





AHT Active monitoring

With the Active Monitoring System (AMS), you're on the safe side. Our sophisticated solution allows us to detect problems before you even notice them, which means you're always one step ahead. As an essential add-on to all AHT products, the AMS makes it much easier for you to manage and monitor the AHT cooling systems in your stores. Benefits of using the AMS:



SHORTER RESPONSE TIMES



MORE EFFICIENT AND EFFECTIVE CALL-OUTS



OPTIMISED SERVICE CALLS



KPIS COLLECTED FOR EVALUATION AND ANALYSIS





Monitoring is the key

Monitoring and process optimisation: 24 hours a day, 7 days a week, 365 days a year – even outside your normal opening hours. This means that any problems with your AHT cooling systems are automatically detected by the AMS. They are reported immediately to the AHT monitoring system and thereby directly to our service team.

Ideally, the issue can be resolved by remote maintenance. If this is not possible, our service team will contact you to arrange an on-site appointment. Damage to equipment or goods is minimised thanks to accurate and meaningful data.



Highest data quality & detailed reporting

With the AMS, you can manage not only your AHT cooling units, but also the inventory of third-party equipment. The AMS provides highest-quality data continuously from all connected devices, allowing faults and anomalies to be localised and described more accurately. In the event of a fault (e.g. door alarm, high temperature alarm, network error), an precise description of the alarm with all the necessary data is sent in order to enable automated prioritisation. With the help of these detailed insights, our service team can prepare for call-outs optimally, which also reduces the service costs.

The AMS reporting is tailored precisely to your requirements. This allows you to accurately monitor the performance of your AHT cooling systems and also switch from scheduled to needs-based maintenance, for example. Our monthly reports, which we send you by email, contain a range of detailed information and data, including:



- _Inventory: Equipment and store KPIs (inventory management through onboarding and maintenance processes)
- _ Alert statistics: Analysis of priority-1 alerts (e.g. during and outside opening hours, frequency, types of alert, alert code statistics)
- _ Service technician call-outs: Response time, tasks, etc.
- _ **Door usage statistics:** When and how often doors are opened (requires an installed and connected door sensor)
- _ Network statistics: No-link alerts (= not connected to device), delay times, etc. (note: full functionality only with fog gateway)

ACTIVE MONITORING WITH THE AMS

A compatible and flexible comprehensive solution tailored precisely to your needs!





Active monitoring with the AMS in a few easy steps

AMS can be installed in various ways. We always recommend using the DS Connectivity Solution Box. If a customer does not want to switch, we can create an interface to the existing system.

If you don't currently use a monitoring solution, we recommend the DS Connectivity Solution Box, which is highly flexible and also compatible with third-party devices. Plus, you can use it for other equipment too, such as your air conditioning or ventilation systems.



The DS Connectivity Solution Box can be configured perfectly to your needs. There are three different versions:

VERSION A

- _New monitoring and control system installed in store
- _No Emerson XWEB set-up required
- _3G/LTE router for network-independent remote maintenance and flexible data processing
- _ Embedded computer for additional memory and advanced data processing functions directly on site

VERSION B

- _ New monitoring and control system installed in store
- _No Emerson XWEB set-up required
- _3G/LTE router for network-independent remote maintenance and flexible data processing

VERSION C

- _Monitoring and control system already exists in store
- _ Emerson XWEB already set up
- _3G/LTE router for network-independent remote maintenance and flexible data processing

We'll be happy to advise you on the right version for your needs. The flexible DS Connectivity Solution Box can generally be upgraded flexibly and retrofitted at any time.



We'll take care of it! The services included in our Active Monitoring System.

24 hours a day // 7 days a week // 365 days a year

EQUIPMENT MONITORING

_Continuous equipment monitoring

THIRD-PARTY PRODUCTS

_Connection to existing monitoring system (e.g. Emerson XWEB)

COMPREHENSIVE STORE MONITORING

- _ Mapping, monitoring and control of the entire store and its equipment
- _Advanced fault and alert handling for all equipment
- _ High up-time: Overview of all KPIs, from inventory to maintenance
- _Automated scheduling and temperature monitoring

PREDICTIVE MAINTENANCE

- _Scheduled, needs-based and economical maintenance: e.g. when cleaning the heat exchanger (sensors, energy consumption, travel costs, flow and return temperatures, etc.)
- _ Faults are identified and resolved before any goods are damaged.

MAXIMUM SERVICE EFFICIENCY

- _Automated service requests
- _ Fast, solution-oriented call-outs based on available data
- _Optimisation of operating behaviour to maximise the service life of your equipment (e.g. opening doors)





HIGH-QUALITY REPORTING

- _ Data transparency ensures access to all data when required
- _ Dashboards and printable reports with relevant KPIs tailored to your decision-making requirements
- _Complex, real-time evaluations with edge computing

HIGHLY FLEXIBLE, DECENTRALISED SYSTEM

- _ Software-based modular system
- _ Easy integration with other systems (RESTful API) such as SAP, Call Manager, CMS and CRM.
- _OpenAPI Specification for all interfaces

END-TO-END SECURITY

- _ Password-less system with two-factor authentication
- _ Decentralised infrastructure across multiple regions ensures maximum independence
- _ Hourly backup of data and assets

CUSTOMISABLE PROCESS FLOWS

- _Centralised, flexible monitoring with configurable sequences
- _ Efficient processes are ensured based on different conditions
- _e.g. time, place and type of alert (regional requirements)

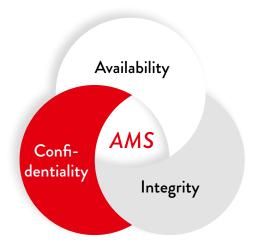






Safety comes first

Our primary goal is to ensure maximum security and reliability across all features and functions. To this end, we focus on the following aspects when transmitting information:



Qualitative data backup

Your data is automatically saved using a backup service. A backup is created every hour. No AMS component can access or delete this backup. So you're always fully protected.

A glimpse into the future

We see AMS as a large knowledge database that can make accurate forecasts with the help of algorithms. A wide range of data is already being collected, which will allow us to make our AHT devices even more sensitive to regional differences (e.g. weather, humidity) in future. By continuously improving and refining the AMS, we are realising our vision of reducing maintenance work to a minimum for you. That's because the customer always comes first at AHT.

AHT Cooling Systems GmbH

Werksgasse 57 8786 Rottenmann | Austria p. +43 3614 24 51-000 sales@aht.at www.aht.at