

GuardTec IoT

Table of Contents

Introduction

Using the Web Application

Overall Consumption of all Sites

Overall Consumption of a Site

Overall Consumption of Pool

Consumption Dashboard

Alarms

Devices

Email Notification

Contact Information



GuardTec Solenis Cloud Manual Guide 1.0

Introduction

1.1 Purpose of the User Manual

The purpose of this user manual is to provide a comprehensive guide on how to use the GuardTec Application. It aims to help users understand the application's features, functionalities, and how to navigate through the interface effectively.

1.2 Scope

This user manual covers all the essential aspects of the web application, navigating the user interface, using core features. It does not cover any backend or development-related topics.

Using The Web Application

In this section, we will cover the basic functions and operations of the GuardTec Application

1. Home Page

The home page is the starting point of the application. The navigation bar appears at the left of the application and provides quick access to essential functions such as Home, Groups, Alarms and Devices. At the Home page there are two widgets: Welcome widget and Device Insights widget.

In Welcome widget, there are three icons available:

- Add additional GuardTec device : User can request for a new device addition belonging to an existing site or request for a new site.

Additional Details

Basic information

First Name *
Pond

Last Name *
Angels

Email *
pond@evolution.aquatic.com

Company Name *
Pond Angels

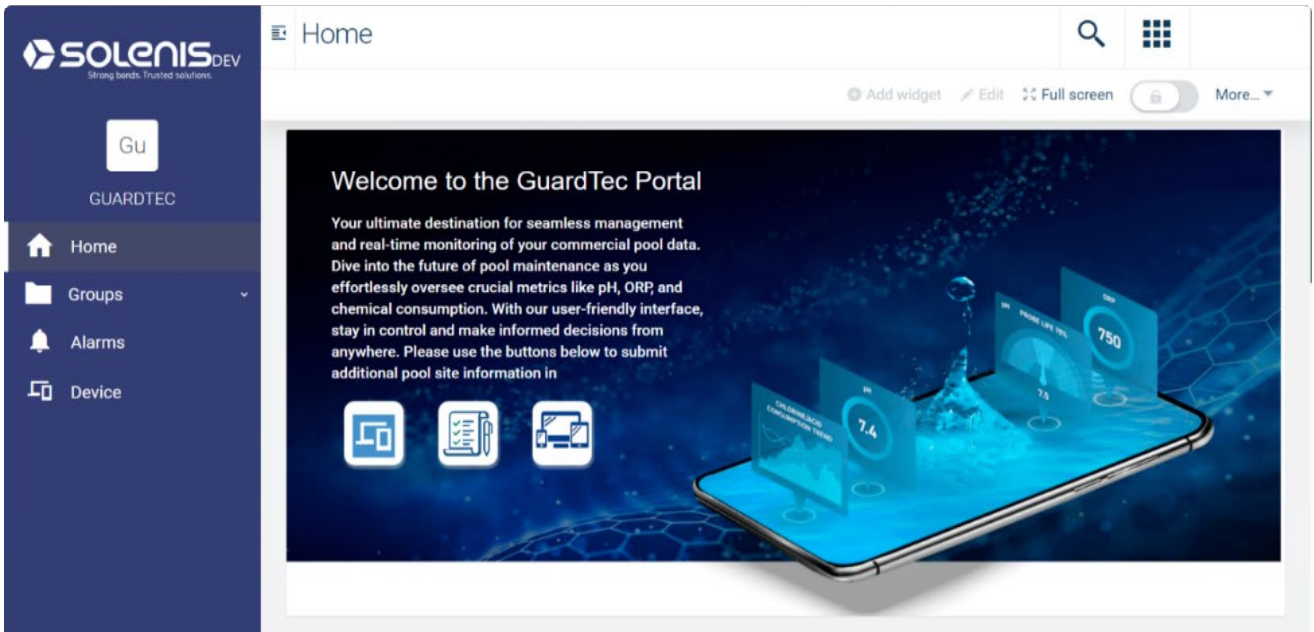
Phone Number

Site Details [Add](#)

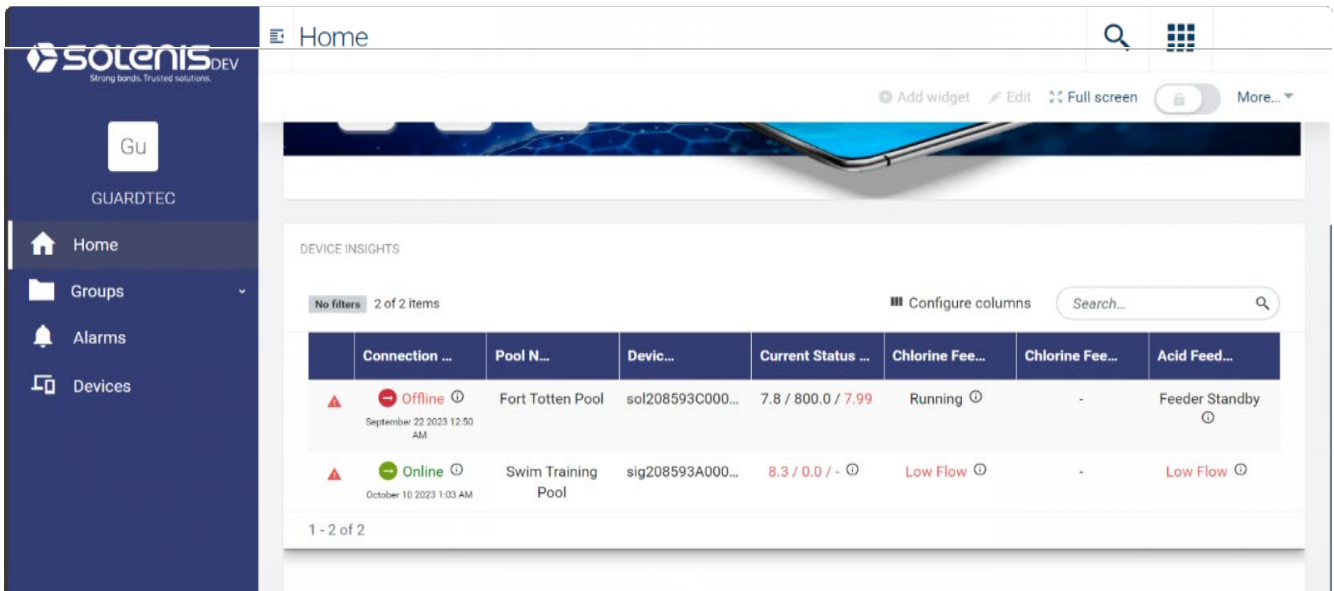
Site Name *
Site Name * (required)

Haffen Aquatic

- Download Registration and start-up information: Download User Manual guide for user to start-up with the application.
- Device Manual Guide: Download Device manual guide.

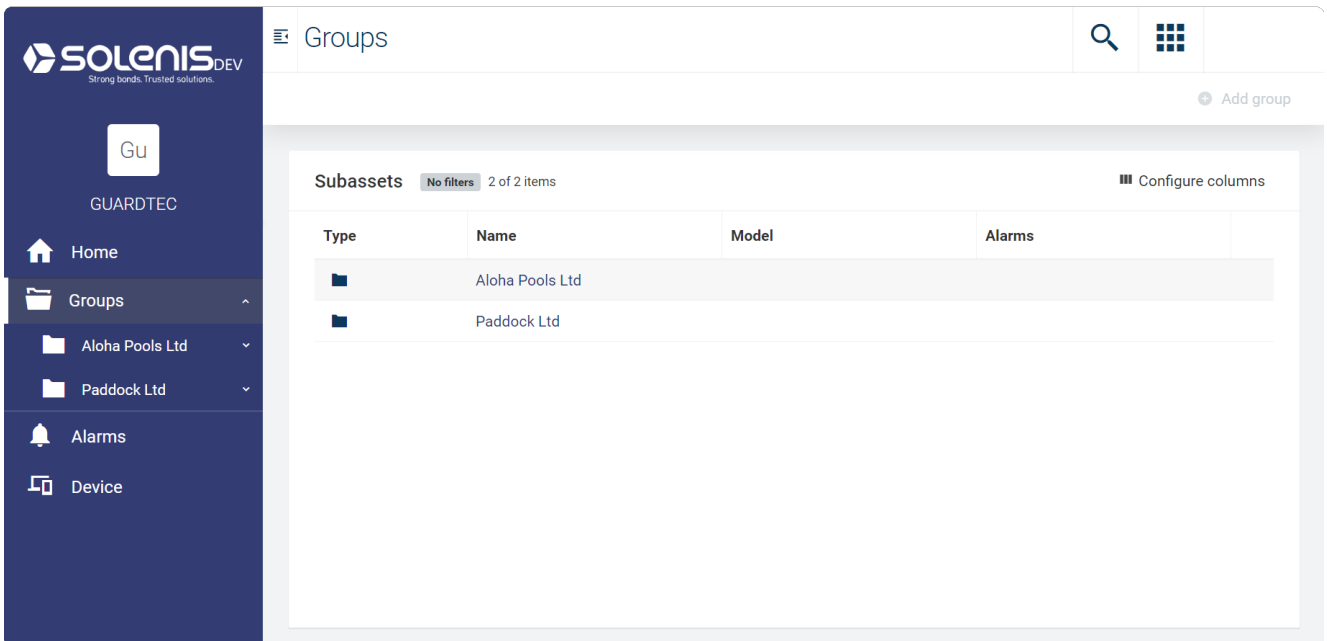


In Device Insights widget, the user can view all the devices, Connection Status, pool name, Chlorine Feeder Status 1, Chlorine Feeder Status 2 and Acid Feeder Status. The user can filter using the device ID and configure table columns as required.



2. Groups

The user needs to click on Groups to see the details of Customer, Site and Device hierarchy.

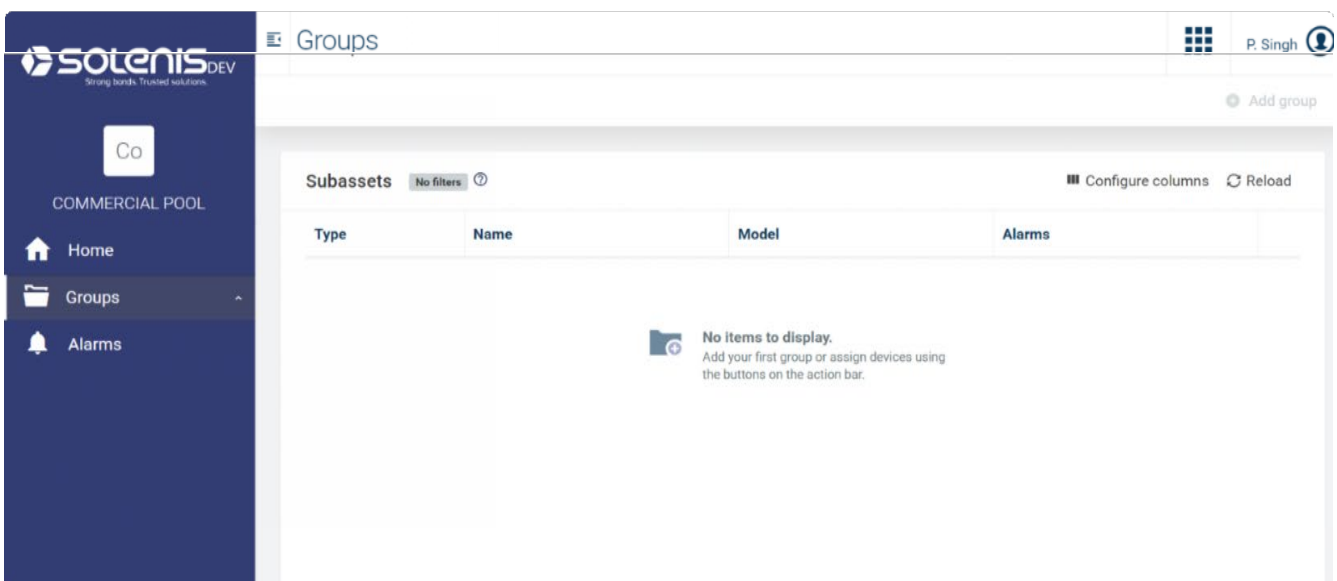


The screenshot shows the 'Groups' page for the user 'Gu' (GUARDTEC). The left sidebar contains navigation options: Home, Groups (selected), Aloha Pools Ltd, Paddock Ltd, Alarms, and Device. The main content area displays a table of subassets with the following data:


Type	Name	Model	Alarms
	Aloha Pools Ltd		
	Paddock Ltd		

Under Groups, the user can view the complete hierarchy:

- The Top Folder represents Customer/Company name.
- The Next folder in the hierarchy represents a Site. Customer can have more than one site.
- Under Site, devices are associated.
- If no device is associated to the user then the user will not see a device and its data.



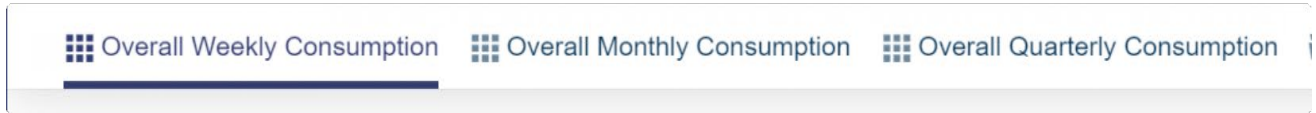
The screenshot shows the 'Groups' page for the user 'Co' (COMMERCIAL POOL). The left sidebar contains navigation options: Home, Groups (selected), and Alarms. The main content area displays a table with the following data:

Type	Name	Model	Alarms
 No items to display. Add your first group or assign devices using the buttons on the action bar.			

3. Dashboard

The dashboard is the screen you see clicking on Customer, Site, and Device under Groups.

This dashboard gives the summary of all site's, Chlorine Briquette over a selected period (Week/Month/Quarter) of time using three dashboards: Overall Weekly Consumption, Overall Monthly Consumption and Overall Quarterly Consumption.



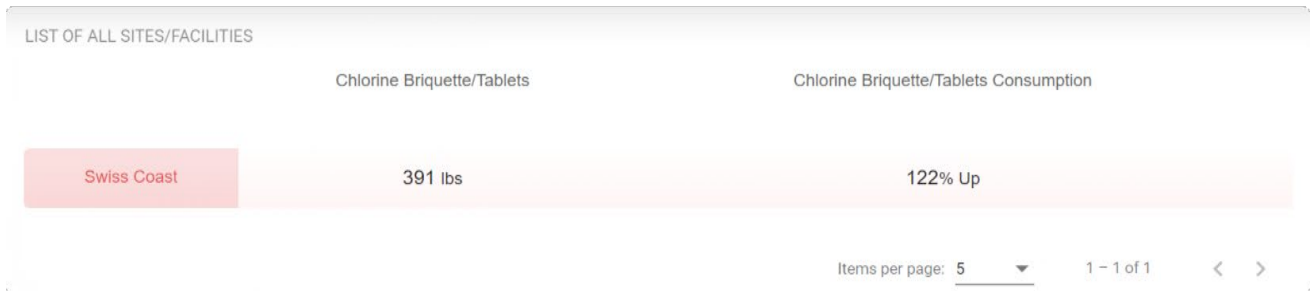
Overall Consumption of all Sites

Click on the customer group in the left navigation bar.

It has two sections:

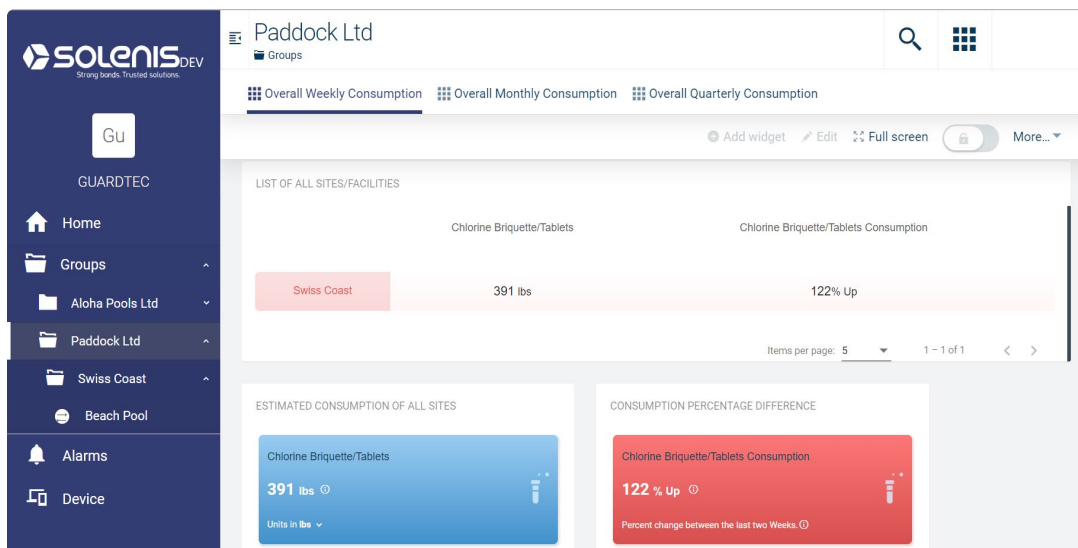
1. List of Facilities/Sites

Each row gives the Consumption and percentage difference of a particular site's Chlorine Briquette over selected period (Week/Month/Quarter) of time.



2. Consumption section

This section will have widgets for the Overall Consumption and Percentage Difference of Chlorine Briquette over a selected period (Week/Month/Quarter) of time for all sites of a particular group.



Overall Consumption of a Site

Click on the site under Customer/Company to see the Site wide dashboard.

This section will also have three dashboards: Overall Weekly Consumption, Overall Monthly Consumption and Overall Quarterly Consumption to show the Selected Site Consumption and Percentage Difference of Chlorine Briquette over a selected period (Week/Month/Quarter) of time for all Pools in the selected site from the overall consumption Page.

It has two sections:

1. List of pools

Each row gives a summary of a pool's connection, current status, acid and chlorine feeder status and Chlorine Briquette value over a selected period (Week/Month/Quarter) of time.

If the consumption values of a pool cross the typical range, the row will be highlighted red as a warning indicator.

Pool Name	Device ID	Connection Status	Current Status (pH / ORP / FAC)	Chlorine Feeder 1 Status	Chlorine Feeder 2 Status	Acid Feeder
Fort Totten Pool	sol208593C0003C	Offline September 22 2023 12:50 AM	7.8 / 800.0 / 7.99	Running	-	Feeder Sta
Swim Training Pool	sig208593A0005F	Online October 10 2023 1:03 AM	8.3 / 0.0 / -	Low Flow	-	Low Flo

Items per page: 5 1 - 2 of 2 < >

2. Consumption Section

Contains the consumption and percentage difference (from last week/month/quarter) of a selected site, and the Chlorine Briquette over a selected period (Week/Month/Quarter) of time.

The screenshot displays the Solenis DEV dashboard for the 'Swiss Coast' site. The left sidebar contains navigation options: Home, Groups (Pond Angels, Paddock Ltd, Swiss Coast), Beach Pool, Alarms, and Devices. The main content area shows the 'Overall Monthly Consumption' dashboard. At the top, there are tabs for 'Overall Weekly Consumption', 'Overall Monthly Consumption', and 'Overall Quarterly Consumption'. Below the tabs is a 'LIST OF ALL POOLS' table with the following data:

Pool Name	Device ID	Connection Status	Current Status (pH / ORP / FAC)	Chlorine Feeder 1 Status	Chlorine Feeder 2 Status	Acid Feeder
Beach Pool	sol208594D0004D	Online October 6 2023 5:00 AM	8.5 / 790.0 / 8.1	Disabled	-	Config Er

Below the table, there are two summary cards: 'ESTIMATED CONSUMPTION OF SITE' showing 'Chlorine Briquette/Tablets' at 3885 lbs, and 'CONSUMPTION PERCENTAGE DIFFERENCE' showing 'Chlorine Briquette/Tablets Consumption' at 339% up. The percentage difference card also notes 'Percent change between the last two Months'.

Overall Consumption of Pool

This section will have five dashboards: Overall Weekly Consumption, Overall Monthly Consumption, Overall Quarterly Consumption, Pool Current Status and Consumption Trend Dashboards to view the following details:

- Viewing the Consumption and percentage difference of a pool's Chlorine Briquette value over a period of time (week/month/quarter).
- Viewing the Chlorine and Acid consumption trend graph.
- Viewing the current pH, ORP and Free Chlorine value of a pool in Gauge chart.
- Viewing the Feeder Status
- Viewing the pH, ORP, FAC trends.
- Viewing the Last Calibration Data and Trends
- Downloading the Raw data for Acid/Cl Consumption
- Downloading the Raw data for Current Status (pH/ORP/FAC)
- Downloading the Raw data for Calibration Results.

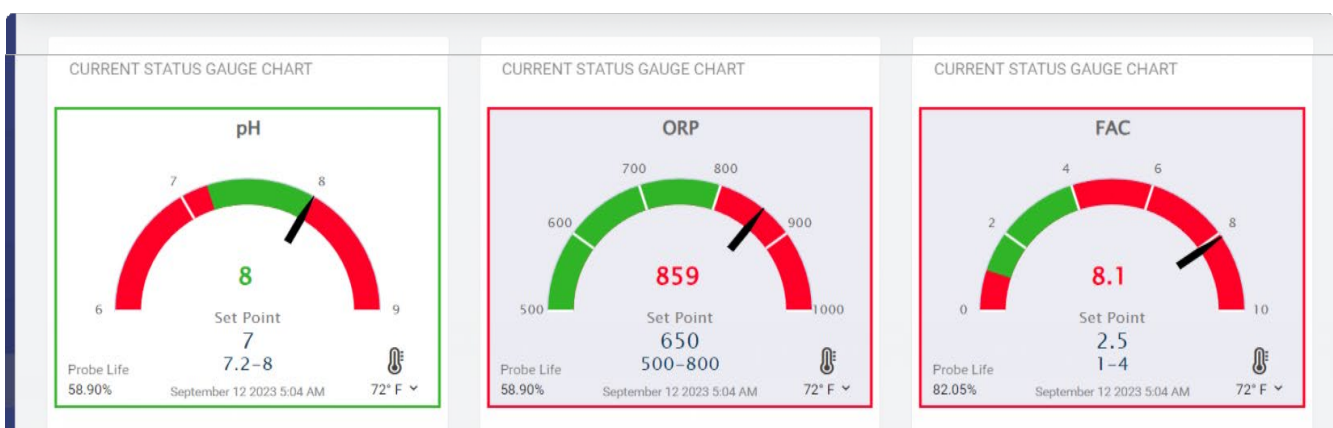
1. Pool Current Status Dashboard

This section will have different widgets:

- Viewing the current pH, ORP and Free Chlorine value of a pool in Gauge chart.
- Viewing the pH, ORP, FAC trends.
- Viewing the Chlorine and Acid consumption trend graph.
- Viewing the Last Calibration Data and Trends

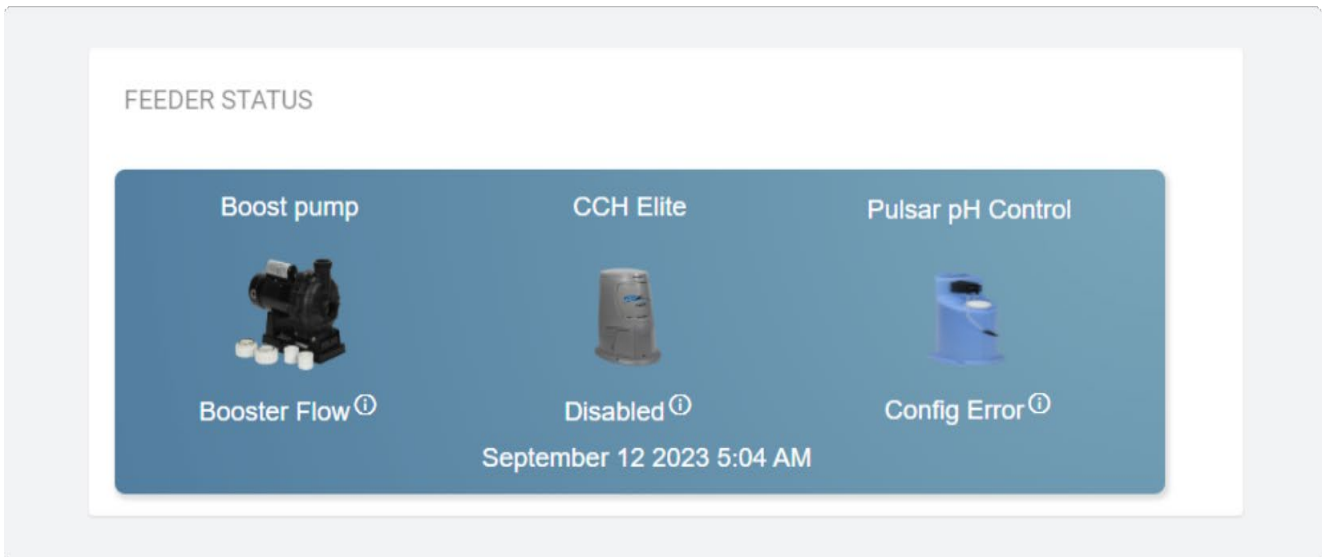
A. Current Status

Gives the current value of pH, ORP and Free chlorine value for a pool. The date displayed in gauge chart will be highlighted red if it is not showing current date.



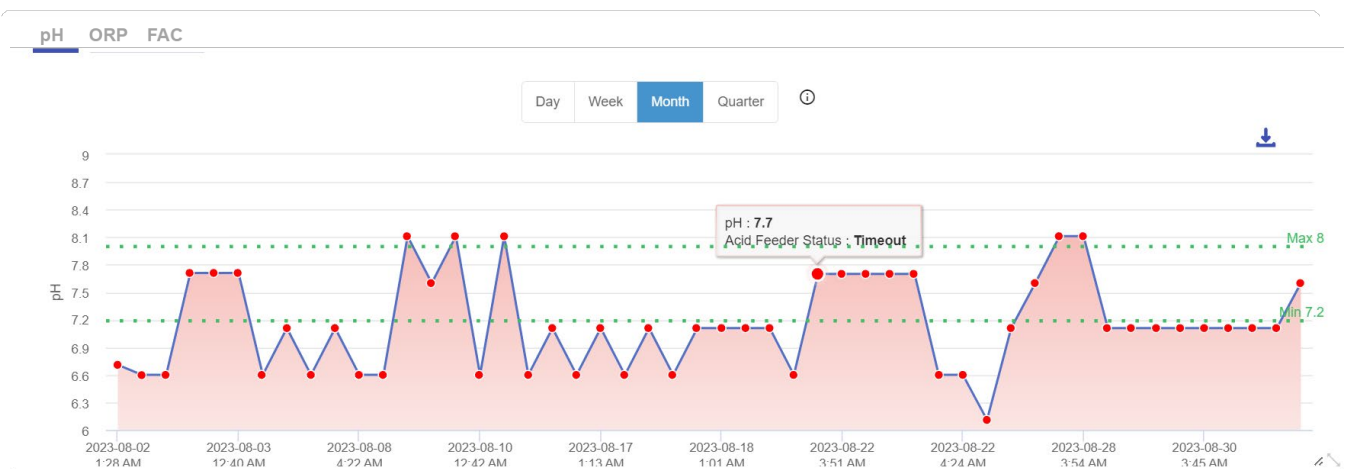
B. Feeder Status

Gives the Feeder status of the current day or date, and it will be highlighted red if the device is disconnected.



C. Current Status trend graph

- User can view a graph plotted pH/ORP/Chlorine value trend.
- User can see the trends for different time intervals using Filters like Day/Week/Month/Quarter.
- The Min and Max Range Are coming from the Device Configurations (Static Packets)
- User Can Also Download Raw Data of Current Status(pH/ORP/FAC) using Download Results button.



e. Calibration Section Calibration section has 2 tabs:

- i. Last Result
- ii. Trends

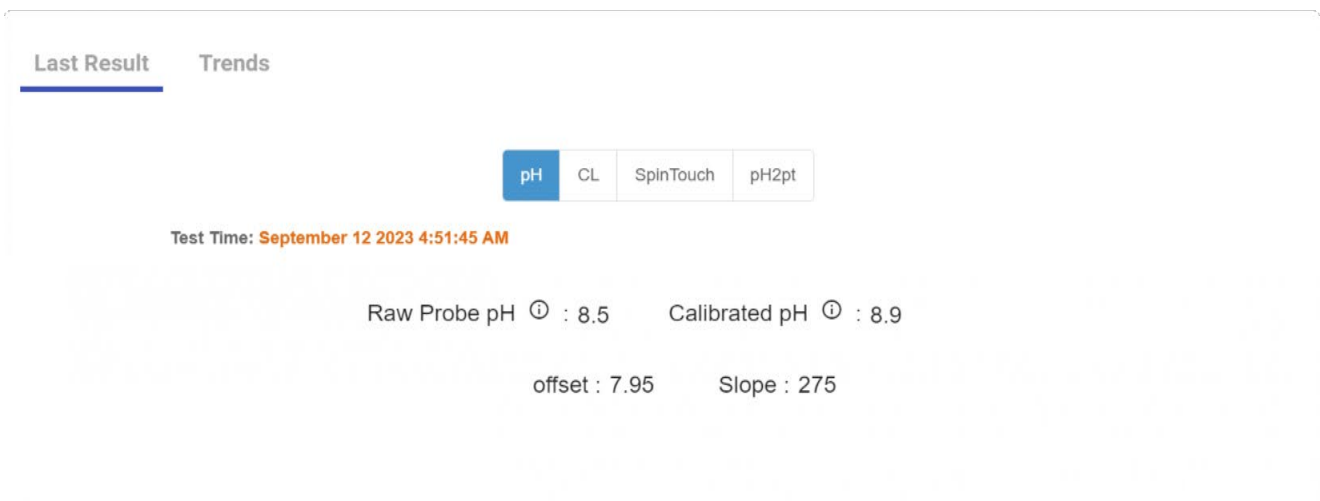
You can view the Last Calibration Data of:

- iii. ePH
- iv. eCL
- v. eSpinTouch
- vi. ePH2pt

The user Can also Download Raw Data of Calibration Results using Download Results button.

1. pH

Last Result

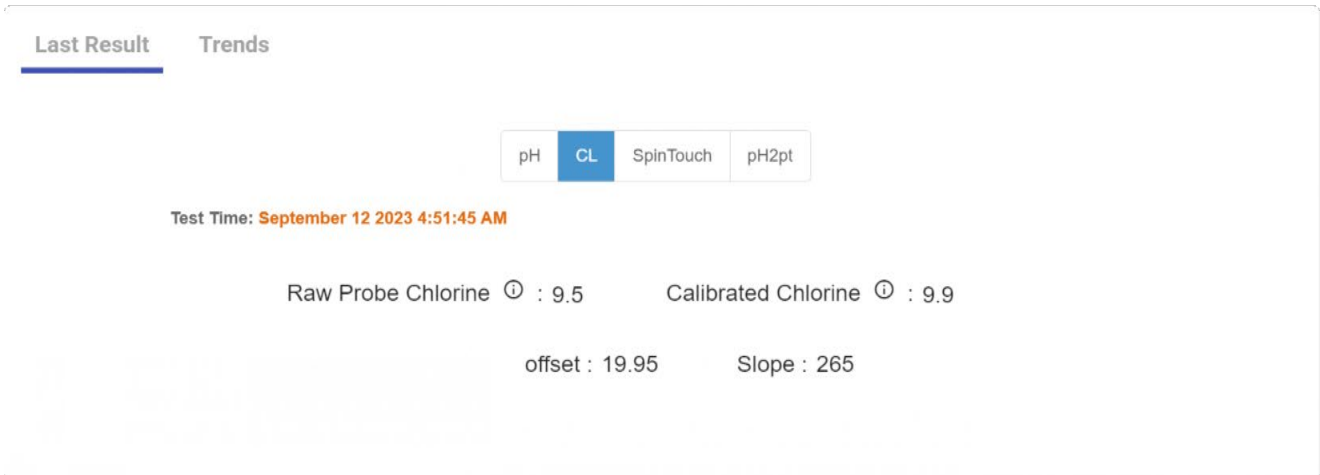


Trends

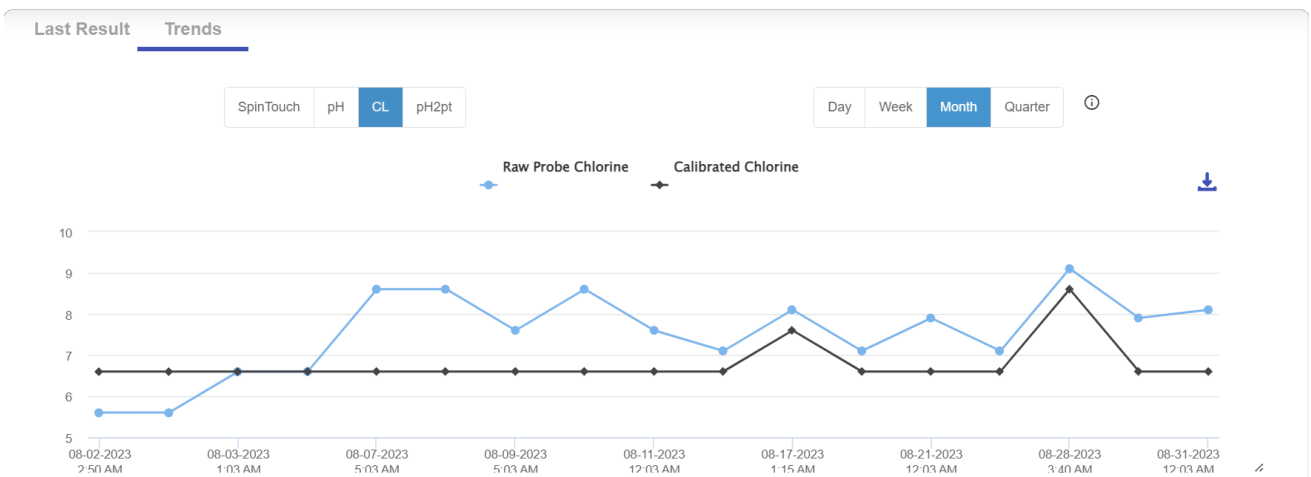


2. Cl

Last Result

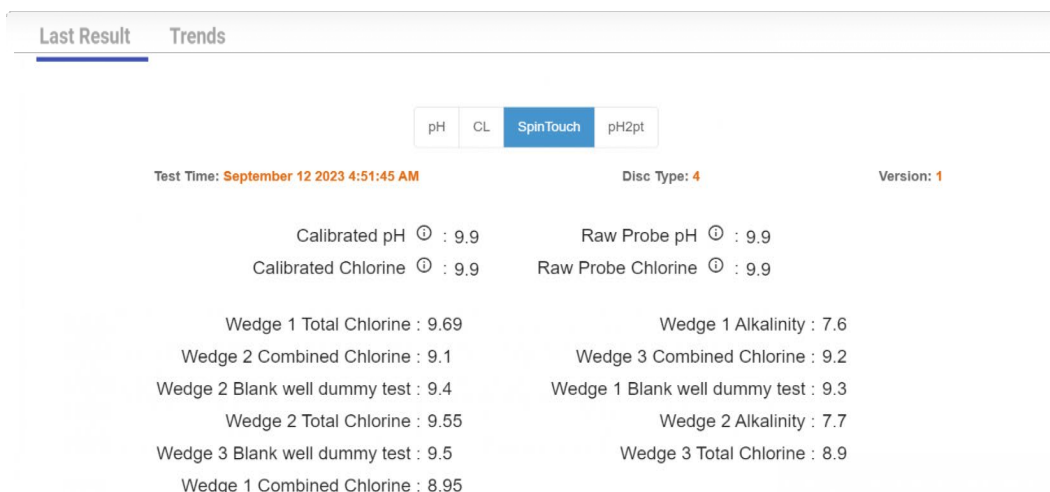


Trends



3. Spin Touch

Last Result



Trends



4. pH2pt

Last Result

Test Time: September 12 2023 4:51:45 AM

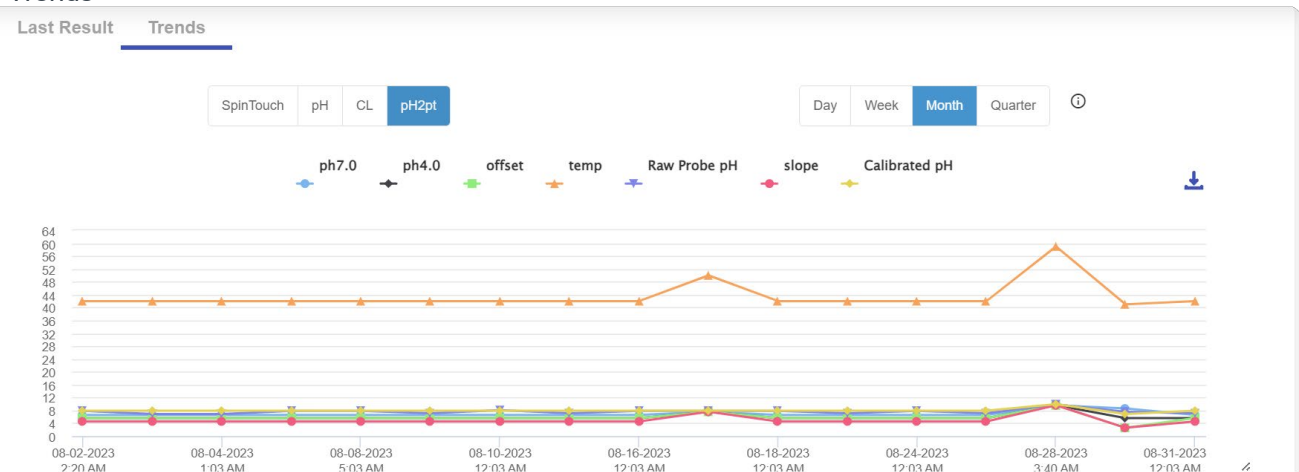
Raw Probe pH ⓘ : 10.9 Calibrated pH ⓘ : 9.9

pH7.0 : 20.7 pH4.0 : 19.7

offset : 25.6 Temperature : 135

Slope : 25.6

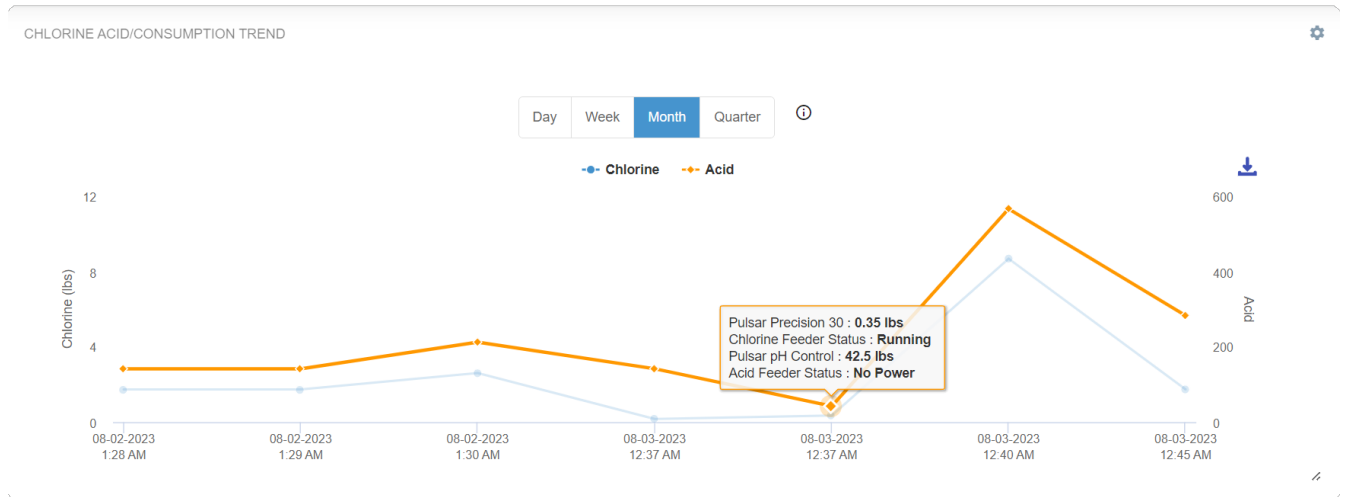
Trends



Consumption Dashboard

1. Chlorine and Acid consumption and trend graph

The user can download the Raw Data of Acid/Cl Consumption using the Download Results button.



Alarms

The user can click on Alarms to see the alarms coming from the device. Alarms are categorized as Major, Minor, Critical and Warning depending upon the severity of that alarm. The user can see the action required related to alarm. The user can view the alarm history by turning on “show cleared alarms button”.

Solenis DEV
Strong bonds. Trusted solutions.

Gu

GUARDTEC

Home
Groups
Pond Angels
Haffen Aquatic
Fort Totten Pool
Swim Training Pool

Alarms
Devices

Alarms

Current Status Consumption Trend Overall Weekly Consumption Overall Monthly Consumption Overall Quarterly Consumption Alarms

Critical 0 Major 1 Minor 0 Warning 5 Online October 10 2023 1:14 AM

Show cleared alarms Clear all Realtime Reload

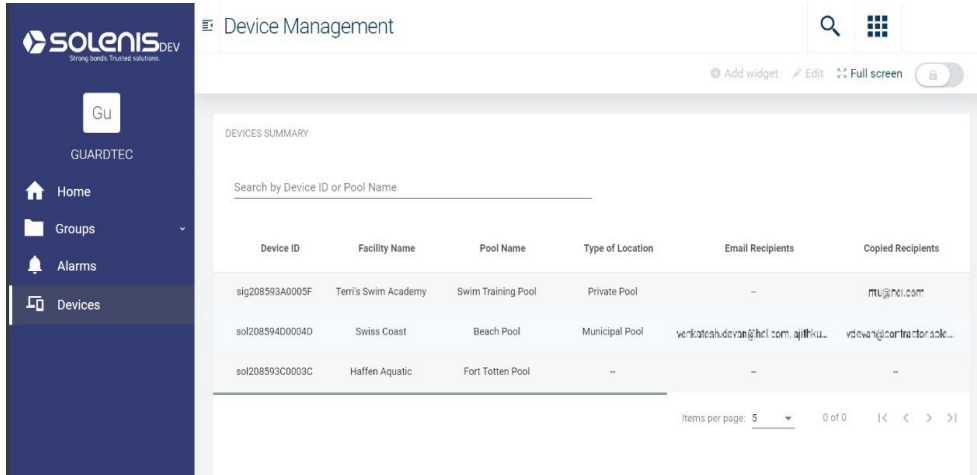
MINOR
No alarms to display.

WARNING

- 165 Flow Cell low or no flow
9 Oct 2023, 23:33:04 Swim Training Pool
- 652 ORP Sensor low limit
8 Oct 2023, 02:13:05 Swim Training Pool
- 735 pH Sensor high limit
7 Oct 2023, 19:40:59 Swim Training Pool
- 50% optimal ORP sensor life remaining
28 Jul 2023, 02:35:58 Swim Training Pool
- 50% optimal PH sensor life remaining

Devices

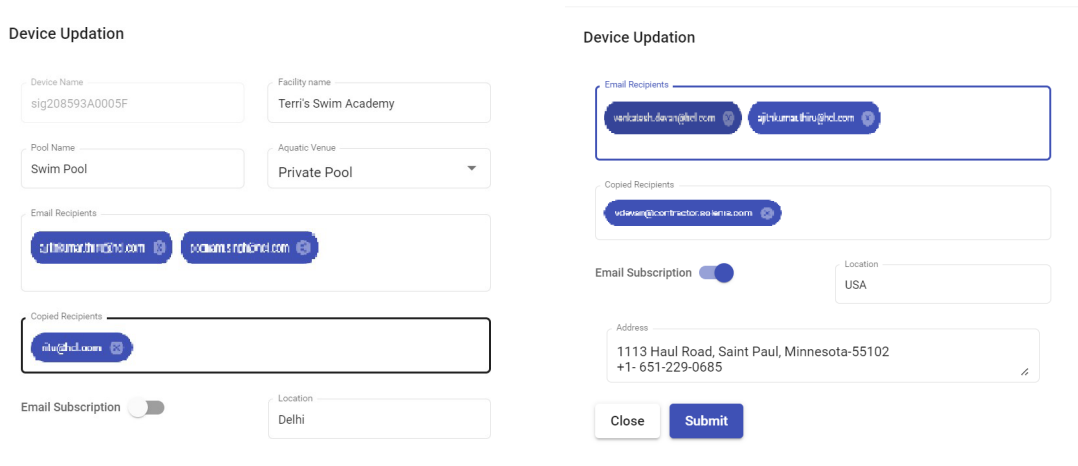
- The user can also update the meta data of the device by clicking on the Actions button in the list. The user will not be able to update the Device ID but can update other meta-data like Facility Name, Pool Name, Aquatic Venue, Email, Location and Address.



The screenshot shows the 'Device Management' page in the Solenis system. It features a sidebar with navigation options: Home, Groups, Alarms, and Devices. The main content area displays a 'DEVICES SUMMARY' table with columns for Device ID, Facility Name, Pool Name, Type of Location, Email Recipients, and Copied Recipients. The table lists three devices with their respective details.

Device ID	Facility Name	Pool Name	Type of Location	Email Recipients	Copied Recipients
sig208593A0005F	Terri's Swim Academy	Swim Training Pool	Private Pool	--	mu@hcl.com
sol208594D0004D	Swiss Coast	Beach Pool	Municipal Pool	verkatshdevan@hcl.com, ajithku...	vdewan@contractor.sole...
sol208593C0003C	Haffen Aquatic	Fort Totten Pool	--	--	--

- The user can update Facility name which is mapped as Site name, Pool name as Device Name, email and Location, Aquatic Venue, and Address (optional fields).
- The user should make sure to update the To and CC emails and verify that the subscription is active: without an active subscription, the respective user will not receive email notifications.



The image shows two screenshots of the 'Device Updation' form. The left screenshot displays fields for Device Name, Facility name, Pool Name, Aquatic Venue, Email Recipients, Copied Recipients, Email Subscription, and Location. The right screenshot shows the Email Recipients and Copied Recipients fields with email addresses, the Email Subscription toggle, Location, and Address fields.

Device Updation

Device Name: sig208593A0005F

Facility name: Terri's Swim Academy

Pool Name: Swim Pool

Aquatic Venue: Private Pool

Email Recipients: vishwanathmurthy@hcl.com, vishwanathmurthy@hcl.com

Copied Recipients: nita@hcl.com

Email Subscription:

Location: Delhi

Device Updation

Email Recipients: verkatshdevan@hcl.com, ajithkumar@hcl.com

Copied Recipients: vdw@contractor.solenis.com

Email Subscription:

Location: USA

Address: 1113 Haul Road, Saint Paul, Minnesota-55102
+1- 651-229-0685

Buttons: Close, Submit

Email Notification

Users will receive email notifications to the registered email address when there is an alarm coming from the device, if the email subscription is enabled for the user.

Contact Information

If you encounter any issues or have questions that are not addressed in this manual, please contact our support team:

Email: rmcticket@solenis.com