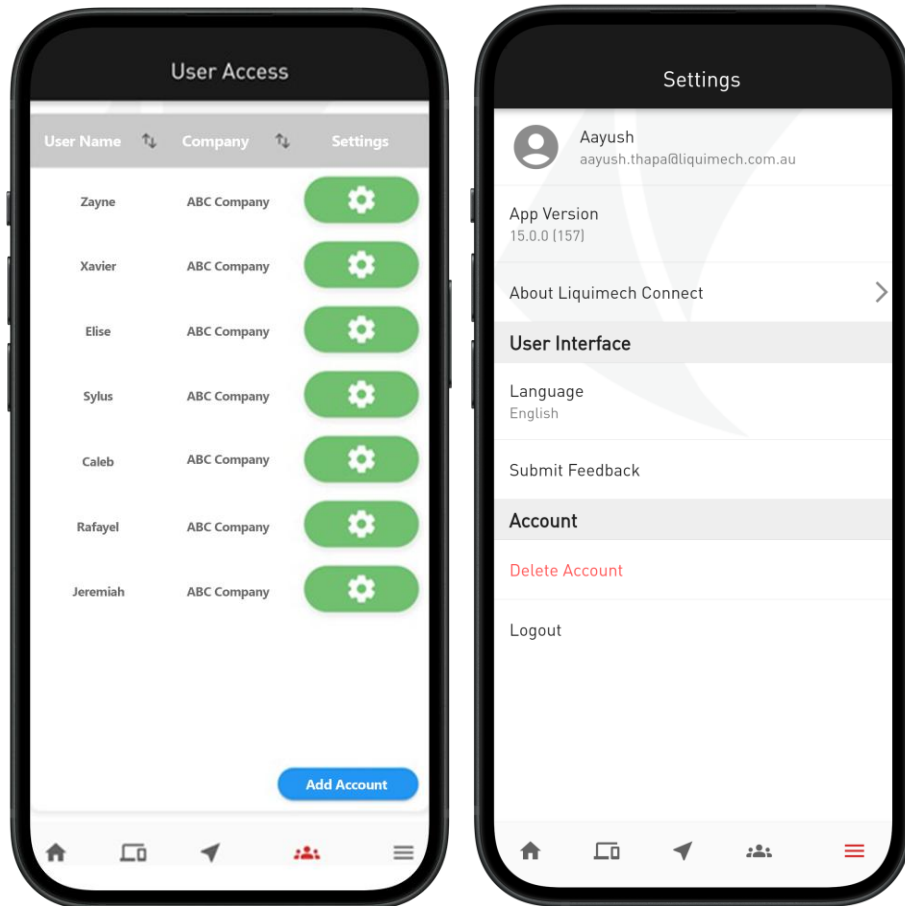
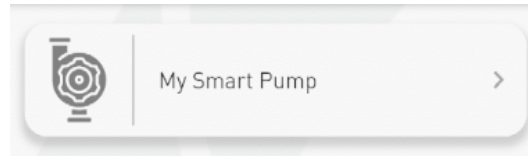


Figure 35: Screenshots showing, in order: Home page, Devices page, Nearby devices page, User Management page, and Settings page.

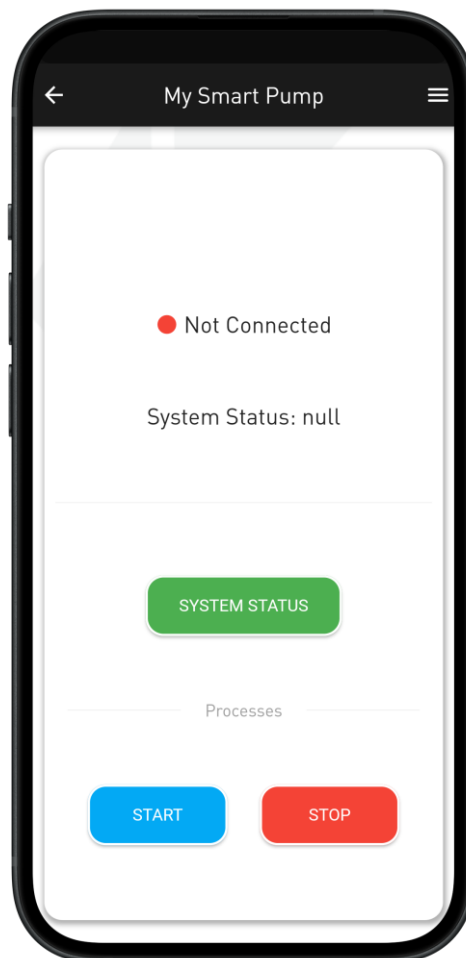
## Smart Pump Control System

For smart pump control systems, an entry with the following icon will be shown:



*Figure 36: Smart pump device icon*

Upon selection of the device entry, you will be taken to the main device dashboard, as shown below.



*Figure 37: Main smart pump device dashboard*

*Note: For Smart Pump Control Systems that broadcast their own Wi-Fi Access Point*

If the device supports connection via its Wi-Fi Access Point, a status indicator will show whether your app is connected to the device's Wi-Fi Access Point, as seen in the following screenshots.



*Figure 38: Device connection statuses*

*Note: Connecting to the Smart Pump Control System*

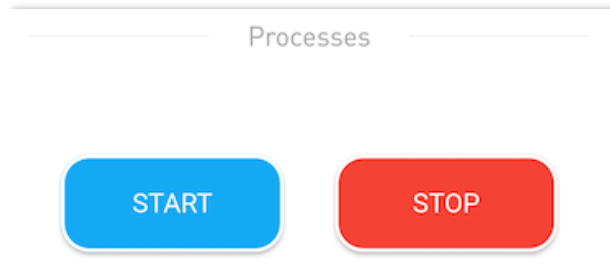
*To connect to the Wi-Fi Access Point of the pump control system, you will be required to connect via your phone settings. Simply look up the Wi-Fi name with the prefix 'LIQUIMECH', and supply the password provided by your company administrator.*

The 'System Status' label shows the status broadcast by the device. When you first connect to the device, it is null. The status of the device can be fetched by selecting the "System Status" button. The following table shows the different statuses that are broadcast.

Status	Meaning
System Free	The system is idle and available for commands.
System Busy	The system is running a process and is unavailable for alternative commands.
Process Started	The system has just started a fill process. The system is now busy.
Process Completed	The system has just completed a fill process. The system is now free.



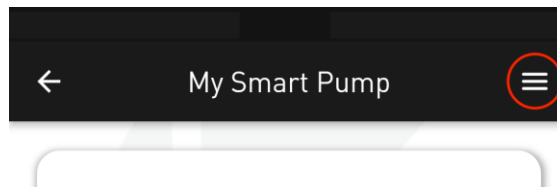
The two process buttons are used to either start a fill process or stop a running fill process.



*Figure 39: Start and Stop buttons*

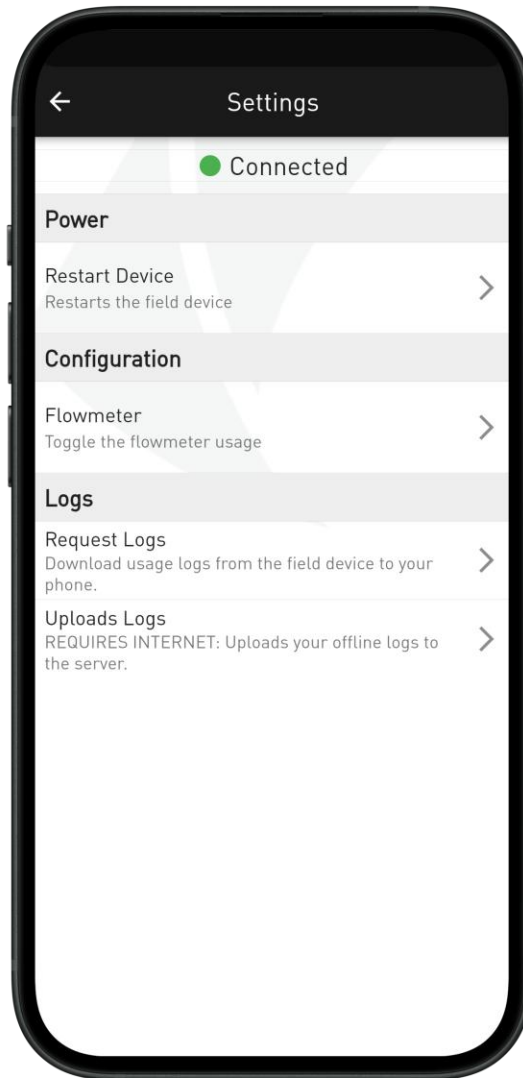
### Additional features

Some smart pump control systems support additional features, which can be accessed via the menu icon at the top right of the device dashboard.



*Figure 40: Menu icon encircled with red.*

This will present you with the device settings page:



*Figure 41: Smart Pump Device Settings*

This page allows you to configure the following device settings:

- Restart Device: Sends a message to the device to restart.
- Configure flowmeter usage: Configure whether to use the flowmeter connected to the pump.

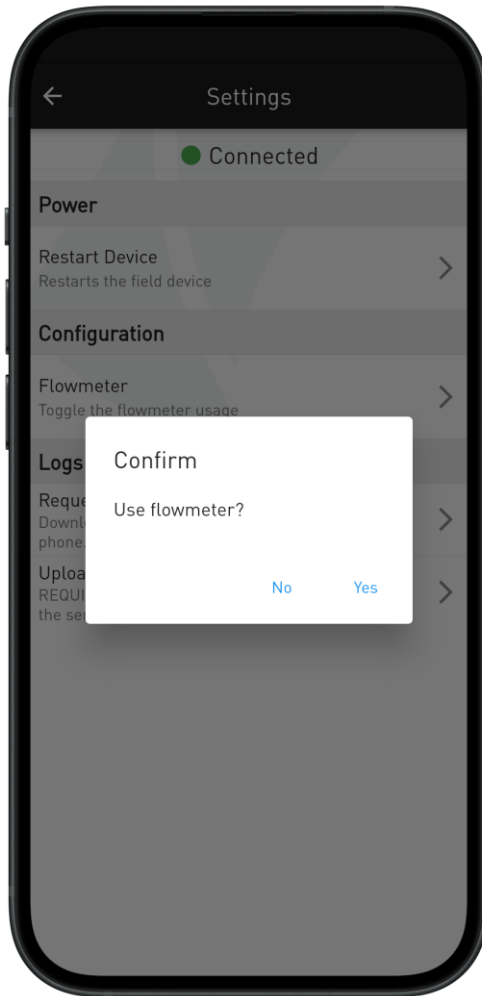


Figure 42: Flowmeter usage control dialog.

- Request logs: Downloads logs stored in the device (if present) and stores it in your phone's local storage, to be uploaded later. **Only present in Wi-Fi-enabled versions.**
- Uploads logs: Uploads the downloaded logs to our servers. **Only present in Wi-Fi-enabled versions.**

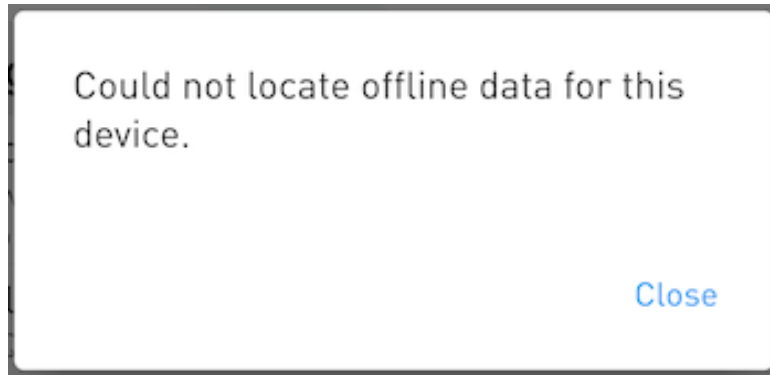


Figure 43: Dialog is shown when no logs were discovered stored locally.

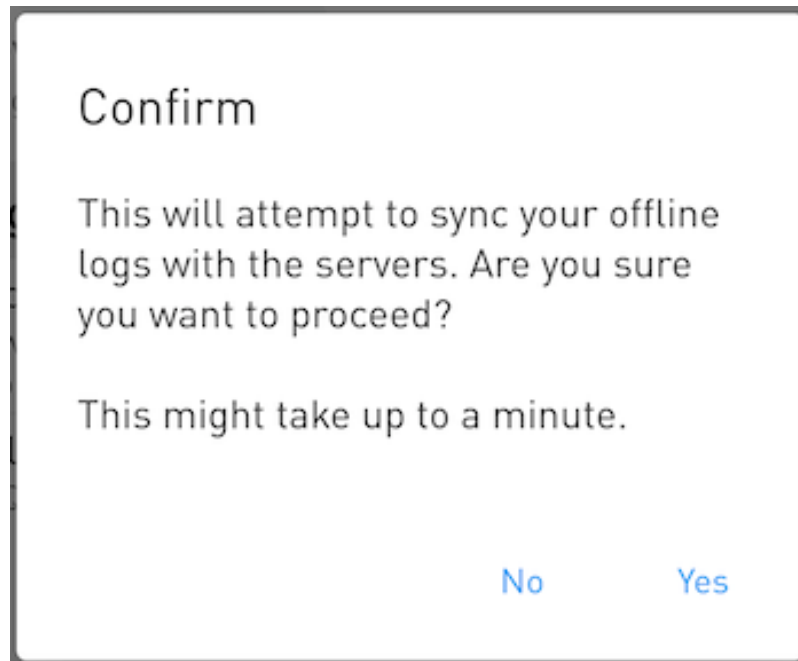


Figure 44: Dialog prompting user confirmation to upload locally stored logs.

## 5.3. User Account Management

The user management page allows an operator with the right access level to provide access to their device to other users.

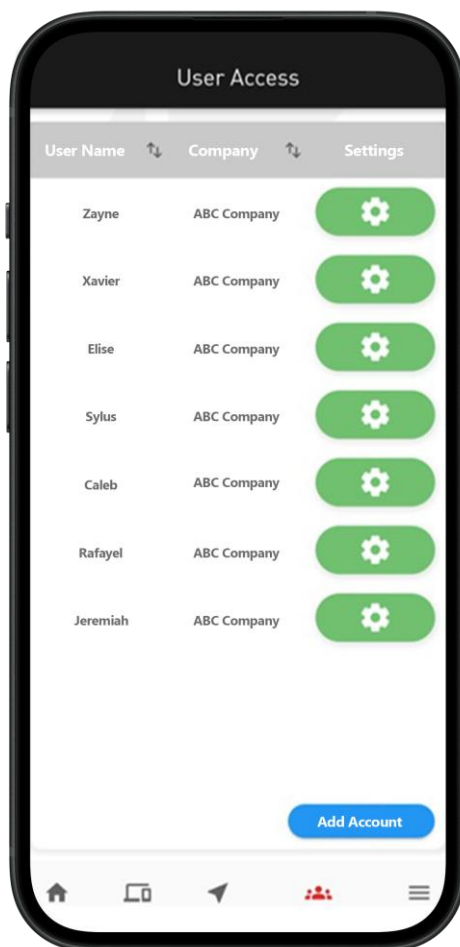


Figure 45: User access screen.

Selecting the settings icon shows a dialog box where different parameters of the account can be edited, such as the username, company, access level and access to all devices.

*Note: A target operator may not be given an access level equal to or greater than the access level of the operator using the app.*

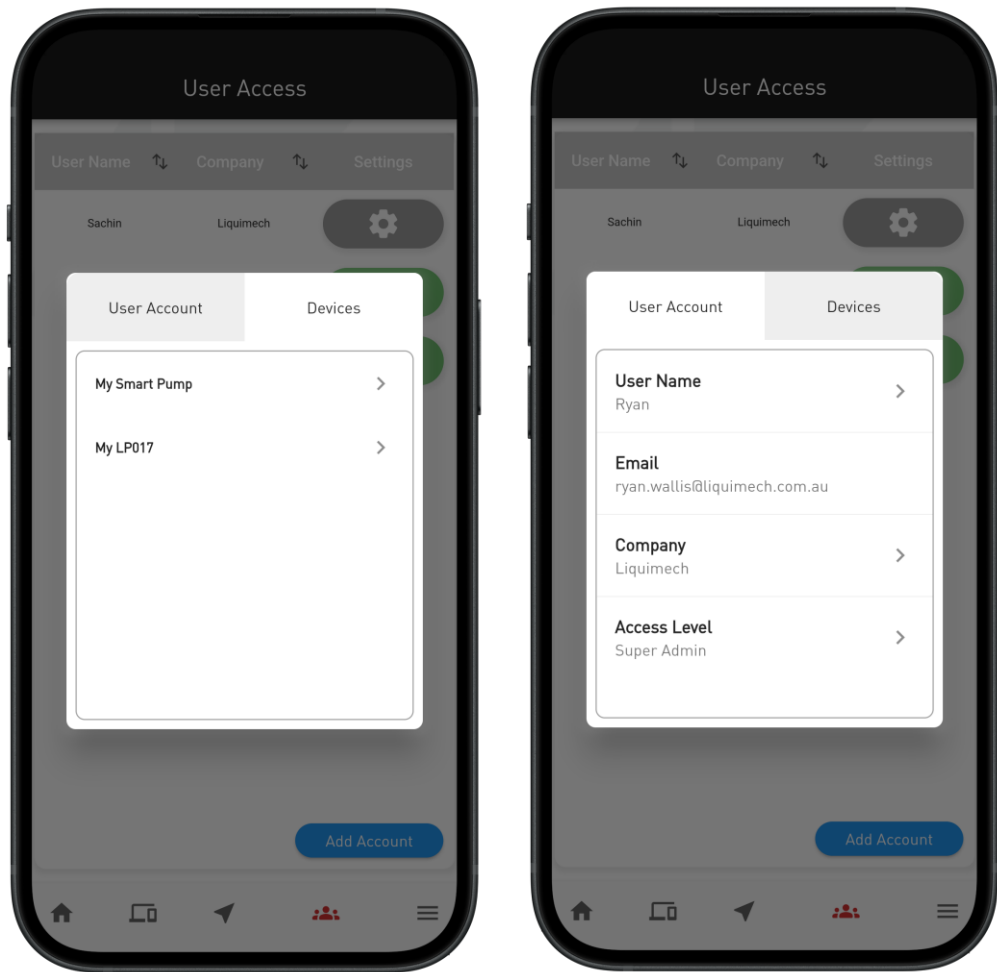


Figure 46: User access screens with a dialog box for the user's account and devices.

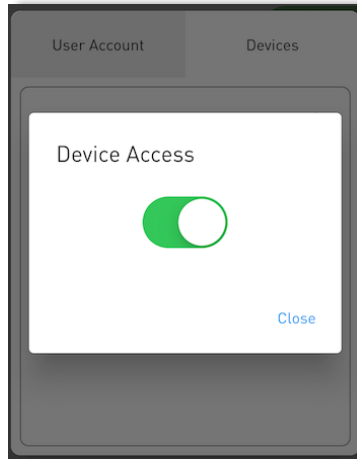


Figure 47: Switch to toggle a user's access to a device

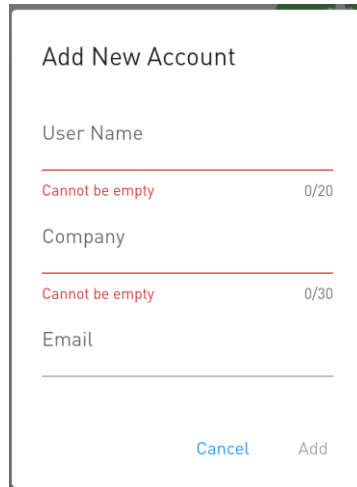
### Access levels

The following table lists all the access levels:

Access Level	Access Title	Description
1	Super-admin	Complete system access with user management capabilities. Usually, the account that Liquimech hands over the product to.
2	Admin	Can modify system settings and view all user activities. Usually delegated by the super-admin to perform day-to-day tasks.
3	Technician*	Limited permission to change settings; can view system status only.
4	Operator*	Basic day-to-day access; can view system status only.

*Note: Depending on the company's organisational structure and the field device's capabilities, a technician and operator may have essentially the same features. For the purposes of most organisations, both access levels may indicate accounts with read-only access.*

New users can be added by selecting the “Add Account” button. This opens a dialog box that allows you to specify the new user’s details.



Add New Account

User Name  
Cannot be empty 0/20

Company  
Cannot be empty 0/30

Email

Cancel Add

Figure 48: New user dialog

*Note: When a new user is added to a device, they will receive an email notification about their new device access. Existing mobile app users will not receive this email; instead, the newly added devices will automatically appear in their device list.*

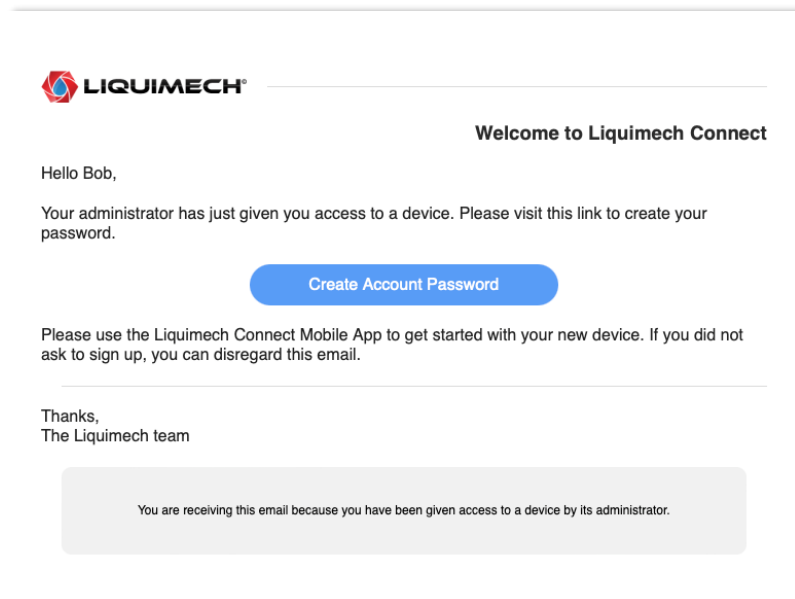


Figure 49: Email notification on new device access.





**You Define, We Design**