

OverShield 3.5 User Guide

Rev. 1.0.3



Table of Contents

OverShield 3.5 User Guide	1
Logging In to OverShield®	1
Multi-Factor Authentication	1
The OverShield Mission	2
How to Navigate in OverShield.....	2
Company Page	2
Site Page	3
Asset Page	4
Asset Groups (Filtering Assets By Type).....	4
Viewing Asset Details	4
Navigating Between Companies, Sites, and Assets	5
The OverShield Sidebar Menu	5
Logs Menu	5
Reports Menu	6
Company Menu	7
About Menu	7
Help Menu	7
Working In OverShield	8
Monitoring Alarm Activity	8
Alarm Definitions	8
Alarm Profiles	8
Alarm User Groups	8
Channels.....	8
Reviewing Sensor Status — The Alarm Monitor page	9
Commenting on Sensor Activity.....	9
Acknowledging a Sensor	10
Resolving an Asset	10
Viewing Alarms.....	11
Alarm Profiles	12
Alarm User Groups	12
Viewing OverShield Data and Data Trends	13

Using the Trend Chart.....	13
Selecting a Date Range	13
Selecting Sensor Data to View	14
Sensor Categories	14
Capturing Data Points in the Trend Chart	16
Viewing Asset Details (The Detail page)	17
Asset Details	17
Asset Traits.....	17
Sensors	17
Image Page (Chamber Diagram)	18
Recommended Maintenance List.....	19
OverShield Weekly Reports	20
Score Legend:	20
Data Shown on Weekly Report	21
User Admin.....	22
Changing Your Password	22
Contacting Predictive Monitor.....	23

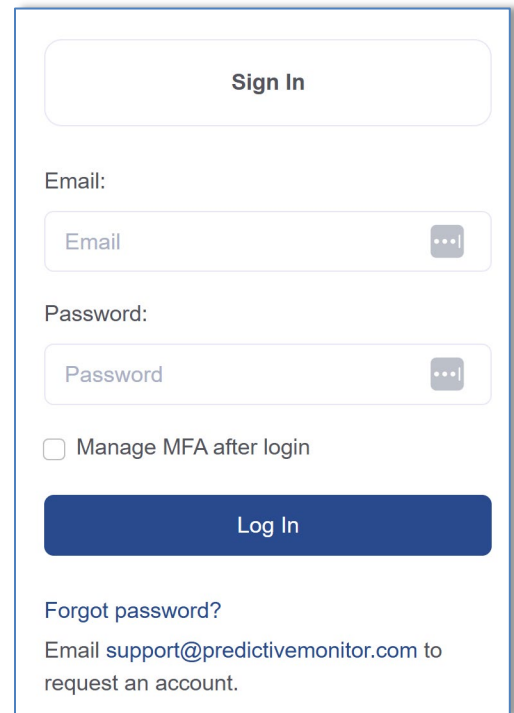
Logging In to OverShield®

To log in to OverShield, your Predictive Monitor administrator must have created a user account for you and provided you with the portal URL and login credentials. As an end user, you have restricted (read-only) access to most of OverShield's administrative features.

1. Open your web browser and navigate to the OverShield portal URL provided by your Predictive Monitor sysadmin.
2. Enter your email address and password, then click the **Log In** button.
 - *If you have already set up authentication, continue to sign in using your preferred method.*
 - *If you have not set up authentication and are required to do so, the **Set up multi-factor authentication** box will appear so you can set that up using the following process:*
 1. Click on the **Enable Email as MFA** button.
 2. Enter the email address you use to log in and click on the **Send Code** button.
 3. Check your email for the code.
 4. Enter the code and click the **Verify & Activate** button.

OverShield opens as usual.

- If you forgot your password? Select the **Forgot password?** link and follow the instructions.
- If you want to change your password, follow the instructions [here](#).
- If you continue to have trouble logging in, contact support@predictivemonitor.com for assistance.



Sign In

Email:

Email

Password:

Password

☐ Manage MFA after login

Log In

Forgot password?

Email support@predictivemonitor.com to request an account.

Multi-Factor Authentication

To provide the highest levels of login protection, OverShield 3.5 has implemented multi-factor authentication. If your administrator has enabled this feature, you will be required to set up email authentication before you can access OverShield. To set up additional authentication methods, refer to the [Multi-Factor Authentication guide](#) for instructions. Click the link and select **Download PDF**.

The OverShield Mission

OverShield protects refrigerated assets by detecting subtle anomalies before they develop into severe conditions that could cause failure. OverShield is both a product and a service that uses advanced sensor technology to monitor the physical conditions in and around each refrigerated asset. This data is sent wirelessly to the OverShield cloud, where AI-powered analytics continuously monitor conditions.

When data from one of these sensors falls outside the prescribed normal range (i.e., an anomaly occurs), an alarm is triggered to notify facility staff that maintenance is required. The OverShield AI provides insights into the root causes of the anomaly and the risk level, enabling facility staff to prioritize their maintenance tasks. Beyond using AI for anomaly detection and identification, Predictive Monitor® always keeps a human in the loop with our HVAC-R experts, who oversee the data and ensure that detected anomalies are being addressed by facility personnel.

By detecting and addressing these anomalies early, OverShield predictively prevents serious refrigeration failures, ensuring that the valuable products stored within are never at risk.

How to Navigate in OverShield

OverShield breaks down your organization's oversight operations from general to specific:

Company → Site → Asset

Each company can encompass many different sites (facilities/warehouses), and each site can have numerous refrigerated assets (walk-in freezers, cold rooms, warm rooms, chillers, etc.)

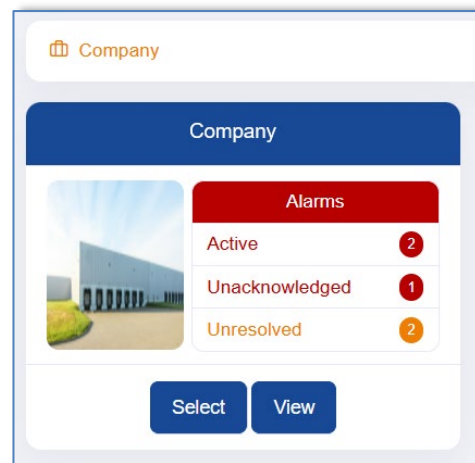
- At the *Company* level, you can view the alarm status of assets across an entire company, as well as notifications, reports, logged data, and other information relevant to the whole company.
- At the *Site* level, you can view the alarm status across multiple facilities to see which sites have assets that require attention.
- At the *Asset* level, you can oversee all of the assets within that facility and see which require attention.

When you log in to OverShield, you begin at the **Company** page.

Company Page

The **Company page** shows alarm activity across each organization. This includes the numbers of Active, Unacknowledged, and Unresolved alarms.

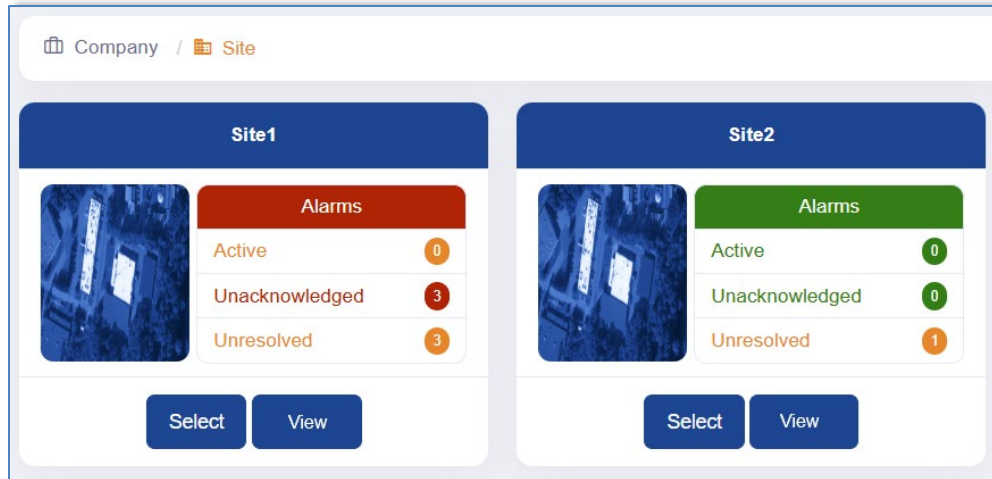
- *Active* alarms are those that are still in progress, whether acknowledged or not.
- *Unacknowledged* alarms are those that have not yet been addressed or recognized by the facility.
- *Unresolved* alarms are those that have been acknowledged, but repairs are not yet complete.



Company page

Select	Opens the Site page, which displays all facilities within the current company. This page provides an at-a-glance view of which facilities have active alarms.
View	Opens the Change Company Definition page, which contains administrative information about all company-level settings. As a user, this information is read-only.

Site Page



Site page

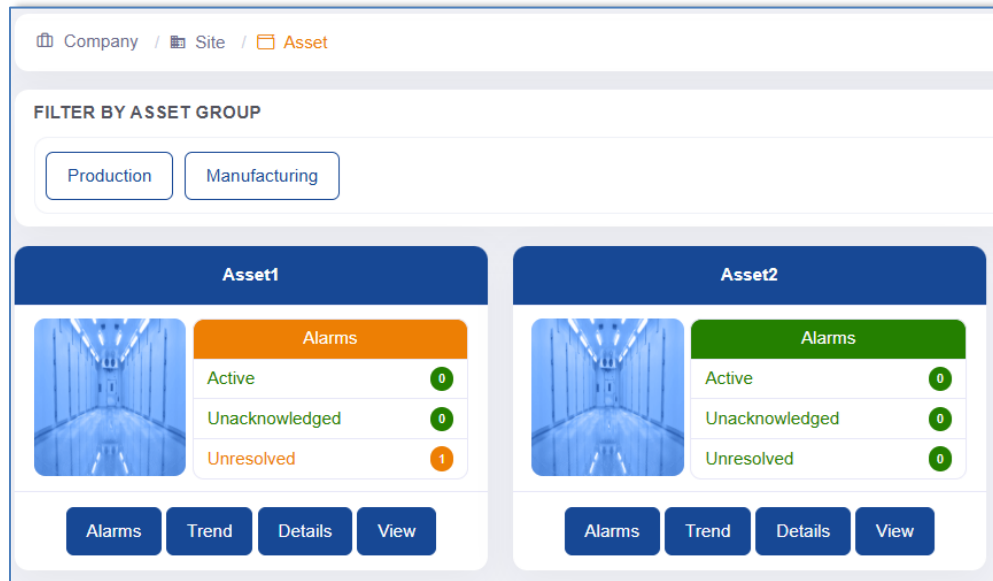
The **Site page** shows the current alarm activity at each site/facility.

- Facilities with active or unacknowledged alarms appear in red.
- Facilities without active or unacknowledged alarms appear in green.
- Facilities that have Unresolved alarms appear in orange.

Select	Opens the Asset page and displays all the refrigerated assets monitored by OverShield within that site. This provides an at-a-glance view of which assets have active alarms and require attention. From the Asset page, you can dig in to view details on alarms, data trends, and other information.
View	Opens the Change Site Definition page, which contains high-level administrative information about the site, including the name, status, time zone, general artificial intelligence (GAI) vector, and site-asset relationship.

Press the **Select** button to view the Asset page for any site.

Asset Page



Asset page

The **Asset Page** shows the individual refrigerated assets within the selected site. From here you can:

- Quickly view the alarm status of all assets within the current site/facility.
- Drill down into each asset's data to facilitate troubleshooting and anomaly detection.

Asset Groups (Filtering Assets By Type)

The Asset page can get unruly when you have a dozen or more assets. OverShield admins can create categories and assign assets to them. For example, in the above screenshot, there are two filters:

Production and **Manufacturing**. If you only want to see the assets assigned to the Production group, click the **Production** button.

If you have suggestions for new filter categories that would make your work easier, please contact your OverShield administrator.

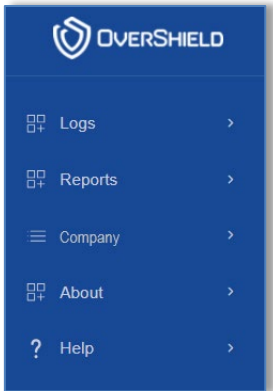
Viewing Asset Details

Each asset box provides access to the following information:

Alarms	Opens the Alarm Monitor page , which displays the current status of each sensor installed on the asset. Users can add comments, acknowledge alarms, and resolve sensors.
Trend	This opens the OverShield Chart , which displays the live data feed from each sensor and allows you to view history and observe trends.
Details	Opens the Detail page , which provides a quick summary of the asset and all its sensors.
View	Opens the Image page , which shows a schematic diagram of the asset/chamber.

Navigating Between Companies, Sites, and Assets

The OverShield menu at the top of the screen is clickable, so you can instantly return to the Asset page, Site page, or Company page just by clicking on the desired item.



The OverShield Sidebar Menu

The OverShield sidebar menu provides access to OverShield’s reporting and data collection features, company and version information, and help resources.

Wherever you are in OverShield, you can always return to the top-level Company page by clicking on the white OverShield logo at the top of the menu.

Logs Menu

OverShield continuously generates data, and OverShield administrators regularly add, change, and update configuration parameters. All of this data is saved out into individual log files that can be used to look back and provide diagnostic data.

As an OverShield user, you have read-only access to this information. To open up a log file, mouse over its **CREATED DATE** and click on it.

Log List									
<div><input type="text"/> <input type="button" value="Search"/></div>									
Action: ----- <input type="button" value="Go"/> 0 of 25 selected									
<input type="checkbox"/>	CREATED DATE:	LOGEVENT	LOGSENSOR	LOGMESSAGE	LOGUSER	LOGCOMPANY	LOGSITE	LOGASSET	LOGSEVERITY
<input type="checkbox"/>	12-23-2025 11:01:15 EST	Report	-----	Report Id: 160 Name: DEV-TEST-HOURLY Report Complete	system	TestLab	QE Site1- MA-BA	-----	Low
<input type="checkbox"/>	12-23-2025 11:01:15 EST	Report	-----	Report Id: 160 Name: DEV-TEST-HOURLY Last Triggered On: 2025-12-23 16:00:00+00:00, Next Report Scheduled For: 2025-12-23 17:00:00+00:00	system	TestLab	QE Site1- MA-BA	-----	Low

The best way to understand logs is to open up each category and see the type of information it contains. Categories include: All, Info, Alarms, Notifications, Acknowledgements, Comments, Reports, Sensor Swaps, System, Configure, and Baseline Alarm Updater.

Reports Menu

OverShield enables administrators to define reports that collect specific types of data from a particular asset. These reports can be run on a fixed schedule and automatically emailed to a list of available users. OverShield also issues reports automatically whenever an issue is detected on a particular asset.

As an OverShield user, you have read-only access to this information.

There are two options under the **Reports** menu:

- The **Reports → Definitions** option lists the report types that have been created. To open a Report Definition file, mouse over the **NAME** column and click.

NAME	ACTIVE	TYPE	TIMEDATE	SITE	ASSETS
1test	✖	Standard Report	2025-06-20 06:00:00 UTC	QE Site3-IL-SS	▪ Asset9
auto-report-All-1761156796	✔	Standard Report	2025-12-24 19:00:00 UTC	QE Site3-IL-SS	▪ Asset10 ▪ Asset9

- The **Reports > Recommendations** option lists the issue-oriented reports generated by OverShield. To open a recommendation item, mouse over its **RECOMMENDATION DATE** column and click.

RECOMMENDATION DATE	ASSET	ISSUE	APPLIED
09-10-2025 14:21:25 EDT	Asset1	Unresolved	✖
07-08-2025 10:43:47 EDT	Asset1	Liquid Proportional Valve - Stuck Open	✔
07-08-2025 10:39:10 EDT	Asset1	Evaporator - Reduced Airflow / Clog	✖

Filtering Logs and Reports

When working with Log lists and Report lists, there is a **Filter** box on the right side of the page that lets you show only specific data based on date, type, asset, etc. For example, if you are looking at a log of Alarm events, you could filter it to show only alarms that occurred today, in the past 7 days, this month, or this year.

FILTER

↓ By DateTime

- Any date
- Today
- Past 7 days
- This month
- This year

Exporting Logs and Reports

Log items and Report items can be exported to a .csv file. Simply select the items you want to export, open the Action drop-down menu, and select Export Selected. A logs.csv file is created and stored to your local Downloads directory.

Action: [dropdown] Go 3 of 25 selected

Export Selected

CRE	REVENT	LOGSENSOR	LC
01-15-2026 14:04:44 EST	Report	----	
01-15-2026 14:04:44 EST	Report	----	
01-15-2026 14:04:44 EST	Report	----	

Company Menu

The Company menu lists every site/facility defined within the company. When you click on a facility, you see a list of asset groups created by the administrator. Asset groups organize each asset’s sensors based on functionality, usage, or other parameters.

Click on an asset group to open the Alarm Monitor page, which lists the sensors assigned to that asset, their alarm status, serial numbers, and latest values.



Asset1			
Action: <input type="text" value="-----"/> <input type="button" value="Go"/> 0 of 13 selected			
<input type="checkbox"/>	ALARM	SENSOR	INFO
<input type="checkbox"/>		Chamber1	Normal
<input type="checkbox"/>		Temp3	Unresolved
<input type="checkbox"/>		Temp4	Normal
SYNCDATETIME			
12/23/2025 12:15:00 EST			
12/23/2025 12:15:00 EST			
12/23/2025 12:15:00 EST			

Users can select one or more sensors and scroll up to the **Action** menu to add comments, acknowledge alarms, or perform an asset resolution.

About Menu

The About menu provides the OverShield software version and access to the Predictive Monitor website (www.predictivemonitor.com).

Help Menu

The Help menu provides online access to the OverShield User Guide.

Working In OverShield

When working in OverShield, there are three general work areas:

- Alarm monitoring
- Reviewing live data and data trends
- Sensor and asset management

Monitoring Alarm Activity

An Alarm specifies a condition that must be met to generate an alert. For example, administrators can define a temperature alarm with a ± 5 °C high/low range and assign it to a temperature sensor/channel. If the temperature exceeds that range, the alarm triggers and notifications are sent to the prescribed personnel at the facility and to the HVAC-R experts at Predictive Monitor.

OverShield users can comment and acknowledge the status of an alarm, but only OverShield administrators can create and edit alarms.

There are three entities associated with OverShield alarms:

Alarm Definitions	An Alarm Definition (AD) is a single alarm rule created by an OverShield administrator. This rule defines a condition that must be met for an alarm to trigger an alert. Alarm Definitions also include a “Severity” (High, Medium, Low) to convey the seriousness of the condition associated with the alarm.
Alarm Profiles	An Alarm Profile (AP) is a collection of Alarm Definitions that are grouped together and applied to one or more sensor channels. Because similar assets use the same sensor arrangement, combining them expedites connecting sensors to new assets.
Alarm User Groups	An Alarm User Group (AUG) determines who gets notified when an alarm is activated. This is used to send alerts to people by their desired method (email, SMS, or voice).

The entities listed above are created and managed by OverShield administrators. As an end user, you cannot change these, but you can make comments and acknowledgements regarding sensor activity.

Channels

Channels are constructs that OverShield uses to facilitate data transmission. There are two types of channels in OverShield: *Sensor channels* and *Calculation channels*.

Sensor Channels (usually just called “channels”) connect each sensor to the OverShield software. Sensors communicate their data to OverShield via a corresponding channel. Alarms are assigned to these channels to monitor the sensor data.

Calculation Channels (Calc Channels) take the data from sensor channels and perform calculations to provide additional information when viewing live data and trends. For instance, if you wanted to monitor the difference between two temperature sensors in real time, an administrator could create a Calc Channel to do that. Another application of Calc Channels is to monitor quantities such as superheat.

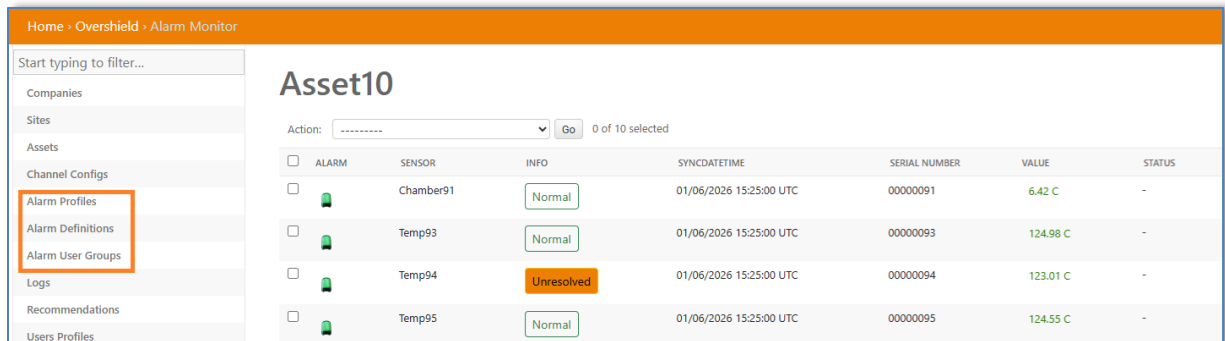
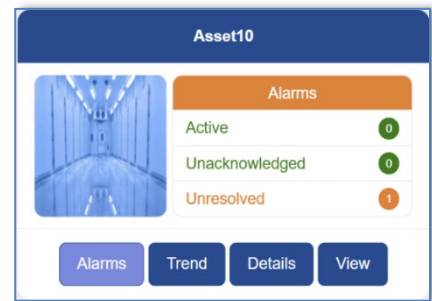
Calc channels are visible on the [Trend Chart](#) just like regular sensor data.

Reviewing Sensor Status — The Alarm Monitor page

All of OverShield's alarm settings are accessed from the **Alarm Monitor** page.

1. Navigate to the [Asset page](#) and locate the asset whose alarms you want to inspect.
2. Click the **Alarms** button.

The Alarm Monitor window opens, showing a list of all the sensors and their current alarm status.

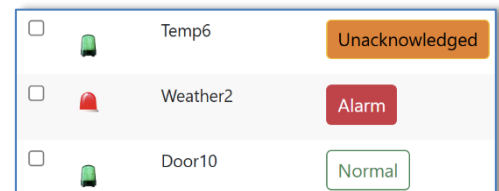
A screenshot of the Alarm Monitor page for Asset10. The left sidebar shows navigation options like Companies, Sites, Assets, Channel Configs, Alarm Profiles, Alarm Definitions, Alarm User Groups, Logs, Recommendations, and Users Profiles. The main area displays a table of sensors with columns for ALARM, SENSOR, INFO, SYNC DATETIME, SERIAL NUMBER, VALUE, and STATUS. The table lists four sensors: Chamber91 (Normal), Temp93 (Normal), Temp94 (Unresolved), and Temp95 (Normal).

ALARM	SENSOR	INFO	SYNC DATETIME	SERIAL NUMBER	VALUE	STATUS
<input type="checkbox"/>	Chamber91	Normal	01/06/2026 15:25:00 UTC	00000091	6.42 C	-
<input type="checkbox"/>	Temp93	Normal	01/06/2026 15:25:00 UTC	00000093	124.98 C	-
<input type="checkbox"/>	Temp94	Unresolved	01/06/2026 15:25:00 UTC	00000094	123.01 C	-
<input type="checkbox"/>	Temp95	Normal	01/06/2026 15:25:00 UTC	00000095	124.55 C	-

Alarm Monitor page

The **Alarm Monitor** page shows the status of each sensor on the asset.

- The Alarm status displays in green if a sensor is either *Normal* or in an *Unacknowledged* state.
- The Alarm status displays in red if the sensor is in an *Alarm* state.

A detail view of sensor status for Temp6, Weather2, and Door10. Temp6 is Unacknowledged, Weather2 is Alarm, and Door10 is Normal.

<input type="checkbox"/>	Temp6	Unacknowledged
<input type="checkbox"/>	Weather2	Alarm
<input type="checkbox"/>	Door10	Normal

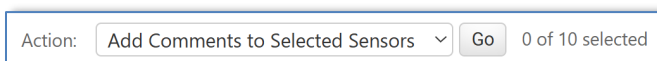
Each row represents data from one sensor, including the sensor's name, status, timestamp of the current data, the sensor's unique serial number, and the sensor's last data reading. By default, OverShield gathers sensor data every five minutes.

From the Alarm Monitor page, you have access to the **Alarm Profiles** page, the **Alarm Definitions** page, and the **Alarm User Groups** page from the left menu.

Commenting on Sensor Activity

If you notice anything unusual or concerning with one or more sensors, leave a comment for the maintenance team.

1. In the far left column of the [Alarm Monitor page](#), check the boxes to select the sensors of interest.
2. Scroll up to the top of the list.

An action bar with a dropdown menu set to 'Add Comments to Selected Sensors', a 'Go' button, and a status '0 of 10 selected'.

Action: Add Comments to Selected Sensors Go 0 of 10 selected

3. From the **Action** menu, select **Add Comments to Selected Sensors**.
4. Click the **Go** button.

The **OverShield Sensor Comments** window opens.



The screenshot shows the 'OverShield - Sensor Comments' window. It has a title bar with a yellow star icon and the text 'OverShield - Sensor Comments'. Below the title bar, there is a note: 'Note: Below are the Sensors you selected to comment on.' followed by '1: Sensor:Chamber61, sn:00000061'. Below this, it says 'Please enter comments.' and there is a text area containing the text 'The chamber sensor is operating very close to upper limit.' At the bottom, there are two buttons: 'Cancel' and 'Submit'.

5. Enter your comments for the sensor and click **Submit**.

Acknowledging a Sensor

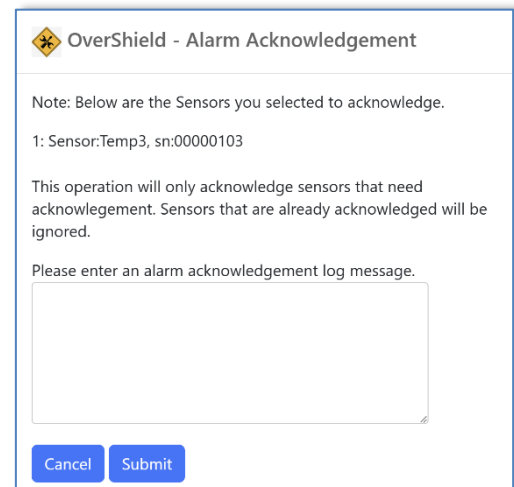
Sensors that are in a state of alert can be either “acknowledged” or “unacknowledged.” An acknowledged alert is one in which the cause has been confirmed by the site’s maintenance team or Predictive Monitor’s HVAC-R experts.

To acknowledge a sensor, do the following:

1. From the [Alarm Monitor page](#), check the boxes next to the sensors that require acknowledgement.
2. Scroll up to the top of the list.
3. From the **Action** menu, select **Alarm Acknowledge Selected Sensors**.
4. Click the **Go** button.

The OverShield Alarm Acknowledgement window opens.

5. Enter a message for the log about this sensor and click **Submit**



The screenshot shows the 'OverShield - Alarm Acknowledgement' window. It has a title bar with a yellow star icon and the text 'OverShield - Alarm Acknowledgement'. Below the title bar, there is a note: 'Note: Below are the Sensors you selected to acknowledge.' followed by '1: Sensor:Temp3, sn:00000103'. Below this, there is a paragraph: 'This operation will only acknowledge sensors that need acknowledgement. Sensors that are already acknowledged will be ignored.' Below that, it says 'Please enter an alarm acknowledgement log message.' and there is a text area. At the bottom, there are two buttons: 'Cancel' and 'Submit'.

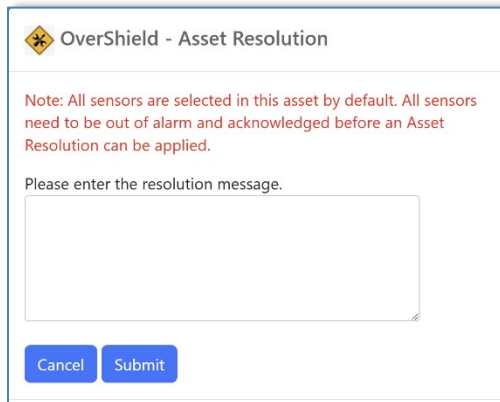
Resolving an Asset

When there are no longer any active alerts on an asset and every sensor has returned to a Normal state, you can close out the alert status on that asset by performing an Asset Resolution:

1. Open the [Alarm Monitor page](#) for the chosen asset.
2. From the **Action** menu (at the top of the page), select **Asset Resolution**.

3. Click the **Go** button.

The OverShield Asset Resolution window opens.



The dialog box is titled "OverShield - Asset Resolution". It contains a red note: "Note: All sensors are selected in this asset by default. All sensors need to be out of alarm and acknowledged before an Asset Resolution can be applied." Below the note is a text input field with the placeholder "Please enter the resolution message." At the bottom are two buttons: "Cancel" and "Submit".

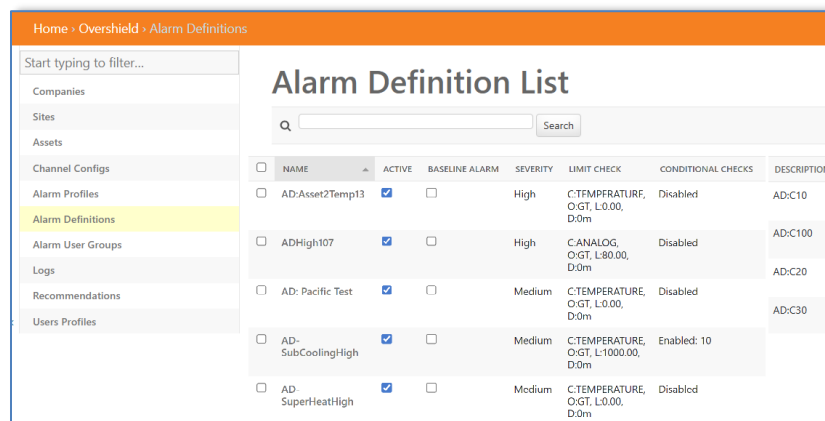
4. Enter a resolution message and click **Submit**.

Viewing Alarms

Alarm Definitions are defined and shared at the company level. To see a list of alarms:

Select **Reports → Definitions → Alarm Definitions** from the left sidebar menu.

The **Alarm Definitions** page opens.



The page shows a sidebar with navigation options: Companies, Sites, Assets, Channel Configs, Alarm Profiles, Alarm Definitions (highlighted), Alarm User Groups, Logs, Recommendations, and Users Profiles. The main content area is titled "Alarm Definition List" and contains a search bar and a table of alarm definitions.

<input type="checkbox"/>	NAME	ACTIVE	BASLINE ALARM	SEVERITY	LIMIT CHECK	CONDITIONAL CHECKS	DESCRIPTION
<input type="checkbox"/>	AD:Asset2Temp13	<input checked="" type="checkbox"/>	<input type="checkbox"/>	High	C:TEMPERATURE, O:GT, L:0.00, D:0m	Disabled	AD:C10
<input type="checkbox"/>	AD:High107	<input checked="" type="checkbox"/>	<input type="checkbox"/>	High	C:ANALOG, O:GT, L:80.00, D:0m	Disabled	AD:C100
<input type="checkbox"/>	AD: Pacific Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Medium	C:TEMPERATURE, O:GT, L:0.00, D:0m	Disabled	AD:C30
<input type="checkbox"/>	AD-SubCoolingHigh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Medium	C:TEMPERATURE, O:GT, L:1000.00, D:0m	Enabled: 10	
<input type="checkbox"/>	AD-SuperHeatHigh	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Medium	C:TEMPERATURE, O:GT, L:0.00, D:0m	Disabled	

Alarm Definitions page

The Alarm Definitions page lists all individual alarms currently used on this asset, providing general information such as the alarm's name, status, and severity level.

More information about any individual alarm can be found by clicking on its name in the Alarm Definitions List.

Alarm Profiles

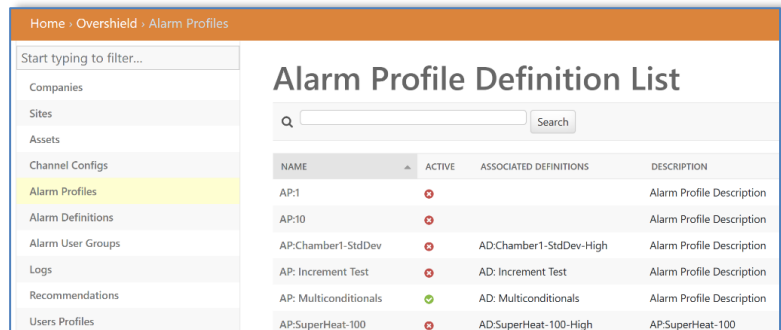
Alarm Profiles are collections of Alarm Definitions that are used together and applied to one or more sensor channels. Because similar assets use the same sensor arrangement, combining them expedites connecting sensors to OverShield.

From the [Alarm Monitor page](#), click on **Alarm Profiles** in the side menu.

The **Alarm Profiles** page opens.

The Alarm Profiles page lists general information for all profiles affiliated with this asset.

More information about any individual profile can be found by clicking on its name in the list.



The screenshot shows the 'Alarm Profile Definition List' page. On the left is a sidebar menu with options: Companies, Sites, Assets, Channel Configs, Alarm Profiles (highlighted), Alarm Definitions, Alarm User Groups, Logs, Recommendations, and Users Profiles. The main content area has a search bar and a table with columns: NAME, ACTIVE, ASSOCIATED DEFINITIONS, and DESCRIPTION. The table lists several alarm profiles, including AP:1, AP:10, AP:Chamber1-StdDev, AP: Increment Test, AP: Multiconditionals, and AP:SuperHeat-100.

NAME	ACTIVE	ASSOCIATED DEFINITIONS	DESCRIPTION
AP:1	○		Alarm Profile Description
AP:10	○		Alarm Profile Description
AP:Chamber1-StdDev	○	AD:Chamber1-StdDev-High	Alarm Profile Description
AP: Increment Test	○	AD: Increment Test	Alarm Profile Description
AP: Multiconditionals	●	AD: Multiconditionals	Alarm Profile Description
AP:SuperHeat-100	○	AD:SuperHeat-100-High	AP:SuperHeat-100

Alarm User Groups

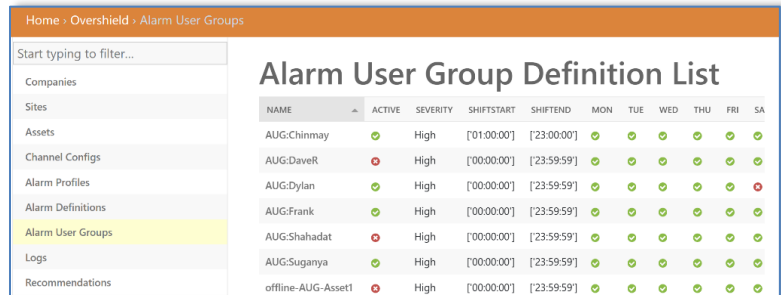
Alarm User Groups specify the people in the company who get notified when an alarm is activated and alerts are sent.

The Alarm User Groups page lists the groups defined for this company.

User Groups are very flexible, taking into account when the alert occurs and the staff working during that shift, so the right people are notified at the right place at the right time.

Alerts can be sent to the recipient via their preferred method (email, SMS, or voice).

More information about any individual Alarm User Group can be found by clicking on its name in this list.



The screenshot shows the 'Alarm User Group Definition List' page. On the left is a sidebar menu with options: Companies, Sites, Assets, Channel Configs, Alarm Profiles, Alarm Definitions, Alarm User Groups (highlighted), Logs, and Recommendations. The main content area has a search bar and a table with columns: NAME, ACTIVE, SEVERITY, SHIFTSTART, SHIFTEnd, MON, TUE, WED, THU, FRI, SA. The table lists several alarm user groups, including AUG:Chinmay, AUG:DaveR, AUG:Dylan, AUG:Frank, AUG:Shahadat, AUG:Suganya, and offline-AUG-Asset1.

NAME	ACTIVE	SEVERITY	SHIFTSTART	SHIFTEnd	MON	TUE	WED	THU	FRI	SA
AUG:Chinmay	●	High	[01:00:00]	[23:00:00]	●	●	●	●	●	●
AUG:DaveR	○	High	[00:00:00]	[23:59:59]	●	●	●	●	●	●
AUG:Dylan	●	High	[00:00:00]	[23:59:59]	●	●	●	●	●	○
AUG:Frank	●	High	[00:00:00]	[23:59:59]	●	●	●	●	●	●
AUG:Shahadat	○	High	[00:00:00]	[23:59:59]	●	●	●	●	●	●
AUG:Suganya	●	High	[00:00:00]	[23:59:59]	●	●	●	●	●	●
offline-AUG-Asset1	○	High	[00:00:00]	[23:59:59]	●	●	●	●	●	●

Viewing OverShield Data and Data Trends

At the core of what OverShield provides is the ability to visualize data from refrigerated assets in real time, with the option to view each asset's full history to establish normal data trends.

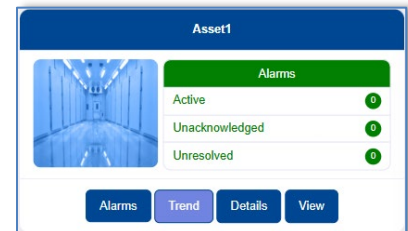
When an alert occurs, it is imperative to review trend data for deviations from the usual pattern. OverShield's AI analytics provide assessments of what and where the problem is, but the trend screen is where the "human in the loop" can visually verify and acknowledge the problem's source.

Using the Trend Chart

To access the Trend chart, go to the [Asset page](#) and locate the asset whose data you want to view.

Click on the **Trend** button.

The Trend Chart opens, displaying a live data feed from all sensors on the asset.



Trend Chart

Selecting a Date Range

At the top of the Trend Chart, enter the **Start Period** and **End Period** for the data you want to view. Click the calendar icon in each field to specify the date range, then click the **Search** button.

A screenshot of the 'Start Period' and 'End Period' input fields. The 'Start Period' field is set to '02/24/2025 11:45 AM' and the 'End Period' field is set to '02/25/2025 11:45 AM'. Both fields have a calendar icon to the right. There is an 'Overlay' button on the left and a 'Search' button on the right.A screenshot of the 'Include Doors', 'AutoUpdate', and 'Show Redundancy' checkboxes. The 'Include Doors' checkbox is unchecked. The 'AutoUpdate (Last24Hrs)' checkbox is checked. The 'Show Redundancy' checkbox is unchecked. There is a 'Time Zone: America/New_York' label and a 'Search' button.

To view data from the past 24 hours, check the **AutoUpdate (Last24Hrs)** checkbox and click **Search**.

Note: The maximum time period you can display on a single chart is 30 days.

Selecting Sensor Data to View

By default, OverShield displays data from all sensors. However, you can refine this to show only data from specific sensor categories such as current, temperature, pressure, calc channels, etc.

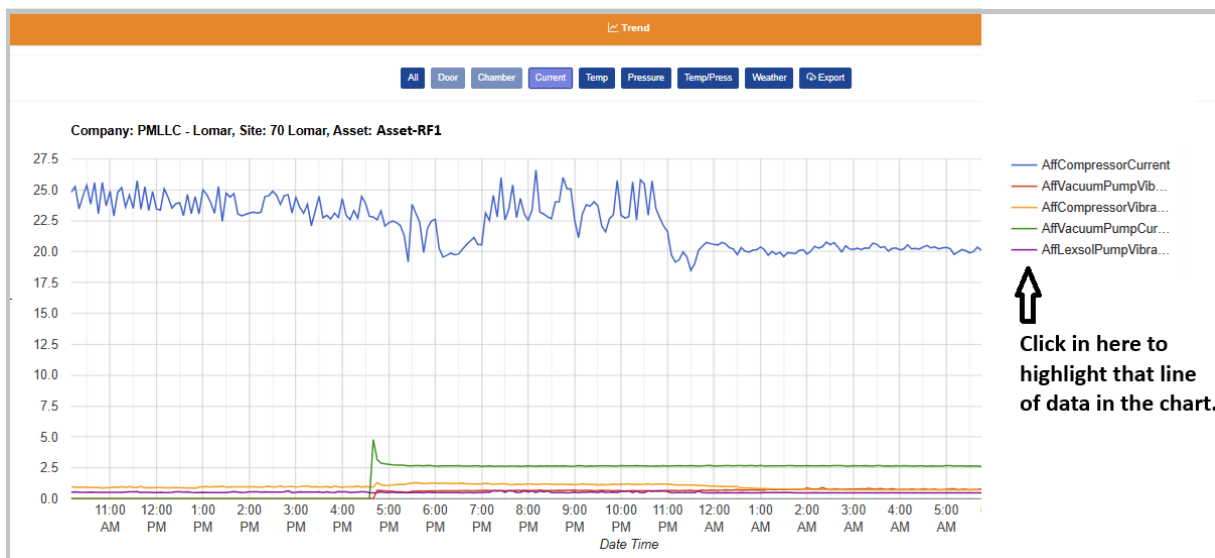
Click the corresponding button to view the sensor data you want.



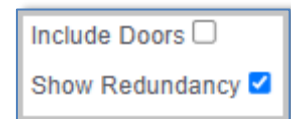
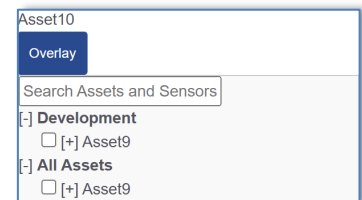
To select sensors individually, scroll to the bottom of the chart and toggle each sensor on/off as desired.

Sensor Categories

All	View all available sensor data simultaneously.
Door	The Door sensor records door-opening events. This data is not displayed by default. You must manually check the Include Doors checkbox (above the chart) and click Search to activate the Door option. The door data reads zero when the door is closed and spikes to “1” when opened.
Chamber	View the conditions within the chamber.
Current	View current (amperage) sensors only.
Temp	View temperature sensors only.
Pressure	View pressure sensors only.
Temp/Press	View both temperature and pressure sensors simultaneously.
Coolant	For air-cooled systems, this refers to the temperature of the air cooling the condenser.
Calc	Calculation channels are a new feature in OverShield 3.5. They enable sensor data to be used in calculations to provide more valuable data, such as superheat. Click this button to view the Calc channels only.
Export	This allows you to export the currently displayed graph as a PDF file or export the raw data to a CSV file. This is an excellent tool for troubleshooting.



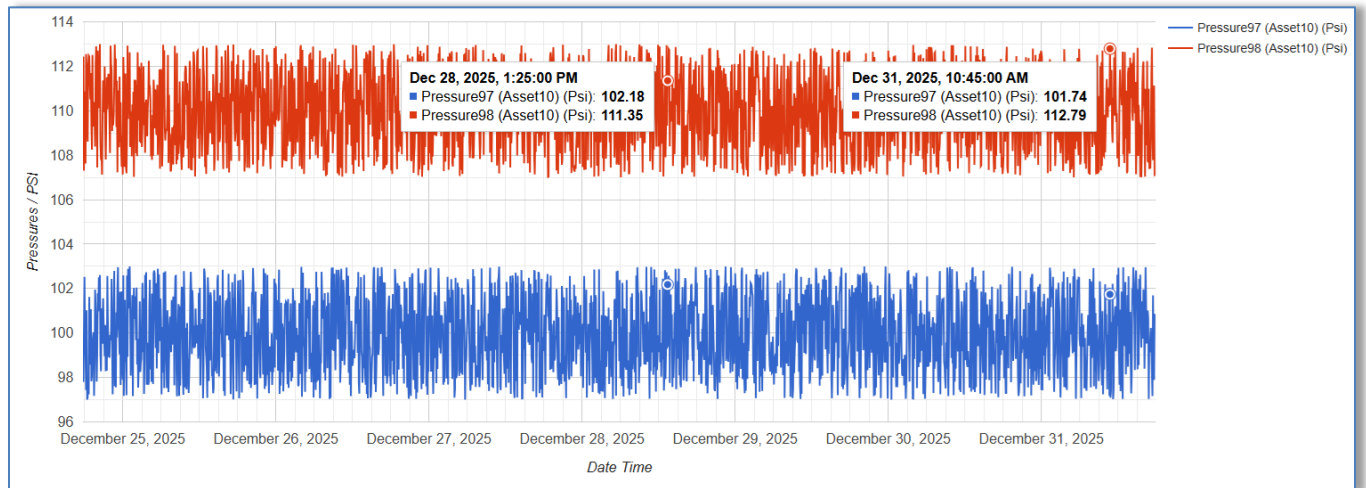
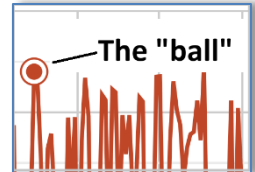
- When selecting a sensor category, the chart shows the data from all sensors in that category. For instance, if you choose **Temp**, all temperature sensors will be displayed. To view only data from specific sensors, scroll beneath the Trend Chart, toggle the desired sensors on/off, and click the **View** button.
- To look at data from other assets in this site, mouse over the **Overlay** button, select the asset you want to view, then click on the **Overlay** button.
- If you want to include the door sensor data in the chart, select **Include Doors**.
- If the chamber has been configured as part of a redundant system and you want to view both systems simultaneously, select the **Show Redundancy** checkbox and click **Search**.
- When looking at several colored lines, it can be challenging to distinguish similar colors. To highlight a particular line of data, click on that color in the color legend.



Capturing Data Points in the Trend Chart

- Hover the mouse pointer over any part of the graph to see a data window for all the currently displayed sensors and their value at that exact point.
- Click on a chart line to “drop a ball” at that point, creating a static window showing all the values at that point in time.
- Drop a ball at multiple points in the chart to compare values over time. This is an excellent tool for troubleshooting (see below).

Dec 28, 2025, 12:40:00 PM
■ Pressure97 (Asset10) (Psi): 102.44
■ Pressure98 (Asset10) (Psi): 110.57



- To close an open data window, click on the ball again.
- To close all open windows, click the **All** button above the chart.

Viewing Asset Details (The Detail page)

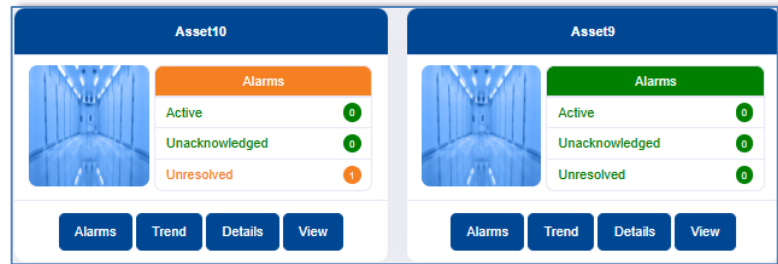
Navigate to the [Asset page](#) and locate the asset you wish to explore.

Click on the **Details** button.

This opens the Detail page, which contains descriptions of the asset and the sensors attached to it.

This information can only be edited by an OverShield administrator.

The Detail page has three main areas: Asset Details, Asset Traits, and Sensors.



Asset Details

The Asset Details box area provides administrative information about the asset, including its Name, Category, Group assignment, ML Code, and Distributor.

ASSET DETAILS	
Name	Asset10
Category	Walk-in Ultra-Low
Group	Development
ML Code	1
Distributor	Unknown

Asset Traits

The Asset Traits box includes more detailed information about the asset, including the refrigerant type, the setpoint of the chamber, its condition, how many components the chamber has (Door, Compressor, Evaporator, Condenser Quantity), and the cooling type (i.e., liquid or air cooled).

ASSET TRAITS	
Refrigerant Type	R404A
Setpoint	-20.00
Condition	Good
Door, Compressor, Evaporator, Condenser Quantity	1,1,1,1
Cooling Type	Air

Sensors

The Sensors box shows the group each sensor belongs to, its name and serial number, and the date it was last modified.

Each sensor has a **View** button that provides access to additional information about each sensor's channel configuration.

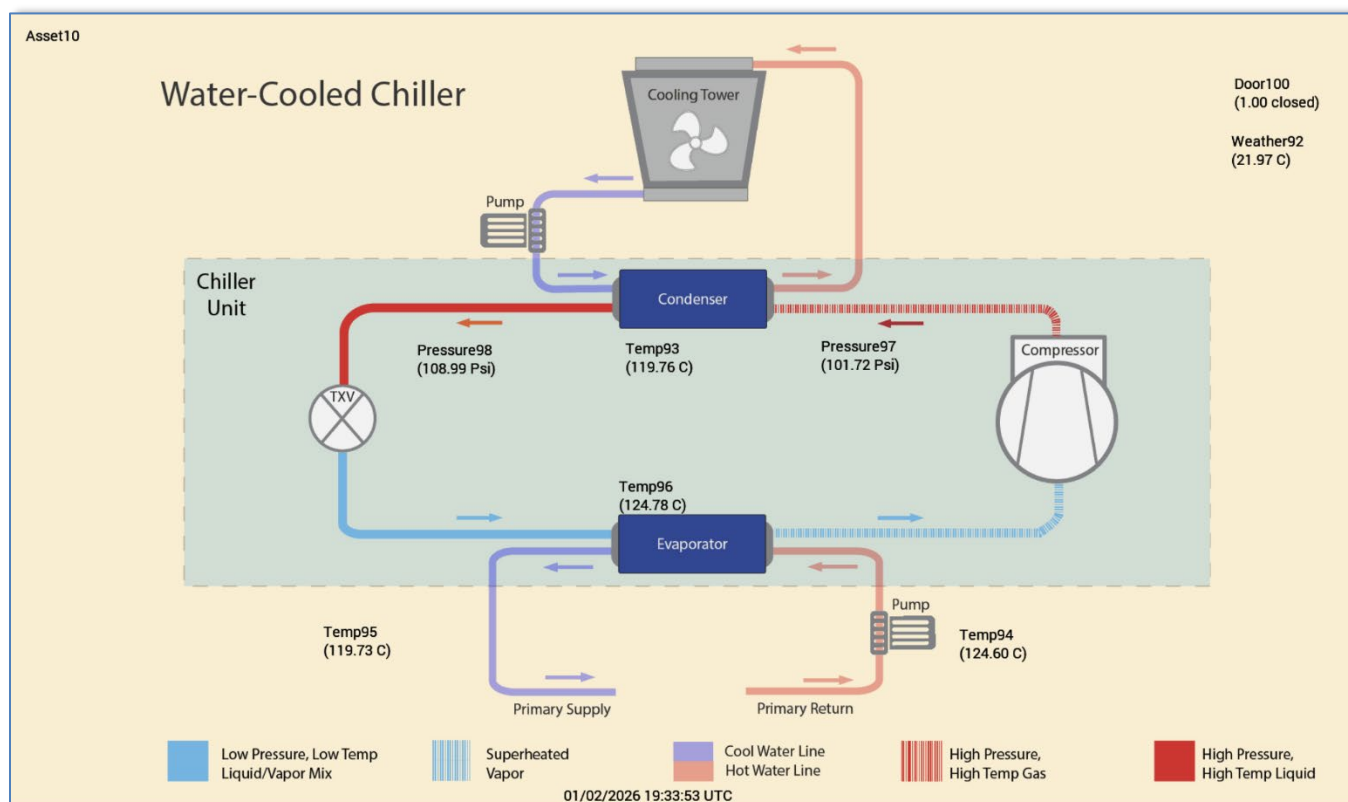
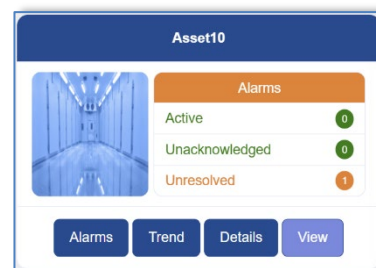
From this page there is also read-only access to Alarm Profiles, Alarm Definitions, Alarm UserGroups, Logs, User Profiles, and Report Definitions.

SENSORS				
GROUP	NAME	SERIAL NUMBER	LAST MODIFIED	ACTIONS
WEATHER_TEMP	Weather92	00000092	12/22/2025 18:41:14 UTC	View
	Temp93	00000093	12/22/2025 18:39:08 UTC	View
TEMPERATURE	Temp94	00000094	07/10/2025 12:02:03 UTC	View
	Temp95	00000095	12/22/2025 18:38:26 UTC	View
	Temp96	00000096	12/22/2025 18:38:41 UTC	View
PRESSURE	Pressure97	00000097	12/22/2025 18:38:54 UTC	View
	Pressure98	00000098	12/22/2025 19:38:55 UTC	View
CURRENT	Current99	00000099	12/22/2025 18:40:57 UTC	View
CONTACT	Door100	00000100	08/20/2025 16:31:17 UTC	View
CHAMBER_TEMP	Chamber91	00000091	12/22/2025 20:08:36 UTC	View

Image Page (Chamber Diagram)

OverShield includes schematic diagrams of each chamber showing the sensor locations and live sensor data.

Navigate to the [Asset page](#), select the asset you want to see, and click on the **View** button.



The schematic shows the key components and the locations where OverShield gathers data.

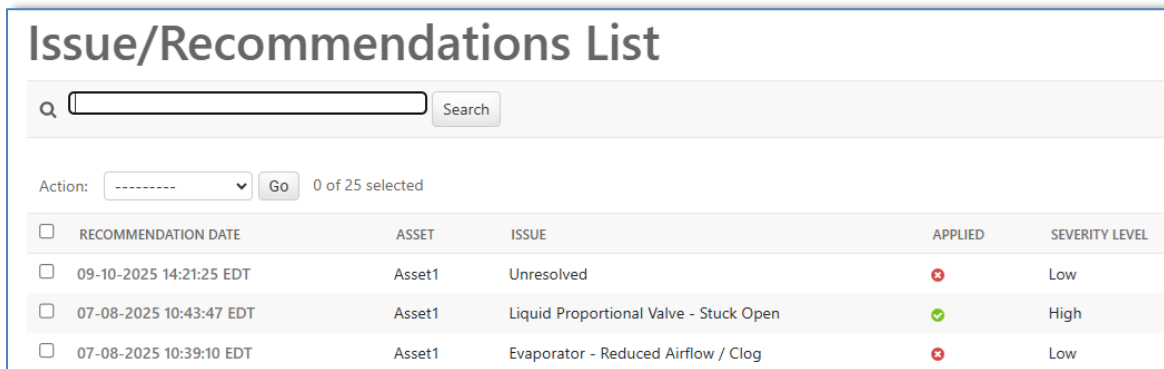
Recommended Maintenance List

The recommendations list operates at the company level, allowing facility managers to track maintenance recommendations across all sites and assets. These recommendations are issued by refrigeration experts at Predictive Monitor after an alarm is triggered or unusual activity is detected on an asset.

To access the Recommendations List:

1. From the Company page, Site page, or Asset page, select **Reports → Recommendations** from the sidebar menu.

The Issue/Recommendations List opens.



<input type="checkbox"/>	RECOMMENDATION DATE	ASSET	ISSUE	APPLIED	SEVERITY LEVEL
<input type="checkbox"/>	09-10-2025 14:21:25 EDT	Asset1	Unresolved	✗	Low
<input type="checkbox"/>	07-08-2025 10:43:47 EDT	Asset1	Liquid Proportional Valve - Stuck Open	✓	High
<input type="checkbox"/>	07-08-2025 10:39:10 EDT	Asset1	Evaporator - Reduced Airflow / Clog	✗	Low

The **Recommendation Date** is a timestamp of when the recommendation was made. Click this field to open a more detailed view of the recommendation.

- The **Asset** is the name of the asset to which the recommendation applies.
- The **Issue** identifies the source of the problem. If there is a clear component that is causing the issue, that component and associated cause are listed here. Otherwise, the problem is labeled “Other,” and more details are in the supplemental section, accessible by clicking on the **Recommendation Date**.
- Applied indicates the status of the recommendation. Green items with a checkmark have been completed or otherwise resolved. Red items marked with an “x” have not yet been completed.
- The **Severity Level** of the recommendation is Predictive Monitor’s suggested urgency for the site’s maintenance team to investigate the issue.


Ranking	Suggested Time to Investigate Within
Emergency	< 24 hours
High	1-3 days
Medium	1-2 weeks
Low	At a convenient time

OverShield Weekly Reports

OverShield Weekly Reports provide a blend of AI/ML data analysis combined with expert review from Predictive Monitor's in-house HVAC-R specialists.

Clients are emailed these reports, which begin with a Summary page that provides a simple color-coded OverShield Score indicating the overall health of each refrigerated asset. The Report also provides an in-depth analysis of each asset showing its data from the past week and how the asset's health has been trending over the past months.

The Summary score for each asset is displayed on the report's front page.

Weekly Report		
		
Summary		
Asset Name	OverShield Score*	Status
CR-3 B	69	Problematic
CR-5 A	70	Irregular
CR-1 B	72	Irregular
CR-1 A	87	Regular
CR-4 A	89	Regular
CR-3 A	89	Regular
CR-2 A	92	Optimal
CR-5 B	93	Optimal
FR-1 A	93	Optimal
FR-1 B	93	Optimal
CR-2 B	95	Optimal
CR-4 B	97	Optimal

Score Legend:

0% to 69%	→	Problematic
70% to 79%	→	Irregular
80% to 89%	→	Regular
90%+	→	Optimal

- The score ranges from 0-100 with 100 being optimal.
- Assets are sorted from lowest scores to highest.
- The score is automatically generated using Predictive Monitor's AI-powered data analytics, which uses a complex algorithm to assess the chamber's performance, weighing the data from each sensor, and comparing that data to the asset's unique operational baseline.
- Each asset's OverShield Score serves as a summation of the performance of the asset compared to its ideal operational baseline.

Data Shown on Weekly Report

The individual OverShield Asset Reports show the following data collected during the past week:

Label	Name of the sensor.
Current Score	Individual score of the sensor for the past week.
Unit	The unit of measurement that the sensor data is using.
Avg	The average or mean of the sensor over the last week.
Δ BL-Avg	The difference between past week's average and the average of the baseline data.
Min	The minimum value over the past week.
Max	The maximum value over the past week.
StD	The standard deviation over the past week.
Δ BL-StD	The difference between the standard deviation of the past week and the standard deviation of the baseline data.
Δ Score Last Week	The difference in the score for each sensor as compared to the previous week.
Δ Score Last Month	The difference in the score for each sensor as compared to the previous month.
Δ Score Last Quarter	The difference in the score for each sensor as compared to the previous quarter.

Note: Sensor statistics are adjusted using AI/ML algorithms to provide the best context for how the asset is running. Therefore, the values shown here, such as Avg, Min, Max, and StD, may differ from those in the raw data.

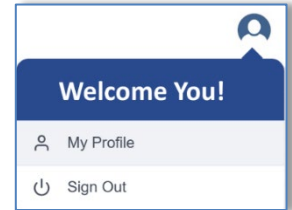
User Admin

Changing Your Password

To change your OverShield password, do the following:

1. Log in to OverShield using your credentials.
2. Complete authentication (if required).
3. In the upper right corner, click on the profile icon and select **My Profile** from the drop-down menu.

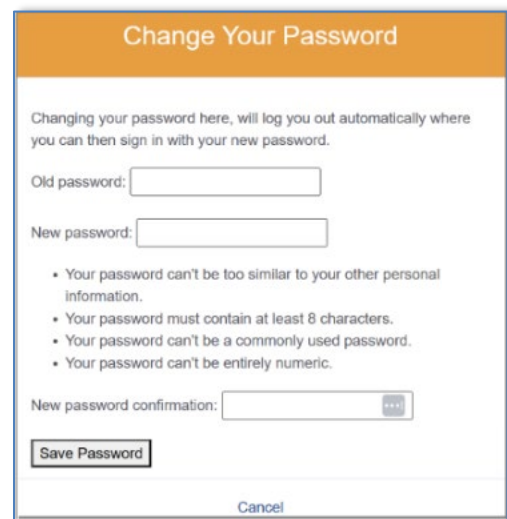
Note: If you do not see this option, it means you are currently logged out.
4. Locate your email address in the list and click on it to open the Change User Profile window.



5. In the upper right part of the window, click on **CHANGE YOUR PASSWORD**.

The Change Your Password dialog box opens.
6. Enter your old and new passwords in the fields provided.
7. Confirm your new password in the field provided.
8. Click the **Save Password** button.

After you save your new password, you will be logged out immediately and will need to log back in with your new credentials.



Contacting Predictive Monitor

If you are having trouble logging in to OverShield, contact support@predictivemonitor.com for assistance.

For all other inquiries, please use the following contact information:



20 Cotton Road, Suite 201
Nashua, NH 03063

Phone: (603) 691-3374

E-mail: info@predictivemonitor.com

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