

PRODUCTS

AWTHERM

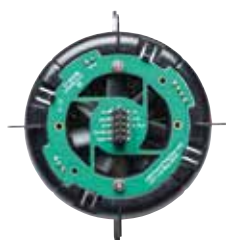
Temperature-stabilized measurement

The AwTherm is a professional high-end laboratory analyser for temperature-stabilized measurement of water activity in the food, pharmaceutical, cosmetics and other industries.

The wide control range permits measurements to be integrated directly in the temperature controlled manufacturing or storage process. Water activity measurement reacts very sensitively to variances in temperature. Stabilizing the temperature prevents imprecise results due to external temperature influences. Tested at 25 °C, AwTherm therefore fulfills the requirements of ISO 21807 (Microbiology of food and animal feeding stuffs – Determination of water activity), which requires measurement at 25 °C.

Order code

AwTherm-PS14
AwTherm-PS40
AwTherm-SET
AwT-MHS
AwT-PS14
AwT-PS40



AwT-MHS: Interchangeable measurement head

Interchangeable measurement head

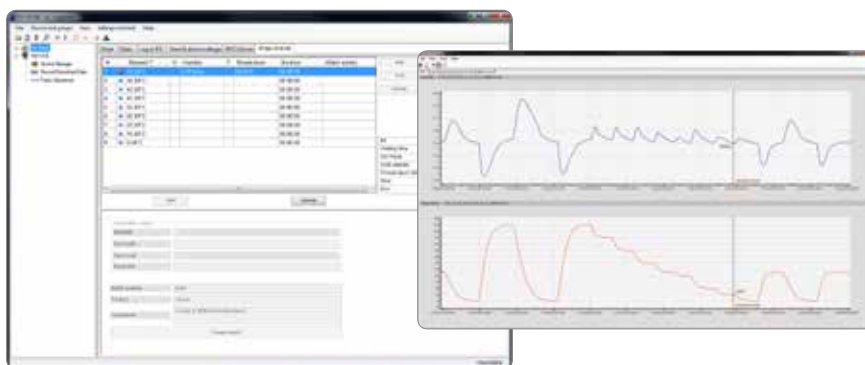
A further advantage of AwTherm is the removable measurement head, which means that the probe can be temperature calibrated or adjusted to achieve high precision.

User friendliness

In stand-alone use, the AwTherm excels with its easy handling and clarity and, together with the Rotronic HW4 software (FDA 21 CFR part 11 compliant), should be available in any laboratory.

Features

- Accuracy: ± 0.005 aw, ± 0.1 K
- Temperature control range: 0...60 °C
- High temperature stability: ± 0.01 °C / min
- Measurement repeatability: 0.002 aw
- Variable sample container sizes: 14 / 40 mm
- Interchangeable reference probes for cleaning or calibration
- Aw Quick function for fast measurement results (typically 4-5 minutes after reaching a stable temperature)
- Aw Equilibrium method available



Fully automatic aw measurement can be planned if the AwTherm is connected to the HW4 software. The instrument then moves to preset temperature points automatically and carries out a pre-selected Aw Quick or Aw Equilibrium measurement.

PRODUCTS

HYGROLAB C1

Laboratory application

The HygroLab C1 is a laboratory analyzer for water activity measurements with up to four interchangeable measurement heads. The possibility to combine measurement heads and insertion probes makes the HygroLab C1 extremely flexible.

Order code

HygroLab C1

HygroLab C1-SET-40



Validated software

The HygroLab C1 is easy and intuitive to use. It offers a high degree of user friendliness and the possibility to connect the benchtop display unit to a PC running Rotronic HW4 software (included in the SET) using a USB cable and via the Ethernet.

The HW4 software can be used to configure instruments and as a remote control for the complete system.

Features

- 4-channel benchtop display unit for the measurement of water activity, relative humidity and temperature
- Aw Quick function for fast measurement results (typically 4-5 minutes)
- Aw Equilibrium method available
- Multi-channel display
- Suitable for applications throughout industry
- Audible alarm to indicate completed aw measurement

HYGROPALM23-AW-A

Mobile application

As a mobile laboratory unit, the HygroPalm HP23-AW-A is perfect for on-site water activity measurements to determine the stability and preservability of the sample being analyzed. Like the HygroLab C1, the HP23-AW-A can also be used with measurement heads or insertion probes (two can be connected). The HygroPalm can be controlled externally using the HW4 software running on a PC.



Order code

HP23-AW-A

HP23-AW-SET-14

HP23-AW-SET-40

Portable and handy

The handheld instrument for measurement of water activity has the same functions as the HygroLab C1, but is handier in its portable version.

Features

- 2-channel handheld instrument with multi-channel display for measurement of water activity, relative humidity and temperature
- Aw Quick function for fast measurement results (typically 4-5 minutes)
- Aw Equilibrium method available
- Audible alarm to indicate completed measurement
- Saves up to 10,000 measured values
- Battery charging function via a USB mains adapter cable (AC1212)

PRODUCTS

AW MEASUREMENT HEAD HC2-AW

The aw measurement head was developed for use in combination with the HygroLab C1 and the HP23-A-AW handheld analyser. This digital probe enables quick and easy measurement of water activity. It can be calibrated via the HygroLabC1, HP23-A-AW or via the HW4 PC software.

The sample holder size is reduced to a minimum, thereby making it possible for humidity equilibrium to be reached quickly for all products being tested, while the metal housing ensures high temperature stability. All critical surfaces are made of chrome steel for minimal soiling.

You can find information on sample holders, disposable plastic sample containers and the clamp sealing mechanism under Accessories on the Rotronic website and in the main catalogue.

Order code

HC2-AW



AW MEASUREMENT HEAD HC2-AW-USB

This USB measurement head can be connected directly to a PC and comes in a set including software or as a single instrument for addition to a system.

The set HC2-AW-USB-SW contains the HW4 software with AW Quick function, thereby opening up all the possibilities of water activity measurement. It can be extended into a multi-station application with up to 64 measurement heads used with a powered USB hub.

Features

- Measurement range: 0...1.00 aw (0...100 %RH), -40...85 °C
- Direct USB PC connection

Order code

HC2-AW-USB

HC2-AW-USB-SW



CLAMP SEALING MECHANISM

Under certain circumstances additional mechanical sealing of the AW measurement station and sample holder may be necessary to prevent external conditions influencing the sample. The AW-KHS ensures a strong mechanical seal and is compatible with the WP-40 and WP-40TH sample holders.

Order code

AW-KHS



PRODUCTS

AW INSERTION PROBES HC2-P05, HC2-HP28, HC2-HP50

Direct measurement

This probe is suitable for direct measurement of water activity in bulk material samples such as powder, granulated materials, corn and grain. The HC2-HP is equipped with a robust stainless steel probe with a diameter of 10 mm and interchangeable sinter steel dust filter for measurement in dusty bulk materials. The HC2-P05 is the ideal measuring instrument for dust-free applications such as tablets, gel capsules and granulated plastics.

Features

- 5 mm insertion probe, for water activity measurement in dust-free bulk materials (P05)
- 10 mm insertion probe for water activity measurement in dusty bulk materials (HC2-HP28 and HC2-HP50)

Order code

HC2-HP05

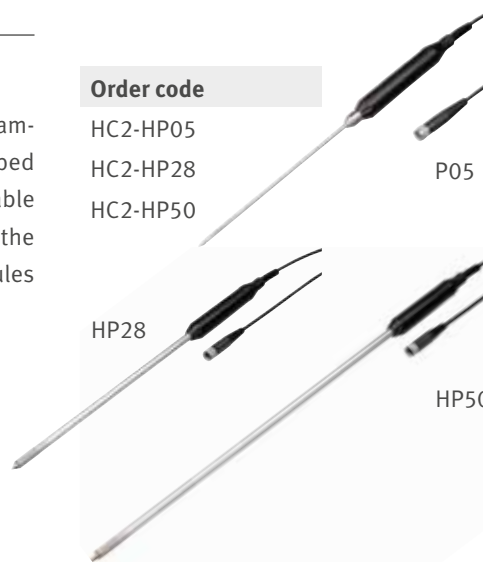
HC2-HP28

HC2-HP50

P05

HP28

HP50



WATER ACTIVITY SETS

The different aw start sets contain everything needed to measure water activity and calibrate the measuring instruments to confirm sensor performance.

HP23-AW-SET-40



Order code

HP23-AW-SET-14

HP23-AW-SET-40

HygroLab C1-Set-40

AwTherm-Set

SAMPLE HOLDERS AND DISPOSABLE SAMPLE CONTAINERS

Sample holders and disposable sample containers

The sample holders ensure optimal temperature stability for the product. The WP-40TH sample holder can be combined with a water jacket for additional stabilization of the temperature.

The disposable sample containers (PS-14 and PS-40) ensure optimal utilization of the volume in the sample holder. They prevent the sample holders from coming into direct contact with the product being tested, thereby preventing soiling or cross contamination. The disposable sample containers also provide a convenient means of collecting and storing samples.

Order code

PS-14

PS-40

WP-14-S

WP-40

WP-40TH

PS-14

PS-40



WP-14-S



WP-40



WP-40TH



SOFTWARE

HW4 SOFTWARE

Full compatibility

The HW4 software is compatible with all Rotronic products with USB, UART or Ethernet interfaces and runs on all WINDOWS 7/8/10 operating systems.

Functions

- Live display of current measured values
- Recording of measured values
- Configuration of instruments
- Probe calibration and adjustment
- Online calculation of humidity and aw values
- Alarm function with e-mail
- AwQuick function (HW4-P-QUICK)
- Measurement within 4-5 minutes
- User management

Viewing of measured values / Monitoring

Viewing of measured values is very easy and user-friendly. Files of any device shown in the device tree can be copied and opened directly with the HW4 explorer. The data is presented in both tabular and graphical formats. The graph module can be configured by the user.

Instrument configuration

The HW4 PC software can be used to adjust the settings of Rotronic instruments and probes. Depending on the instrument and probe, the following functions and settings can be changed:

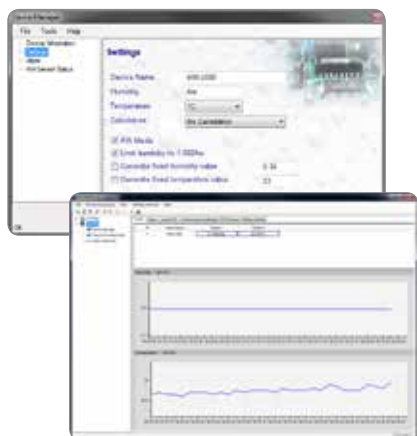
- general device settings
- password protection of device settings
- change the system units: metric / Imperial
- AwE and Aw Quick
- aw mode settings
- validation FDA 21 CFR part 11

Order code

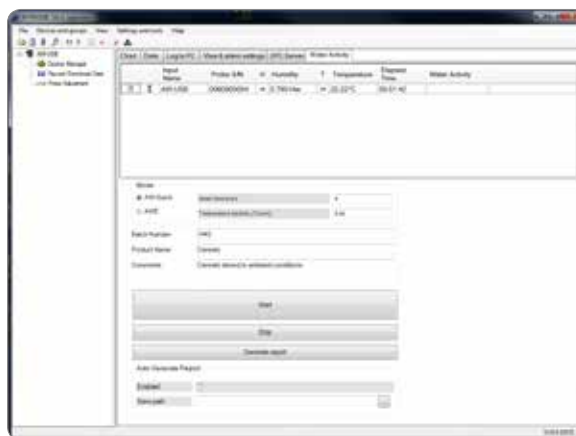
HW4-P-Quick



PDF report available



HW4 measured values shown graphically



Water activity measurement setup with HW4 PC software