

# Condition monitoring for properties



# A short note about Paessler

- 70% of Fortune 100 enterprises globally use PRTG
- Largest markets are USA, Germany, UK and Benelux
- Headquarter in Nuremberg, Subsidiaries in USA and Malaysia with Paessler Regional Teams
- More than 300 employees from 25 countries

“THE  
MONITORING  
EXPERTS”

Founded by  
Dirk Paessler in  
1997

# Today everything revolves around these little digital helpers



URSALINK AMS102 CO2 Sensor



UNIPI Indoor Air Quality Sensor



Adeunis Analog sensor



Bosch Park Sensor



Elsys ERS Motion Sensor



Zenner Water counter

# Where Paessler starts it's journey



# Market challenges in the facility industry

- Low adoption rate of digitization
- Manual data collection on site
- Status of object not transparent due to lack of up-to-date data



# ... but what was first? ;)

## (Potential) Press Release (how would we announce it to the market)

Nuremberg, Sep. 1st 2020

Paessler, the Nuremberg based software development house, known for the IT monitoring product PRTG, announced a new cloud based product, called "Paessler Insights Engine". This new product builds an unite solution to integrate wireless sensors via Sigfox, LoRaWan and Mioty and allows customers to easily make use of the data provided by these wireless IOT devices. The Insights Engine comes with a device onboarding module which makes it easy for users to integrate new wireless sensors for all kinds of physical measurements. It also allows to configure custom dashboards for visualization, notifications via various channels like eMail and SMS and much more. The base version of this product provides a click-and-point, fully integrated solution from device management to data visualization. Specifically interesting are the extension modules, which allow customers to add complex business rules to evaluate specific conditions, add anomaly detection or add threshold monitoring to gain valuable insights from the data. With this product, Paessler enables customers to get started with wireless sensors quickly and without pain, no programming skills required. The entire product is fully managed by Paessler, so customers do not need to provision any hardware and do not need to worry about operating the software and can follow easily their entire businessplans.

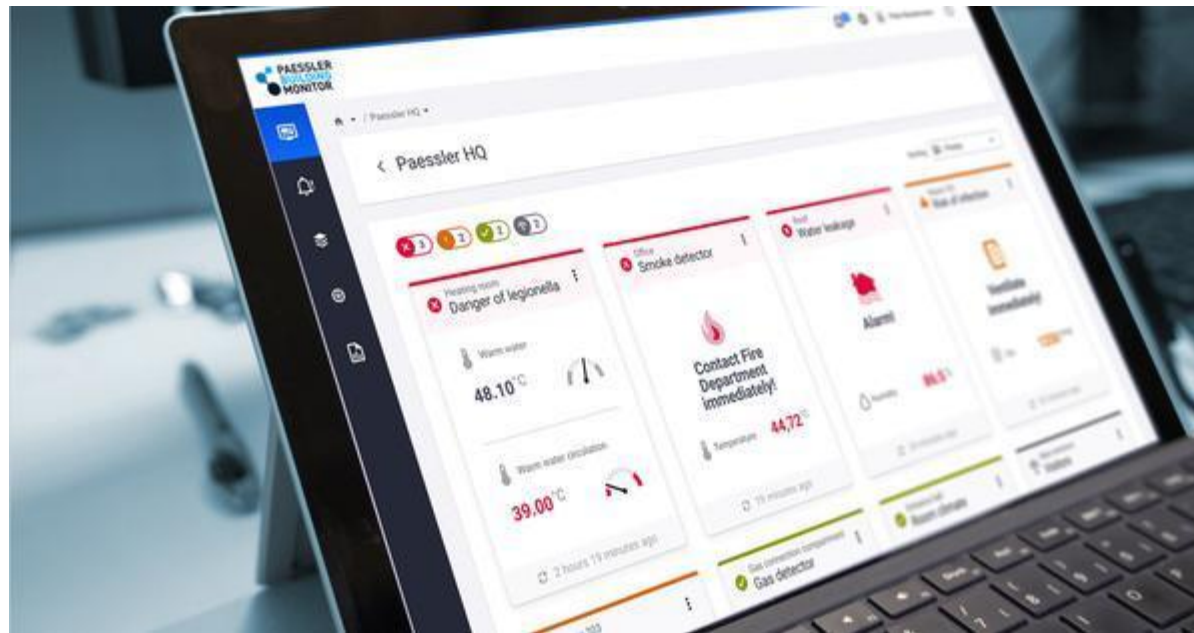
The Paessler Insights Engine base version includes data ingest, data exchange, configuration tools and basic data visualization. It is priced at 1,99 € per connected device. The additional modules "Business Rules", "Anomaly Detection", "Threshold Monitoring", "Analytics & Reporting" are priced in packages of generated events or alarms (generated insights). Please check the Paessler Insights Engine pricing page here <> for details. Paessler also provides additional services to host required infrastructure, e.g. LoRaWAN Servers on behalf of the customers. That makes it even easier for customers to build end-to-end solutions, leveraging the insights from their new wireless sensors. It always should follow the rules of easy usage & easy pricing.

Due to its general purpose scope, the Paessler Insights Engine enables customers to enhance existing environments with wireless sensors, without the need to lay down wires in existing buildings, city environments, fields or other places. With this, Paessler combines wireless IOT technology with its 20 years of experience in data management and monitoring to empower digitalization projects for smarter buildings, smarter cities and smarter environments. Customers can choose from the add-on modules from basic visualization to complex condition and alarm calculations and are also able to use the managed services for all required computer systems and software. It always follows the rule - feature-caused-by-needs. Paessler provides to its customers a feature-on-demand platform. *"You pay what you really need - this is a big advantage in the market outside there"* - says the CEO Helmut Binder of the Paessler AG.

Get started now, the Paessler Insights Engine is now available for customers in Germany, Austria, Switzerland and Liechtenstein. All you need to do is to sign up for a free Paessler account at <>. The Paessler Insights Engine can be used without charge with all features for 3 months in a trial period (limitations apply).

<<Customer quote: With the Paessler Insights Engine, we established a LoRaWAN based solution to monitor and improve the air quality in our entire campus, inside and outside. And this only within a 4 month period. We now have active alarming in place if air quality is changing and we are able to manage it proactively. - Max Musterman, Head of Facility Operations at Universitätsklinikum Erlangen>>

# Our Answer! – the Building Monitor



# Use cases – exemplary

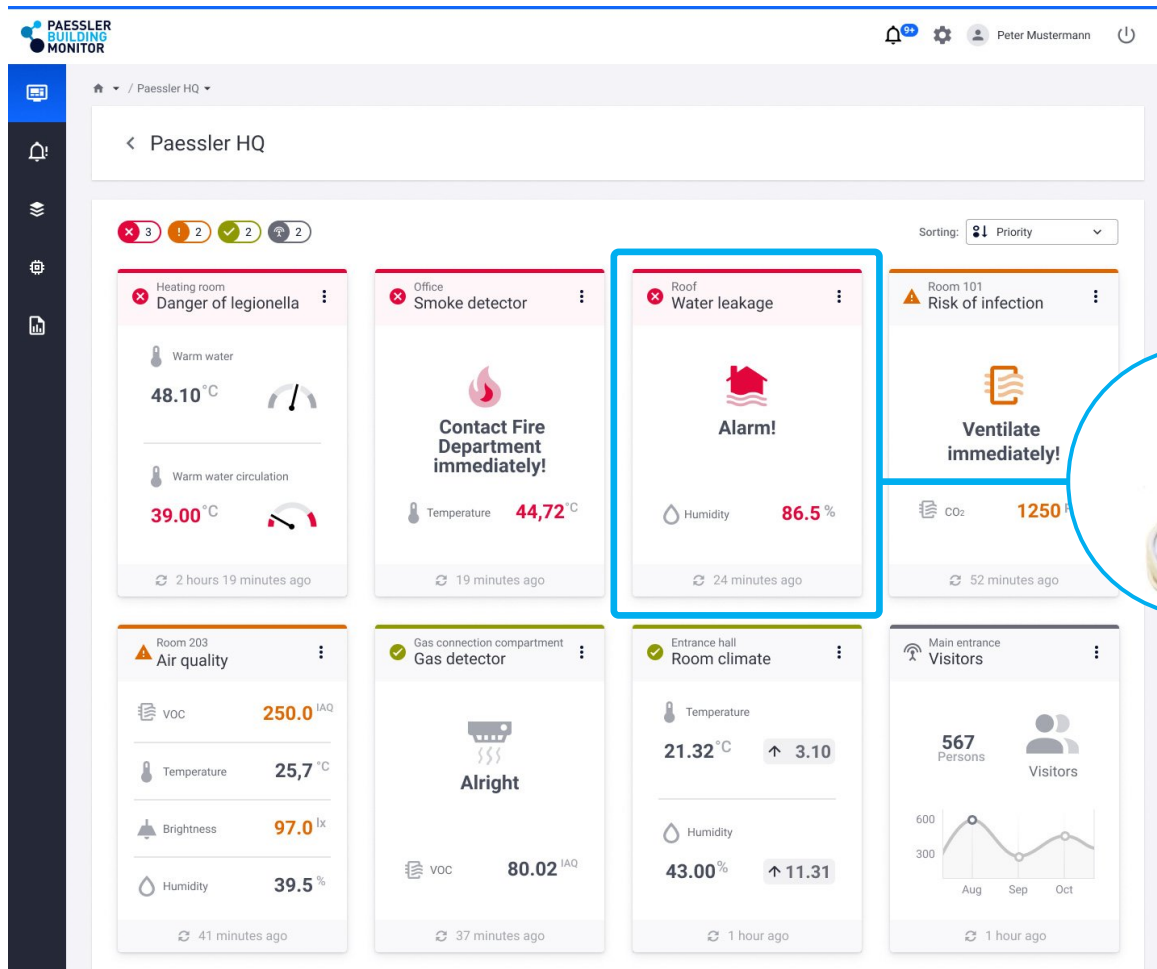
- Smoke & gas detectors
- Consumption data
- electricity, water, gas, heating
- Legionella danger
- Leakage
- Heating circuit
- Fire department access road
- Mold

- Indoor climate
- Temperature
- Humidity
- Air quality
- Lighting
- Risk of infection (aerosols)
- Visitors





# Easy setup & structured dashboard

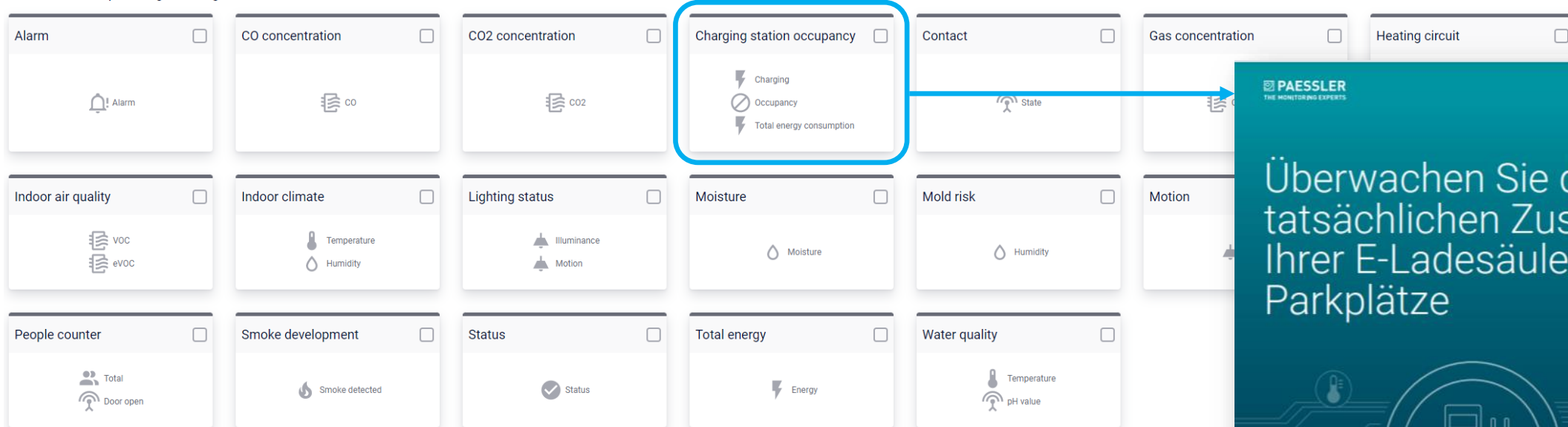


- Installation within a day
- No programming skills required
- Large catalog of supported devices



# Preconfigured uses cases

Select one of the preconfigured insights.



You can rely on [preconfigured templates](#) for various use cases including [default value limits](#), and on device templates with a well-structured visualization



# Easy data source onboarding

< Add device

Device model

Select one of the preconfigured device models.  
Do you want to add a device that is not listed?  
[Request custom device](#)

All

HTTP

MQTT

LoRaWAN

Device model	Available metrics
<input type="radio"/> Adeunis Temp 3 LoRaWAN	Temperatur 1, Temperatur 2
<input type="radio"/> Adeunis Temp LoRaWAN	Temperatur, Temperatur extern
<input type="radio"/> AMS S/200-P	Gas Detektiert
<input type="radio"/> Bosch TPS110	Belegung
<input type="radio"/> Dragino LHT65 V1	Battery Status, Temperatur, Feuchtigkeit, Temperatur extern
<input type="radio"/> Elsys ELT-2	Temperatur, Feuchtigkeit, Bewegungszähler, Luftdruck, Wasserleck

PAESSLER  
BUILDING  
MONITOR

Home

Data Sources

Devices

Adeunis XR-73728

< Adeunis XR-73728

Device EUI  
A81758FF051F21

Device template  
Air quality

Activate maintenance mode

Swap device

Delete device

Messages

Last 30 days

Last 7 days

Last 48 hours


Last 24 hours

Time	Message type	Message
2020-11-10 - 18:00	Status	OK
2020-11-10 - 17:13	Data	Temperature: 25,7 °C, Humidity: 39,5 %, Brightness: 250 lx, VOC: 437 IAQ
2020-11-10 - 15:13	Data	Temperature: 23,1 °C, Humidity: 44,2 %, Brightness: 243 lx, VOC: 421 IAQ
2020-11-10 - 13:13	Data	No message received
2020-11-23 - 12:00	Status	No data
2020-11-23 - 11:13	Data	Temperature: 22,6 °C, Humidity: 41,7 %, Brightness: 263 lx, VOC: 428 IAQ
2020-11-23 - 09:13	Data	Temperature: 23,3 °C, Humidity: 42,9 %, Brightness: 252 lx, VOC: 431 IAQ
2020-11-23 - 07:13	Data	Temperature: 21,9 °C, Humidity: 41,4 %, Brightness: 258 lx, VOC: 435 IAQ
2020-11-23 - 06:00	Status	OK
2020-11-23 - 05:13	Data	Temperature: 22,4 °C, Humidity: 39,3 %, Brightness: 254 lx, VOC: 423 IAQ

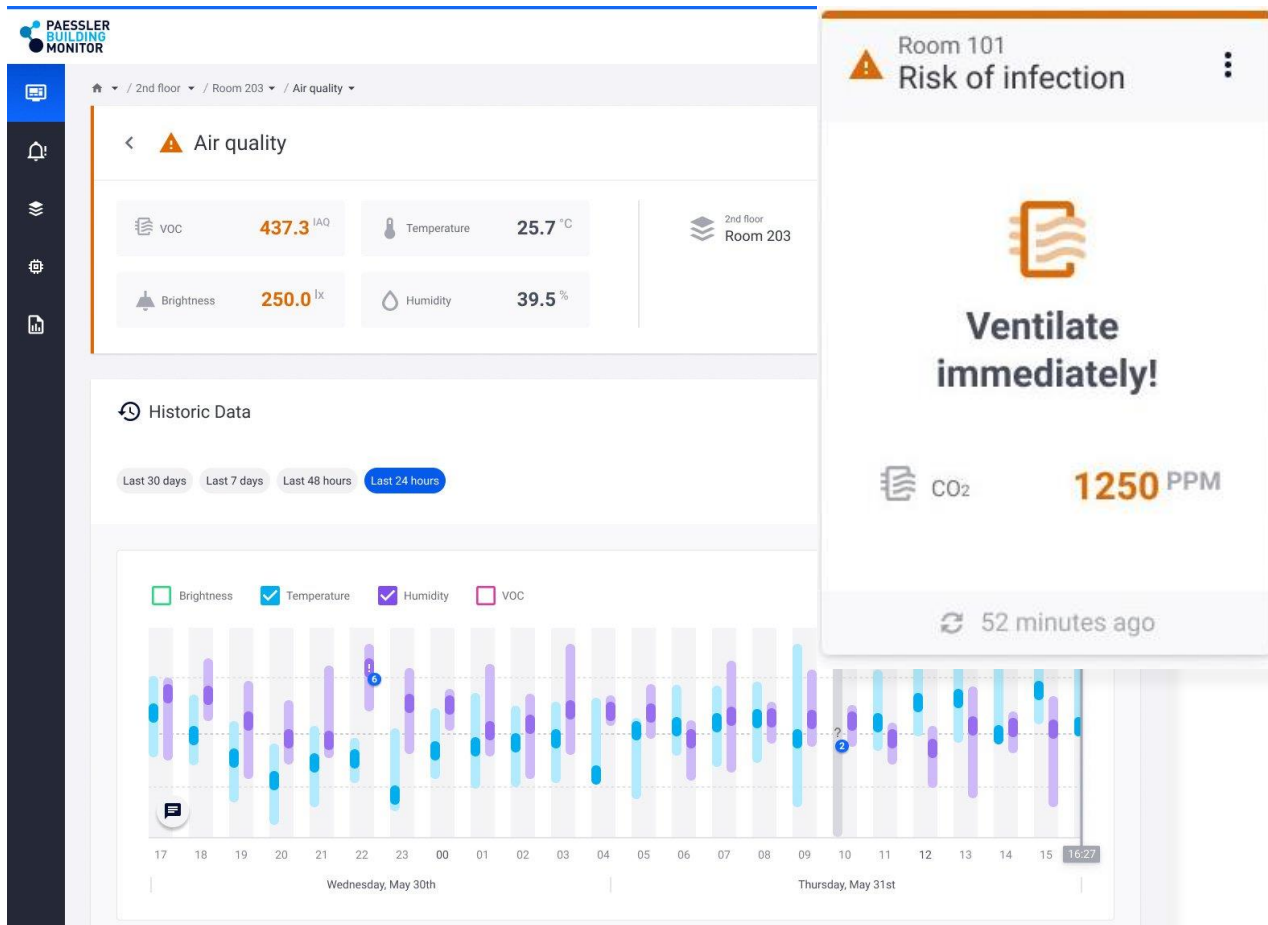
10

23.05.2021 - 18:01 bis 24.05.2021 - 18:01

< 1 - 10 11 - 20 >



# Insights

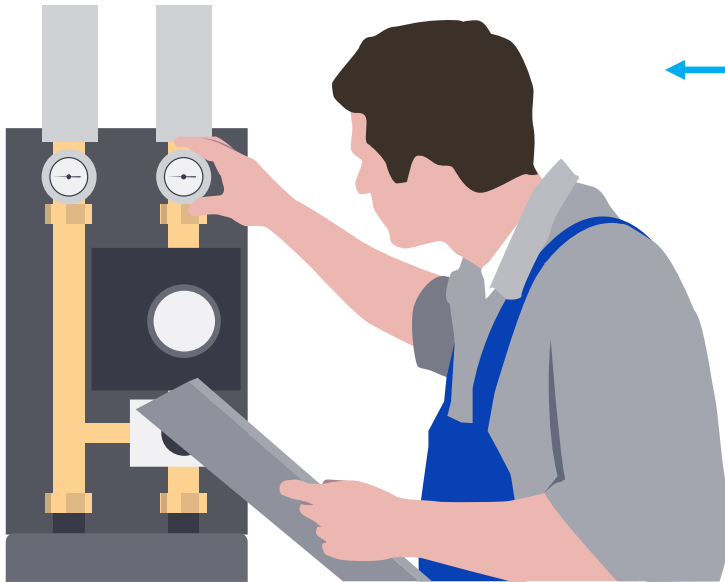


- Common use cases as templates
- Relevant threshold recommendations
- Custom use cases can be easily added



# Get notified

- Threshold-based alerting
- Get notified via email, SMS, and more
- Notifications that matter – no alert noise



PAESSLER BUILDING MONITOR

🔔 4 🛠️ 👤 Peter Mustermann ⏻

🏠 / Alerts

< Alerts

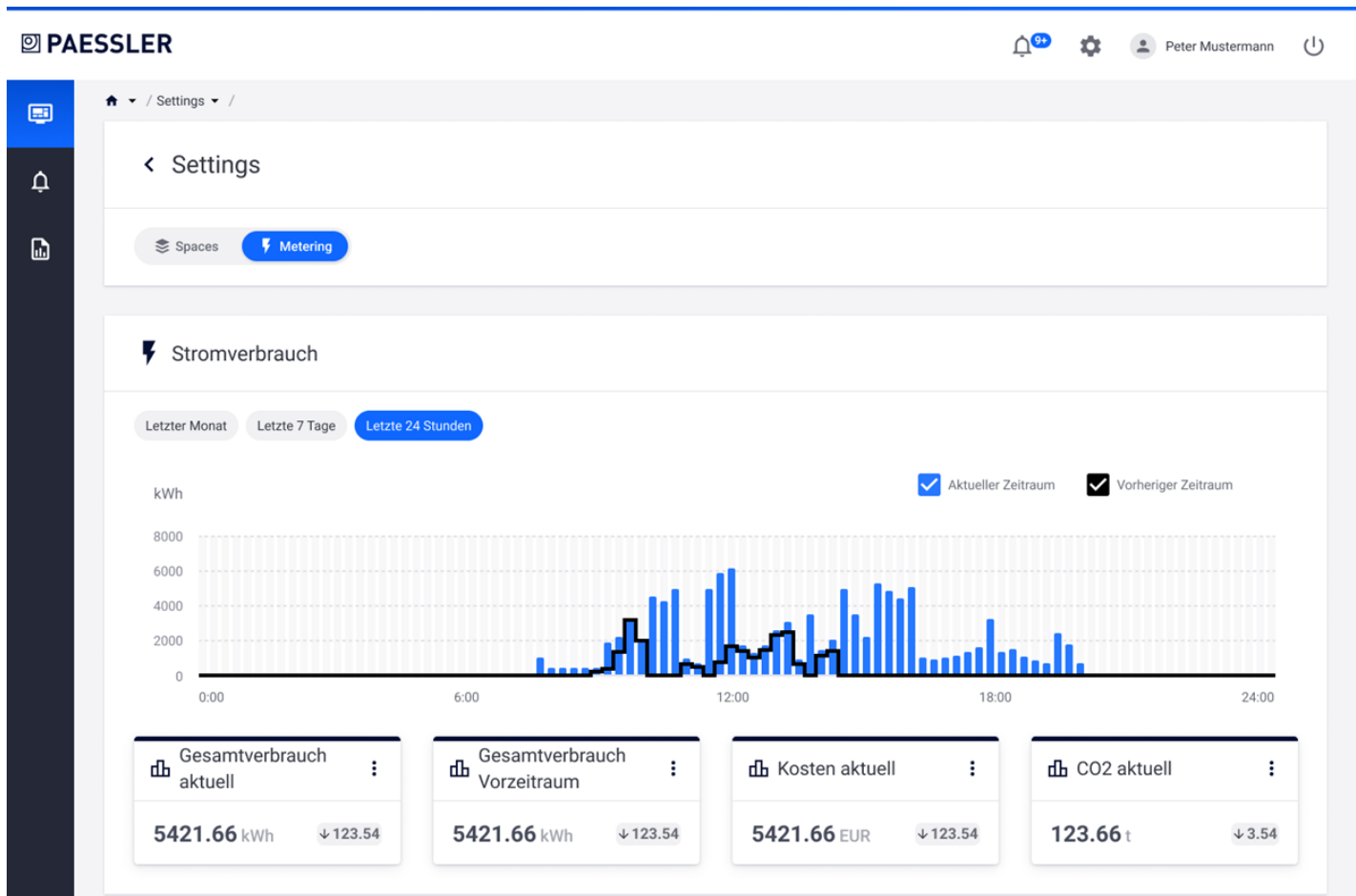
🔴 5 🟡 4 🔵 1 ☐ Show only active alerts

Last 30 days Last 7 days **Last 48 hours** Last 24 hours

Timestamp	Status	Message	Insight
🔴 24.05.2021 - 19:13	active	Smoke detected	Smoke detector
🟡 24.05.2021 - 14:56	no longer active	Minimum temperature reached	Danger of legionella
🔴 24.05.2021 - 09:13	active	Below minimum temperature	Danger of legionella
🔴 24.05.2021 - 08:22	active	Water leakage detected	Water leakage
🟡 23.05.2021 - 19:52	active	Below minimum humidity	Air quality
🔴 23.05.2021 - 16:13	active	Smoke detected	Smoke detector
🔵 23.05.2021 - 10:23	active	No data sent	Gas detector
🟡 23.05.2021 - 08:47	active	Humidity threshold exceeded	Room climate
🟡 22.05.2021 - 23:59	no longer active	Minimum temperature reached	Room climate
🔴 22.05.2021 - 23:22	active	Below minimum temperature	Room climate

🔵 10 22.05.2021 - 20:01 bis 24.05.2021 - 20:01

# Continuous Extensions



# Benefits

- Save resources by remote monitoring of the entire object portfolio
- Save time by digital condition monitoring
- Detect and prevent potential damages at an early stage
- Additional revenue with optional services possible

# Paessler & AWS –why?

- We are using several services from AWS which allows us to build the **solution much faster**, because we do not need to focus on infrastructure, servers or containers.
- We are focusing on creating **customer value**
- The use of AWS services brings many functional benefits and speeds up our development, but even more important, it brings **operational qualities** which are typically hard to achieve.



# Software architecture



**Device Agnostic**  
connect any type of  
sensor (decode data  
payload from any IoT  
device)

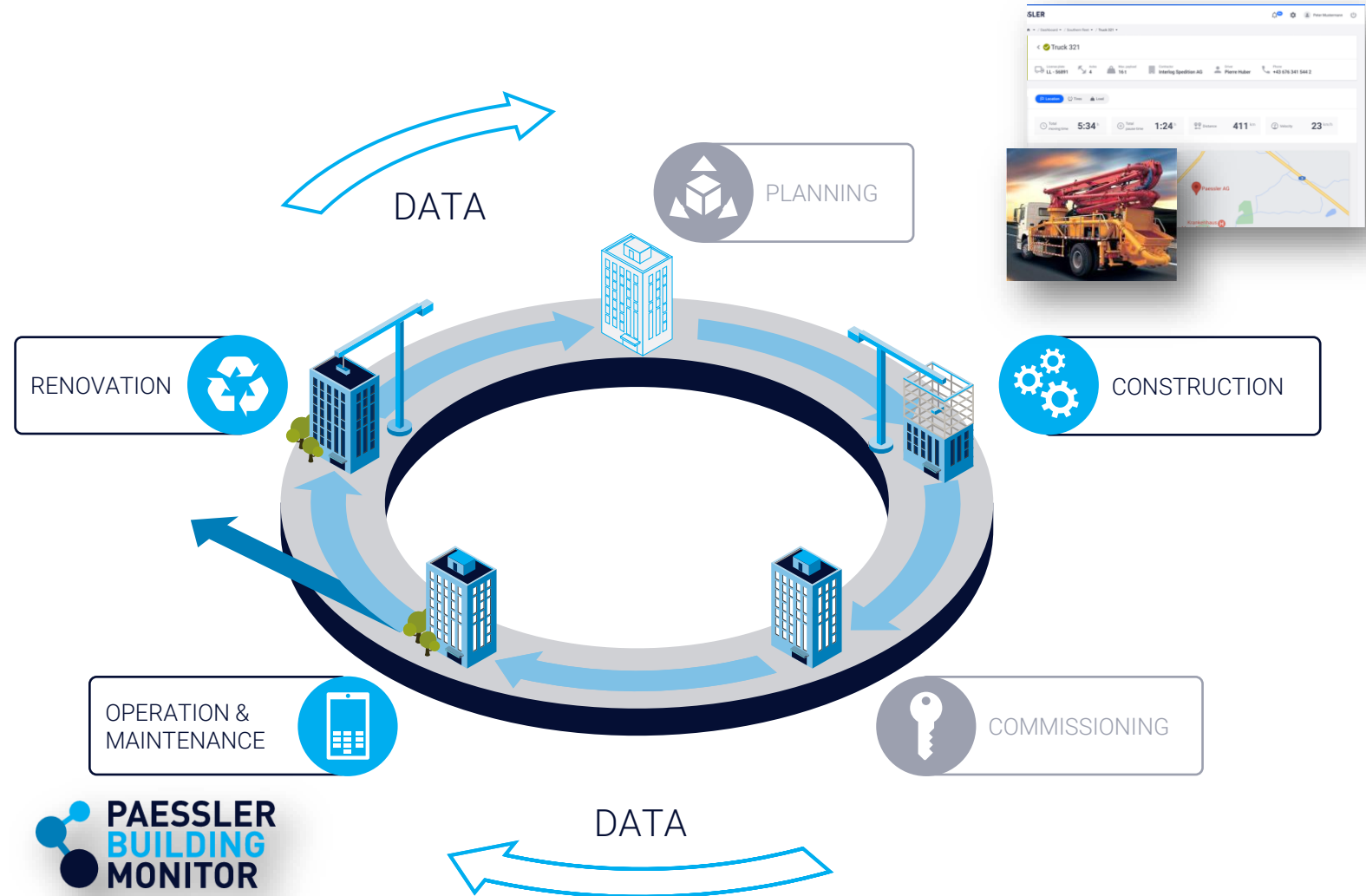
**Connectivity Agnostic**  
connect connectivity  
technology / network of  
your choice

**Application Agnostic**  
use pre-defined application  
/ solution template  
or create your own  
custom solution

**Integration Agnostic**  
use built-in reporting  
service or export data  
to your data analytics  
/ BI platform

# Where our solutions could fit

- Valuable **proof of insurance**
- Value for **bridging loans**
- Valuable for **consistent documentation**
- Valuable for **proof of security**
- Useful for **questions of liability**
- Valuable for **building valuation**
- Valuable when **operating a Building**
- Valuable for the **path to climate neutrality**



# Questions?



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<https://www.paessler.com/de/building-iot-monitoring>