novasina
The Art of Precision Measurement

*Lab*MASTER-aw

The **new star** in water activity measurement for quality management, research and production optimisation in **food**, **pharmaceutical**, chemical or cosmetic industries. A professional lab instrument for high precision measurements of a_w values (**water activity**) in various probes. The temperature of the measurement chamber may be set and fully controlled in the range from 0°C to 50°C, and is kept constant within +/-0.2K. This allows measuring different probes in very low as well as high water activity ranges. Key element of this new instrument is the humidity measurement element. Its very high accuracy, robustness and unsurpassed long-term stability are the result of decades of research and experience in sensor technology.

This instrument offers the most used aw measuring technology all over the world. A big LCD screen and a simple intuitive menu driven operation, help to fulfil your task quickly, precise and efficient.

Research institutes, foodstuff production companies as well as an increasing number of manufacturers of pharmaceuticals and cosmetics, appreciate the advantages.

Measuring range aw	:	**0.03 ... 1.00a_w** *(real range !!)*
Measurement chamber temp.	:	**selectable 0 ... 50°C, +/- 0.2K**
Humidity Sensor type	:	Intelligent resistive electrolyte cell using the newest Novasina "Novalyte" technology
Accuracy	:	**+/- 0.003a_w / 0.2°C at 25°C** when the system is calibrated at min. 6 points (0.06….097 a_w)
Repeatability	:	**+/- 0.002a_w**
Communication	:	RS-232 or USB interface, PC software for analysing and visualisation

*Lab*MASTER-aw

High-precision, fast, flexible and easy!

The newest laboratory precision instrument for high reproducible, precise aw measurements under accurately controlled temperature conditions for all types of foodstuffs, cosmetics, as well as dry pharmaceutical materials. The ***Lab*Master-aw** is the only instrument in the world that enables measurements under precisely **controlled chamber temperature** conditions, selectable in the following range: 0°C to 50°C, with a precision of 0.2K. His quick response and many additional software features set the new standard for aw-value measurement. A new **multi-user** and **multi-probes management** is implemented and fulfils the first time ever all subjects of regulation or recommendations of different associations and laws.

The instrument and its sensor are very robust and have an excellent long-term stability. The Novasina electrolyte sensor delivers essentially hysteresis-free measurements. The system will be delivered in one of three operations levels **"BASIC"** (single user),**"STANDARD"** (multi user) and **"ADVANCED"** (multi user & multi channel) for a high price efficiency. An upgrade will be possible later on.

The large, clear illuminated graphic LC display is very easy to read and the menu driven software is intuitive and simple to learn.

An RS 232 or USB interface is implemented for connecting a printer or PC. PC-Software for Win9x/2000/NT/XP is provided with the instrument.

Examples of aw measurements:

• All forms of pastry and baked goods	• Meat and sausages
• Fruit concentrates	• Cheese, Milk products
• Dried foodstuffs	• Pasta, Icecream
• Medications	• Cosmetics, Lipsticks

***Lab*MASTER-aw instrument:**
Surface area: width 26, depth 44 cm
Weight : 9.8 kg
Mains supply: 90V…260V, 50/60Hz, wide range power supply

***Humidity sensor*:**
Electrolyte measurement cell CM-2
Range : 0.03...1.00aw in the range of 0…50°C.
Repeatability : +/- 0.002aw
Accuracy : +/- 0.003aw at 25°C *when fully calibrated*
Resolution : 0.001aw / 0.1°C

Temperature sensor:
Precise NTC resistor
Range : -20...80°C
Repeatability : +/- 0.1° C
Accuracy : +/- 0.3° C
Resolution : 0.1°C

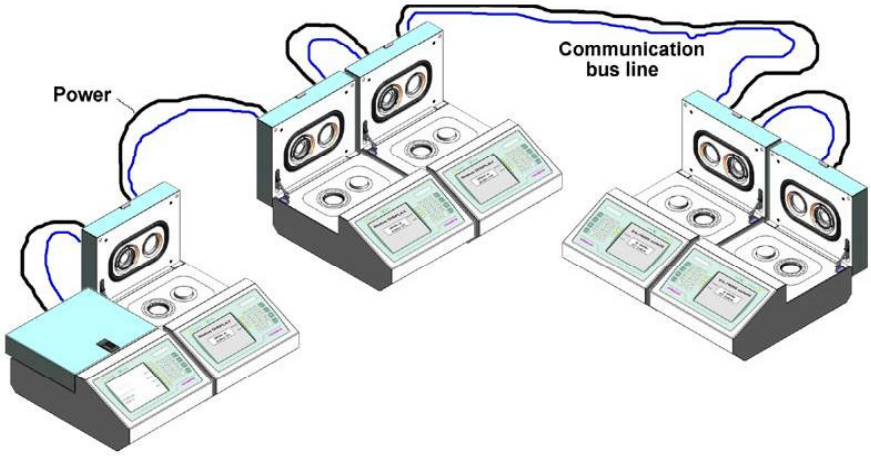
Humidity standards for calibration:
SAL-T salt tablets:
Saturated pure salt solutions, based on national standards. Novasina recommends the following calibration values:

6%, 11%, 33%, 53%, 75%, 90% and 97% rh

Novasina AG, Neuheimstrasse 12, 8853 Lachen SZ, Switzerland
Telephone +41-55-642 67 67 Fax +41-55-642 67 70 E-Mail: info@novasina.ch, www.novasina.com

novasina
The Art of Precision Measurement

Multi Channel System



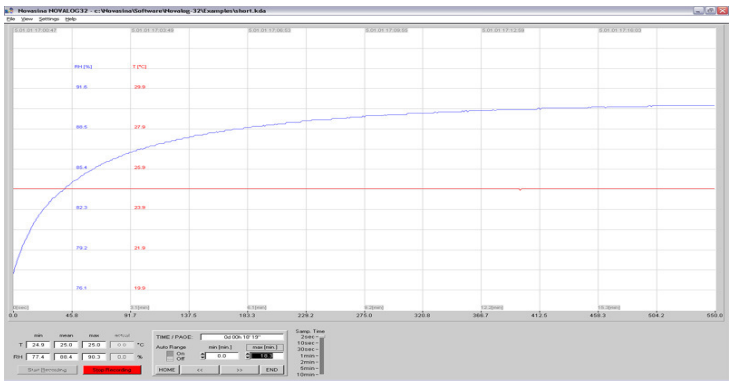
Multi Channel System

High-precision, fast, flexible, easy to use !

All precision aw-value measurements need time and are depending on the different probes as well as many other parameters. If you need to measure larger quantities of probes, you can work in parallel with the LabMaster/Partner network system. The LabPartner instrument works always together with a LabMaster, which can control up to 9 LabPartner in one network. Thus it will be possible that one LabMaster can manage and control a LabPartner that is placed far from the quality laboratory, e.g. directly on the production line.

LabPartner-aw

This non-independent instrument works only in combination with a LabMaster. It has the same technical data and sensor technology than the LabMaster-aw. A LC display informs the user about the actual measurement results. The LabMaster-aw controls this data and transmits it to a PC based analysing software tool on the computer.



Multi Channel System:

***Lab*MASTER-aw instrument:**
Mains supply: 90V…260V, 50/60Hz,
wide range power supply
*Lab*Parter is powered by
the *Lab*Master

***Lab*MASTER / *Lab*PARTNER-aw:**
Surface area: width 26, depth 44 cm
Weight : 9.8 kg

***Humidity sensor*:**
Electrolyte measurement cell CM-2
Range : 0.03...1.00aw
in the range of
0…50°C.
Repeatability : +/- 0.002aw
Accuracy : +/- 0.003aw at 25°C
when fully calibrated
Resolution : 0.001aw / 0.1°C

Temperature sensor:
Precise NTC resistor
Range : -20...80°C
Repeatability : +/- 0.1° C
Accuracy : +/- 0.3° C
Resolution : 0.1°C

Humidity standards for calibration:
SAL-T salt tablets:
Saturated pure salt solutions, based on national standards. Novasina recommends the following calibration values:

6%, 11%, 33%, 53%, 75%, 90% and 97% rh

Novasina AG, Neuheimstrasse 12, 8853 Lachen SZ, Switzerland
Telephone +41-55-642 67 67 Fax +41-55-642 67 70 E-Mail: info@novasina.ch, www.novasina.com