



# *Lab*Touch-aw







The new laboratory instrument WITH TOUCH-SCREEN for water activity measurement in foodstuff, drugs and cosmetic products.

Measurement device with touch-screen combined with a semitemperature-stabilised measurement chamber for consistent and reproducible measurement results (aw-value).

The LabTouch-aw, with its ergonomic design and the touchscreen, makes water activity measurements easier than ever before. Semi-temperature-control and active sample temperature measurements by an integrated infrared sensor, provide the highest possible reliability of measurements.

: 0.06 ... 0.97a<sub>w</sub>, (non condensing) Measurement range aw Measurement range temp. : 5 ... 45°C

: with resistive-electrolytic Sensor measurement cell CM-2

: +/-  $0.005 a_w$ , +/- 0.15KAccuracy

Communication : RS-232, USB

2x RS-485 for add. chambers SD card -> PC (NovaLog MC)



# LabTouch-aw

Fast, accurate, reliable, easy to operate

Experience the next generation of high quality water activity meters made by Novasina. Touch a new world, driven by the ease of use and fast menu access by a touch-screen combined with a semitemperature-stabilised measurement chamber for consistent and reproducible measurement results (aw-value). The latest sensor and measurement technology coupled with re-useable humidity calibration standards provide a very economical solution to precision water activity measurements . Furthermore, the standards are an easy method for double-checking the instrument and sensor's high performance.

All measurement data, including the important protocols are stored on a SD card and can be transferred to a PC or printer. Special software is available for viewing results and analysis of the data. This assures confidence in readings for quality assurance and traceability of all measurement values.

The LabTouch-aw assures high accuracy and reproducibility, longterm stability, ease of use and an economical measurement system. Get ready for the new standard for aw-value measurement.

# Typical samples:

- Lean meat, fresh meat
- Bakery products with filling
- Fruits, dried products, milk powder, spices
- Chocolate
- Cosmetics
- Petfood

# Measurement device LabTouch-aw:

Dimensions: 105 x 200 x 300mm (HxWxL) Touch-screen: 55 x 95mm (color LCD)

: 2.8 kg Power supply : External supply

# **Operation ranges:**

Temperature : 5 ... 45 °C : 0.06 ... 0.97 a<sub>w</sub>

# Humidity sensor:

Electrolyte measurement cell

Type : CM-2 incl. stored

calibration values (11, 33, 58, 75,84, 90, 97%RH)

# Temperature measurement:

Precision infrared surface sensor as well as NTC temperature sensor

# Meaasurement chamber temp. control:

Accuracy : +/- 0.05° K

Chamber temperature must be always +2°C above environmental temperature.

# **Humidity standards** Salt tablets SAL-T:

Various re-usable salt solutions are available for instrument verification and calibration. For more information please consult the chapter accessories.



# Measurement instrument LabTouch / Click-aw



# LabTouch-aw "BASIC"

single-channel



260 0775 LabTouch-aw "BASIC"

# LabTouch-aw "BASIC"

Bench-top laboratory measurement instrument with semi-temperature controlled measurement chamber and touch-screen.

Further functions:

- Stability parameter, time & date displayed on LCD screen
- Semi-temperature-stabilized measurement chamber
- Re-usable SAL-T humidity standards
- Fast and precise thanks to "Novalyte" technology
- Specific chemical sensor protection filters available
- Calibration data is stored on the sensor
- Data logging function with SD card Factory calibration at 7 aW-value points
- Checking, testing and adjusting possibilities with SAL-T humidity standards

### LabTouch-aw includes:

Dimensions: 200 x 300x 95 mm Weight : 2.800 kg

- Measurement device LabTouch
- External universal power supply
- SD card 2GB Memory
- 4 SAL-T: 33, 58, 75, 84% RH
- 40 sample dishes ePW
- Spare pre-filters white (5 pcs)
- Tension ring
- Operating instructions
- Factory certificate of 7-point calibration,

11-33-58-75-84-90-97%

# LabTouch-aw "ADVANCED"

multi-channel system



The flexible LabTouch-aw system can be extended by max. 2 additional external LabClick-aw chambers. This offers a higher measurement capacity running 2 or 3 chambers contemporaneously. The calibration and system management is made by the LabTouch-aw "ADVANCED". The external chambers can be put in a climatic chamber if required.



**260 0776** *Lab*Touch-aw "ADVANCED"

# LabTouch-aw "ADVANCED"

Bench-top laboratory measurement instrument with semi-temperature controlled measurement chamber and touch-screen.

Further functions:

- Stability parameter, time & date displayed on LCD screen
- Semi-temperature-stabilized measurement chamber
- Re-usable SAL-T humidity standards
- Fast and precise thanks to "Novalyte" technology
- Specific chemical sensor protection filters available
- Calibration data is stored on the sensor
- Data logging function with SD card
- Factory calibration at 7 aW-value points
- Checking, testing and adjusting possibilities with SAL-T humidity standards
- Option to connect max. 2 external chambers LabClick-aw

# LabTouch-aw includes:

Dimensions: 200 x 300x 95 mm

Weight : 2.800 kg

- Measurement device LabTouch
- External universal power supply
- SD card 2 GB Memory
- 4 SAL-T: 33, 58, 75, 84% RH
- 40 sample dishes ePW
- Spare pre-filters white (5 pcs)
- Tension ring
- Operating instructions
- Factory certificate of 7-point calibration. 11-33-58-75-84-90-97%
- Novalog MC software
- USB interface

# LabClick-aw



260 0838 LabClick-aw

External chamber with 2-line LCDisplay to be connected to a LabTouch-aw "ADVANCED" for extended measurement capacity. Operation and calibration is made by the main unit LabTouch-aw "ADVANCED".

Remark: The LabClick-aw has NO semi-temperature stabilized measurement chamber. Make sure the ambient temperature is stable during the measurement or place the instrument inside a climatic chamber.

# LabClick-aw includes:

Dimension s: 140 x 225x 80 mm Weight: 1.600 kgs

- Measurement device LabClick-aw
- External universal power supply
- Connection cable 1.8 m
- · Operating instructions
- Factory certificate of 6-point calibration, 11-33-58-75-84-90%

Remark: pre-filters, SAL-T and sample dishes are not included



# Accessories for LabTouch / Click-aw



# Accessories for LabTouch-aw

for "BASIC" and "ADVANCED"



External power supply 260 0505 with universal plug

# External power supply with universal plug insert for all socket standards

Power supply and battery charger (for *Lab*Swift-aw with akku). The same power supply is ready for the *Lab*Touch-aw and *Lab*Click-aw.

<u>Attention:</u> Please use only the external power supply delivered by Novasina.

# Power supply:

90-264 VAC / 50-60Hz

Output : 5 VDC / 10W Plug : Stereo plug

(instrument side) Diameter 4 mm

Weight: 130 g

Cable length: approx. 1.5 m



260 0188 PC-SW Novalog MC

# PC software NovaLog MC

This optional Windows software allows the analysis and graphical display of the measurement data.

# Software suitable for :

Windows 98/2000/XP/Vista and Windows 7

# Consisting of:

CD with **Novalog MC** software for Windows system

Weight: 180g



111 0601 ePW sample dishes

# Sample dishes ePW

Box with 100 sample cups.

These cups are for all Novasina aw instruments. They are disposable, intended for a single use.

# A box contains:

100 sample cups ePW

Material : Polypropylene Dimensions : 40mm diameter

x 12mm depth

Weight: 440 g



<u>111</u>	7440	->	SAL-T	4%	RH
<u>111</u>	<u>6453</u>	->	SAL-T	6%	RH
111	0930	->	SAL-T	11%	RH
<u>111</u>	0932	->	SAL-T	33%	RH
111	0934	->	SAL-T	53%	RH
<b>260</b>	0189	->	SAL-T	58%	RH
<u>111</u>	0936	->	SAL-T	75%	RH
111	9886	->	SAL-T	84%	RH
<u>111</u>	0938	->	SAL-T	90%	RH
<u>111</u>	9887	->	SAL-T	97%	RH

# **SAL-T salt tablets**

Standards based on saturated salt solutions in plastic tablets with humidity-permeable membranes. Each salt is delivered in an airtight can. SAL-T are available with following humidity values (at 25°C):

colour	white
colour	white
colour	white
colour	blue
colour	green
colour	white
colour	purple
colour	white
colour	white
colour	yellow
	colour colour colour colour colour colour colour

**Important:** please consult the operation manual of your instrument to see which points can be calibrated. Other SAL-T can be used for verification.

# Humidity values in the temperature range 15° .... 30°C:

4.3 3.0%	rh
6.9 6.2%	rh
11.3 11.3%	rh
33.3 32.4%	rh
55.9 51.4%	rh
60.7 56.0%	rh
75.6 75.1%	rh
85.9 83.6%	rh
90.9 89.9%	rh
97.9 97.0%	rh

The precision corresponds to eg. the Greenspan Report 1977 typically +/- 0.3 % rh

Weight: 50 g each



111 7000 -> SAL-T/C 6% RH 111 1056 -> SAL-T/C 11% RH 111 1057 -> SAL-T/C 33% RH 111 0060 -> SAL-T/C 53% RH 260 0190 -> SAL-T/C 58% RH 111 1063 -> SAL-T/C 75% RH 260 0276 -> SAL-T/C 84% RH 111 1065 -> SAL-T/C 90% RH

111 9981 -> SAL-T/C 97% RH

# Salt tablets SAL-T/C certified with European certificate

Humidity standards based on saturated salt solutions in plastic tablets with humidity-permeable membranes. Each salt is delivered in an airtight can. SAL-T are available with the following humidity values (at 25°C):

6.4 %	colour white	<b>57.6</b> %	colour white
11.3 %	colour white	75.3 %	colour purple
32.8 %	colour blue	84.3 %	colour white
52.9 %	colour green	90.1 %	colour white
	_	97.3 %	colour yellow

**Important:** please consult the operation manual of your instrument to see which points can be calibrated. Other SAL-T can be used for verification.

# Internationally accredited laboratory:



All Novasina humidity standards are also available with an internationally recognised certificate from an accredited European laboratory (UKAS England)

Weight : 50g each



# Accessories & spare parts for LabTouch / Click-aw





260 0191 Carrying case with 5 pcs SAL-T

# Set of 5 SAL-T salt tablets

Humidity standards based on saturated salt solutions in plastic tablets with humidity-permeable membranes. Each salt is delivered in an airtight can. The set consists of a case containing one each of the following values (at 25°C):

11.3 %	colour	white
32.8 %		blue
57.6 %	colour	white
75.3 %	colour	purple
84.3 %	colour	white

# Case with 5 salt tablets

SAL-T for 11 ... 90%rh.

Humidity values in the temperature range 15° .... 30°C:

11.3	 11.3%	rh
33.3	 32.4%	rŀ
60.7	 56.0%	rŀ
75.6	 75.1%	rh
85.9	 83.6%	rh

The precision corresponds to the *Greenspan Report 1977* typically +/- 0.3 % rh

Weight: 670 g



see price list UKAS certificate

# Certification

of an aw measurement instrument in an accredited European laboratory

A UKAS-laboratory will certify the instrument at two or more humidity values and at several different temperatures if required.

### Accredited lab:



Certified instruments can be also supplied.



111 1001 -> eVC-21 111 1003 -> eVC-26 111 0995 -> eVALC 111 0997 -> eVMT-2

# **Cell protection filters**

A number of filters are available to protect the measurement cell from abrasion or corrosive volatiles.

-> Please consult the Novasina filter data sheet for more details about the sample substances and the correct selection of the most suitable filter for your application.

# Cell protection filters:

111 1001 -> eVC-21 (10 pcs) 111 1003 -> eVC-26 (10 pcs) 111 0995 > eVALC (2 pcs) 111 0997 -> eVMT-2 (5 pcs)

Dimensions: 36 x 3mm

Weight : 30 g each filter

111 7212 -> Redox

# **Cell protection filter REDOX**

Special protection filter against volatiles such as aromatic substances, ethanol, glycol etc. which can be present in a sample.

**Important:** this filter is subject to saturation, therefore it must be checked and replaced regularly.

-> Please consult the Novasina filter data sheet for more details about the sample substances and the correct selection of the most suitable filter for your application.

# Cell protection filters:

111 7212 -> Redox ( 1 pc)

Dimension : 36 x 3mm

Weight : 60 g

# Spare parts for LabTouch-aw

# 3 1 2

 260 0211
 Gasket
 : 1

 260 0183
 Pre-filter white
 : 2

 260 0210
 Tension ring
 : 3

# Spare parts to measurement head LabTouch/Click-aw

- 1 Gasket to *Lab*Swift/Touch/Chamber-aw Recommendation: Seal ring should be replaced and lubricated regularly.
- 2 Pre-filter white (only dustfilter), 5 pcs
- 3 Tension ring for filter fixation

**Remark:** these spare parts are the same as used for LabStart-aw and LabSwift-aw

# Spare parts chamber:

- Gasket
- Pre-filter white
- Tension ring

Weight: 1 : 10 g 2 : 10 g 3 : 5 g



# Spare parts / Upgrade - LabTouch / Click-aw





260 0193 SD card

# SD card

SD-card for measurement data and protocol storage. The data can be analysed by spreadsheet programs

# Consisting of:

• SD memory card

Blister

Memory: 2 GB

Weight: 6g



111 9983 CM-2 measurement cell

# CM-2 measurement cell

Replaceable, calibrated measurement system with calibration point memory on the basis of the unique Novasina "Novalyte" technology. The inbuilt active heating element avoids condensation on the humidity sensing element.

**Attention:** do not touch the top of the measurement cell. Neither by hand nor with any other object!

# Measurement system CM-2:

 $\begin{array}{lll} \text{Meas. range} & : 0.03...1.00a_w \\ \text{Storage temp.} & : 0...50^{\circ}\text{C} \\ \text{Storage humidity} & : 10....80\% \text{ RH} \end{array}$ 

Fully calibrated at 9 calibration points

Weight : approx. 2 g

# Upgrade kit for LabTouch-aw

# 00010101 1001

# Firmware upgrade "BASIC"-"ADVANCED"

Enables an upgrade from *Lab*Touch-aw "BASIC" to "ADVANCED".

# Additional functions :

- Activation of RS-232 and USB Interface for NovaLog MC connections
- Multi-Channnel functions for connection of max. 2 LabClick
- including visualization Software NovaLog MC

# Upgrade for LabTouch-aw:

- Firmware upgrade for additional functions :

# **BASIC to ADVANCED level**

- NovaLog MC visualisation and analysis software
- USB / RS-232 interface cable 1,8m.

260 0893 Firmware upgrade