

10 reasons in favour of: Fully automated environmental monitoring

Regulatory requirements make it necessary to seamlessly monitor temperature-sensitive products along the pharmaceutical supply chain. Fully automated environmental monitoring systems are now widely used to tackle this challenging task. If you are still unsure whether this type of solution fits your requirements, we have put together 10 convincing reasons to help you decide.

1. No paper documentation

With data loggers, min/max thermometers and thermohygrometers, you have to manually read out, document and archive all measured values at the intervals you require. Think of the metres of shelves that will gradually fill up with the corresponding records. If, on the other hand, you opt for a monitoring system, all these activities are carried out digitally and, most importantly, completely automatically. This always gives you a better, faster and simpler overview of the measurement data and you also use less paper.

2. Significant time savings

Depending on how many measuring points you have, you can easily spend several hours on the daily readout of the measuring instruments and subsequent documentation of the data. Every single day! What more useful things could you or your employees be doing instead? With a monitoring system, all measurement data is automatically recorded, transmitted and archived. Manual activities that tie up resources are no longer needed.

3. Fewer human errors

It's as logical as it is inevitable: wherever people work, mistakes happen. This also applies to work with data loggers or thermohygrometers. Because once you have numerous different measured values which need to be written down with the exact date or time and archived with precision, you quickly find careless errors creeping in. Or the notepad used during the round of readouts ends up getting lost, so the values are then noted down from memory to the best of one's knowledge and belief. An automated monitoring system minimizes precisely these kinds of potential errors.

4. More alarm options



Data loggers and thermohygrometers can also indicate limit value violations. However, only on the measuring instrument itself. If you have multiple instruments in use at different measuring points, you might easily not notice this until it's time for the daily or even the weekly readout. However, by then it may already be too late. The big advantage of environmental monitoring systems is their comprehensive alarm options. In addition to alarms on the instruments themselves, you are also informed by e-mail or SMS if limit values are violated or if a system-critical incident occurs. This allows you to intervene immediately and implement countermeasures before it is too late.

5. Complete compliance for audits



The pharmaceutical supply chain is just one area where regulatory requirements are becoming ever stricter and the number of rules to be followed ever more extensive. Measuring technology for monitoring environmental conditions plays a key role here. That's why you can be sure that monitoring systems comply with all relevant guidelines and standards (including 21 CFR Part 11) with regard to measuring technology and software. And in the event of an audit, you have all the required readings at your fingertips, just at the touch of a button.

6. More customization for reports



Reports are one of the major advantages of environmental monitoring systems. Not only are reports created automatically and sent to a user-defined distribution list. The digital documents can also be customized in terms of their scope, frequency and level of detail. This means that internal stakeholders are not the only ones who are kept better informed. The reports are also ideal for faster audits.

7. Higher level of data security



The data collected from your measuring points is valuable: It gives you the confidence that you are reliably complying with all legal requirements, makes for more efficient audits and enables you to optimize your processes in a goal-oriented manner. This makes it all the more important to know that the data is always securely stored and available at all times. Which is why your readings are stored securely and protected against misuse both in the hardware and in the cloud. On-premises solutions are also usually feasible.

8. Better data availability



Knowing that your readings are reliably recorded and securely stored is one thing. But it's just as important to be able to access them at any time – and not only on site. Because even when you're on the road, you want to know whether everything is running smoothly in production or in the warehouse. That's why most monitoring solutions allow you to access your data at any time, from anywhere and with any terminal device.

9. More assurance



In contrast to data loggers, fully automated monitoring systems monitor environmental parameters in a genuinely uninterrupted manner. This is because with stand-alone loggers, the recording of readings is interrupted for the readout. Since this step is completely automated in a monitoring system, you miss absolutely nothing. And of course, you will be alerted immediately in the event of any limit value violations.

10. More flexibility combined with constant security



A rule of thumb in environmental monitoring is: The more measuring points to be monitored and the more stringent the regulatory requirements for safety, the higher the degree of automation you should be looking for. This is why fully automated monitoring solutions can be adapted to your requirements as needed and with great flexibility, without compromising on measurement data recording or data security.

Find out more:

[A comparison of Testo's monitoring systems](#)