



Monitoring platform — user manual

For the person who checks the equipment

RetrofitWithAI · SCMDSD LLC
1603 Capitol Avenue, Cheyenne, WY 82001
contact@retrofitwithai.com

Monitoring platform — user manual

For the person who checks the equipment

RetrofitWithAI · SCMDSD LLC · version 1 · August 2026

Before anything else

This application tells you **what happened to your equipment, and when**.

It does not tell you whether the product inside is still fit for use. That decision is yours, or your quality manager's. The system provides the record; the judgement stays with a person.

One more thing worth knowing from the start: ****the same application handles every kind of equipment****. A vaccine fridge, a cold room, an incubator, a freezer and an oxygen concentrator all appear in the same list, on the same screen, with the same buttons. Only the thresholds differ, and those are set per equipment when it is installed.

1. Signing in

Open the address your installer gave you. You will be asked for a user name and a password.

[screenshot — sign-in page]

Access is granted per site. If you cannot sign in, contact the person who installed the system — passwords are not reset from this screen.

Your session stays open for eight hours, then asks again.

2. The equipment list

This is the first screen after signing in. Every piece of equipment registered for your site appears here, one per line.

[screenshot — equipment list]

Column	What it means
Device	The identifier written on the sensor box
Label	The name you gave it — "Pharmacy fridge 2", "Vaccine room"
Site	Useful when one account covers several buildings
Profile	The set of thresholds applied to this equipment
Range	The target band, for equipment measured in degrees
Probe	<i>Buffered</i> means the probe sits in a thermal buffer, not in free air

Click **Open** to see one piece of equipment in detail.

3. One piece of equipment

The top of the page shows the **current state**: the latest value, when it was received, and whether a door is open or mains power has been lost.

[screenshot — device page, top section]

The word **stale** appears if no reading has arrived for more than an hour.

That does not mean the equipment has failed — it means the system has stopped hearing from it. A network problem and a power cut look the same from here.

Treat it as something to check, not as an incident in itself.

For equipment measured in other units

Oxygen concentrators, compressors and similar equipment show **one card per measured quantity** instead of a single temperature: concentration, pressure, running hours, each with its own thresholds.

[screenshot — device page with metric cards]

A card outlined in **pink** means the value is past its critical limit. In

amber, past the warning limit. A greyed card is a value that is recorded

but has no threshold set — running hours, for example.

The time window

Three links — **24 h**, **7 d**, **30 d** — change how far back the table goes.

The table below shows the most recent 200 rows of the window you chose.

4. Excursions

An **excursion** is a period during which the equipment was outside its limits for long enough to matter.

Two words in that sentence do the work:

- **outside its limits** — not outside the target band. A fridge that touches 8.2 °C for one minute has not had an excursion.
- **long enough** — every profile has a minimum breach duration. Below it, nothing is recorded.

[screenshot — excursions list]

Type	Meaning
high	Above the upper critical limit
low	Below the lower critical limit
door	Door open longer than the configured delay
power	Mains power lost

An excursion shown as **ongoing** has not finished. Once it ends, a **PDF**

button appears on its line.

What does not raise an excursion

This matters as much as what does.

- **Opening the door.** Temperature evaluation is suspended while a door is open, and for a settling period afterwards. Normal use does not appear as an incident.
- **A defrost cycle,** on equipment configured for it. A cold room that rises by several degrees with the compressor stopped and the door closed is defrosting, and the system knows it. It resumes normal detection immediately if the rise goes further than a defrost would explain.
- **A brief spike.** See the minimum breach duration above.

If your equipment raises alerts you believe are wrong, say so. Thresholds are set per equipment and can be adjusted. **An alert that is always wrong will be ignored, and then a real one will be missed too.**

5. Alerts

An alert is a message. An excursion is an event. One excursion produces at least two alerts: one when it starts, one when it ends.

[screenshot — alerts list]

Level	When
critical	A high, low or power excursion has started
warning	A door excursion has started
recovery	An excursion has ended

The **Notified** column shows when the message actually left the server. If it reads `pending`, the message is queued and has not gone out yet.

The e-mail

Alerts are sent to the address configured for your site. The system checks for new alerts every minute.

If the mail server is briefly unavailable, the alert is **not lost** — it stays queued and is sent on the next cycle. You may therefore receive a message a few minutes after the event.

Do not rely on e-mail alone. A mailbox can fill, a filter can misfile a message, an address can change when someone leaves. The screen is the source of truth; the e-mail is a prompt to go and look.

6. Getting the record out

CSV export

On any equipment page, **Export CSV** downloads the readings of the window you

selected. The file opens in any spreadsheet.

It contains one row per reading, timestamped in UTC, with the temperature and the other recorded values.

Excursion report (PDF)

On the excursions list, the **PDF** button produces a report for one finished excursion. It contains:

- which equipment, which site, which probe type
- when the event started and ended, how long it lasted, the extreme value reached
- the thresholds that were in force at that moment
- the alerts that were issued, and how long they took to go out
- every reading of the window, fifteen minutes either side
- a **space for your signature** and for what you did about it

The report is only produced once an excursion has **ended**. A report on an event still in progress would be signed on an incomplete story.

7. What you have to do, and the system will not

Read this section twice.

The system does not decide whether the stored product is still usable.

It records temperatures. Whether a batch of vaccines that spent forty minutes at 9 °C can still be administered is a decision for the person responsible for the cold chain, using the manufacturer's stability data — not a decision this software makes or should make.

The system does not act. It does not close a door, restart a compressor or switch to a backup unit. It reads and it reports.

The system does not replace your procedures. Mapping, qualification, periodic verification and your own quality file remain yours. What the system adds is a continuous record between two verifications.

The signature on the excursion report is yours. The report states what was measured. What was done about it, and whether the goods were kept or discarded, is written and signed by a person.

8. What to do when an alert arrives

A short sequence, in order:

1. **Go and look at the equipment.** The screen tells you a number; the room tells you whether a door is ajar, a vent is blocked, or a unit is silent.
1. **Open the equipment page** and look at the trend, not just the current value. A temperature climbing steadily is not the same as one that spiked and returned.
1. **Follow your own procedure** for the product concerned. That procedure exists independently of this system.
1. **Once the excursion has ended, produce the PDF report**, complete the sign-off block, and file it where your quality records are kept.

If the alert was not justified, note why, and have the threshold reviewed. It is a five-minute change and it protects the credibility of every future alert.

9. Frequently asked

The screen says stale. Is the fridge broken?

Unknown. It means no reading has arrived for over an hour. Check the sensor box has power and that the site network is up, then check the equipment itself.

Can I change the thresholds myself?

Not from this screen. Thresholds are held per equipment profile and are changed by the person who administers the system, so that a change is deliberate and traceable.

Why does my cold room show two probes?

Because a room stratifies — the top and the bottom are not at the same temperature. One measurement point describes one point, not a room.

I opened the door for ten minutes and nothing was recorded. Is it working?

Yes. On a cold room the door delay is fifteen minutes, because staff walk in and stay. On a fridge it is two minutes.

Someone deleted an equipment by mistake. Can we get the history back?

Ask before deleting. Readings are kept, but the link to a removed equipment is not something to rely on. Deletion is not part of normal use.

10. Who to contact

For anything about the equipment itself — a fridge that fails, a probe that has come loose — your usual maintenance contact.

For anything about this application — an account, a threshold, an equipment to add or rename — the partner who installed the system.

This manual describes the platform as it is. Where a behaviour has a limit, the limit is stated. A manual that promises more than the software does is a manual that gets someone into trouble.