



General Catalogue AW

2016

Water activity measurement instruments

for

Foodstuff

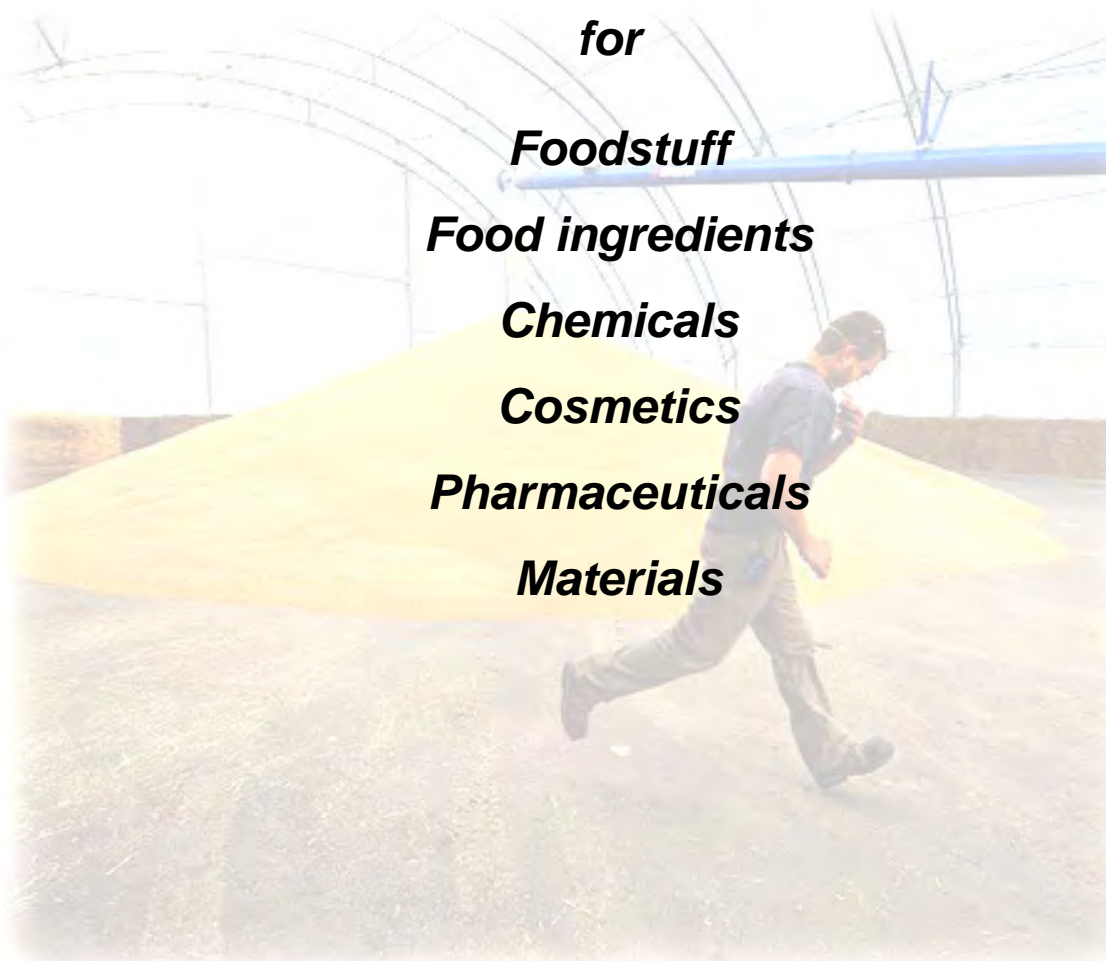
Food ingredients

Chemicals

Cosmetics

Pharmaceuticals

Materials



Manufacturer :

Novasina AG

Neuheimstrasse 12, CH-8853 Lachen, Switzerland

Telephone +41 55 642 67 67

Fax +41 55 642 67 70

www.novasina.com

E-Mail : info@novasina.ch



Table of contents

ClimMate-set aw	<i>“Portable water activity instrument with big box”</i>	4
Accessories		5
Spare parts		6
LabStart-aw	<i>“Portable water activity instrument with standard box”</i>	7
Accessories		8
Spare parts		10
LabSwift-aw	<i>“Mobile water activity instrument with data acquisition”</i>	11
Accessories		12
Spare parts		14
LabTouch-aw	<i>“Touch screen water activity instrument with Quick mode”</i>	15
Accessories		17
Spare parts		18
Upgrade		19
LabMaster-aw	<i>“Bench top water activity instrument”</i>	20
Accessories		21
LabMaster/Partner-aw	<i>“Multi-Channel bench top system”</i>	22
Accessories		23
Spare parts		25
Upgrade & Updates		26
Application overview	<i>“which instrument for which application”</i>	27



ClimMate-set aw

Portable water activity instrument for aW measurement in bulk goods with big sample box

This low cost water activity measurement device is intended to be used directly at-line or in the field. It is battery powered and with its large sample box sensor suitable for an indicative water activity measurement in bulk goods.

Its accuracy can be checked at any time using re-usable saturated salt calibration standards SAL-SC.

The **ClimMate-set aw** is delivered including all required accessories.

Measurement range aW	: 0.00 ... 1.00a _w
Measurement range temp.	: 15 ...30°C (recommended)
Sensor	: resistive-electrolytic probe nSens-HT-ENS
Sensor accuracy	: typical +/- 0.005 ... +/- 0.025 a _w typical +/- 0.1 +/- 0.2K (depending on measurement range)



ClimMate-set aw

Mobile, versatile and reliable for bulk goods

The ClimMate is a versatile handheld device for detection and storage of various parameters such as water activity, relative humidity, temperature, absolute pressure and other calculated parameters.

The user gets a complete solution, which is based on the unique high precision Novasina sensing technology. State-of-the-art operation and display unit excels as big, colour LCD touch screen, easy and intuitive menu structure and data logging capability with up to 2 million data point storage. The ClimMate can be connected to a PC for data download, visualisation or export using the included SmartGraph III software. The device is powered by 4 pcs standard AA LR6 alkaline batteries.

The ClimMate-set aw has been designed for on site water activity measurement for all samples without volatiles. These can be bulk goods for example in bags, or large samples measured inside the sample cup. The instrument is simple to operate and is supplied in a complete set including re-useable humidity calibration standards for verification and calibration.

Important information

Since this device does not have any aW equilibrium observation, it is recommended only for applications where approximate values of water activity are sufficient.

Typical samples:

- **Cereals**
- **Granulates**
- **Powders**
- **Dried samples**

Measurement device ClimMate-set aw:

Case dimensions	: 510x430x150mm
Weight	: 3.5 kg
Power supply	: 4 AA LR6 alkaline batteries

Operation ranges:

a _w	: 0.0 ... 1.00 a _w (non-condensing)
Temperature	: 15 ... 30°C

Humidity sensor:

Electrolytic intelligent measurement probe with calibration data storage

Type	: nSens-HT-ENS incl. stored calibration values (11, 33, 53, 75, 90%RH)
------	--

Temperature measurement:

Precision NTC temperature sensor

Humidity standards

Salt SC :

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



ClimMate-set aw



260 1288 ClimMate-set aw

ClimMate-set aw with nSens-HT probe

Set in carrying case contains :

- Multifunction handheld instrument *ClimMate*
- nSens-HT-ENS probe incl. nLink-UMB adapter
- Sample box for bulk goods
- USB cable, length 1.8m
- nSens extension cable, length 2m
- 4 alkaline batteries LR6 AA, 1,5V
- Humidity references SAL-SC 33% & 75%RH
- Adapter SAL-SC for nSens probes
- Factory calibration certificates
- Short instruction manual
- SmartGraph III software on CD

- Dimensions: Carrying case
510x430x150mm
- Total weight : 3'500 gr
- Instrument :
- Dimensions : 170 x 62 x 34mm (ClimMate)
 - Weight: 205 gr (ClimMate)
 - nSens-HT incl. nLink-UMB
Length 170mm x Ø 13mm
 - Absolute pressure sensor integrated
Measurement range 800....1'100 mbar

Accessories for ClimMate-set aw



260 1094 nSoft-CAL Software

nSoft-CAL calibration kit

Windows based software for the verification and calibration of nSens probes with the PC. Runs on Windows 98/2000/XP/Vista/Windows 7 and 8.

Incl. nLink-USB connection cable with 1,8m cable length

- Contains:
- nSoft-CAL Software on CD
 - PDF Operating Manual on CD
 - nLink-USB connection cable for nSens probes with cable length of 1,8m



- 260 0978** -> SAL-SC 6
111 0885 -> SAL-SC 11
111 0855 -> SAL-SC 33
111 0857 -> SAL-SC 53
260 0219 -> SAL-SC 58
111 0859 -> SAL-SC 75
251 8965 -> SAL-SC 84
111 0896 -> SAL-SC 90
251 8966 -> SAL-SC 97

Sensor-Checks SAL-SC (rh standards)

Reusable humidity standards based on saturated salt solutions in plastic cylinders with moisture permeable membranes. Each salt is delivered in a well-sealed box. Sensor Checks SC are obtainable for the following values (at 25°C) :

6.4 % rh	
11.3 % rh	75.3 % rh
32.8 % rh	84.3 % rh
52.9 % rh	90.1 % rh
57.6 % rh	97.3 % rh

Important:

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

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

6.9	.....	6.2% rh	/ 15....30°C
11.3	.....	11.3% rh	/ 15....30°C
33.3	.....	32.4% rh	/ 15....30°C
55.9	.....	51.4% rh	/ 15....30°C
60.7	.....	56.0% rh	/ 15....30°C
75.6	.....	75.1% rh	/ 15....30°C
85.9	.....	83.6% rh	/ 15....30°C
90.9	.....	89.9% rh	/ 15....30°C
97.9	.....	97.0% rh	/ 15....30°C

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

Weight : 90 g



- 111 1044** -> SAL-SC 11 C
111 1037 -> SAL-SC 33 C
111 1040 -> SAL-SC 53 C
111 1035 -> SAL-SC 75 C
260 1272 -> SAL-SC 84 C
111 1032 -> SAL-SC 90 C
260 1275 -> SAL-SC 97 C

Sensor-Checks SAL-SC with European certificate

Reusable humidity standards based on saturated salt solutions in plastic cylinders with moisture permeable membranes. Each salt is delivered in a well-sealed box. Sensor Checks SAL-SC are obtainable for the following values (at 25°C) :

11.3 % rh
32.8 % rh
52.9 % rh
75.3 % rh
84.3 % rh
90.1 % rh
97.3 % rh

Internationally accredited laboratory



All Novasina humidity standards can also be supplied with an internationally recognised certificate from an accredited European laboratory (UKAS England).

Weight : 90 g



260 0872 USB power supply

USB power supply

Power supply with USB socket for ClimMate. If powered by this power supply, the internal AA batteries are only for backup in case of a power failure.

2m USB cable already included in ClimMate set

Remark: internal alkaline batteries cannot be charged

Dimensions: 55x25x80 mm

Weight: 50 g

Input power : 100...260V AC 50/60 Hz
Output power : +5V DC USB
1200mA / 6W

Housing/protection: plastic ABS / IP40

Spare parts for ClimMate-set aw



260 1143 Adapter SAL-SC / nSens

Adapter SAL-SC

- for nSens probes

Plastic adapter for humidity standards. Used for diameter reduction and radial sealing around the nSens probe with diameter 13mm.

With integrated rubber sealing ring.

Dimension : Out diam.30/In.diam 13 mm (nSens)

Weight : 5 g

Material : Thermoplastic resin



260 1147 nCap-PS Filter

nCap-PS filter protection cap

With silver oxide coated filter insert.

For optimal mechanical sensor protection as well as protection against dust.

Additional basic chemical sensor protection.

For particle sizes of <10 µm.

Dimension: Ø12.6mm x L36.1mm

Housing material: PVDF black

Filter insert: Polyethylene/silver oxide



260 1171 nSens-HT-ENS

nSens-HT-ENS probe

Digital nSens-HT **humidity & temperature** probe with resistive-electrolytic humidity and NTC temperature sensor. With nCap-PS filter protection cap.

The calibration points are saved directly on the probe. The verification and calibration is done by the separately available nSoft-CAL calibration software. The plug-in probe can be replaced very easily.

Spare part sensor compleat !

Dimension: L101mm x Ø 13mm
Detailed information can be found in the technical data sheet.

Communication: digital by Bus-system

Fact. calibration: at 5 humidity points at 1 temp. incl. certificate

Verification & calibration: with nSoft-CAL software



260 1254 Sample cup large

Sample cup large

For bulk samples such as grain, granulates, powders etc.

Including lid with screw joint for nSens-HT-ENS fixation and

Cup dimensions: Ø 80 mm, height 95mm

Material: Polypropylene



LabStart-aw



Portable low cost precision instrument for water activity measurement (a_w) in foodstuff and powder products

This compact low cost water activity measurement device is intended for a mobile measurement directly at-line and has been developed for standard applications and for users, who want to start with the water activity measurement.

Its accuracy can be checked at any time using re-usable saturated salt calibration standards.

The **LabStart-aw** is delivered including all necessary accessories.

Measurement range a_w	: 0.20 ... 0.80 a_w
Measurement range temp.	: 15 ... 30°C (Sample $\pm 5^\circ\text{C}$ over ambient)
Sensor	: with resistive-electrolytic measurement cell CM-4
Instrument accuracy	: $\pm 0.03 a_w$ $\pm 0.3\text{K}$



LabStart-aw

Mobile, accurate, reliable and low cost

A good start is essential for every project and undertaking. That is why the LabStart-aw has been developed to introduce quality managers, production personnel and laboratory technicians to water activity measurement. This instrument is simple to operate, providing basic measurement functions, yet still having built-in automatic equilibrium detection and the well-proven resistive-electrolytic sensor technology as employed in all Novasina water activity meters. As standard, the LabStart-aw is supplied with one re-useable humidity calibration standard which provides a very economical solution to precision water activity measurements in one simple kit. Furthermore, the calibration standard is an easy method for verification of the instrument's high performance.

Optional chemical protection filters assist with high solvent – content samples, as well as accurate water activity detection with high repeatability.

Although the LabStart-aw is a starter instrument, it offers great value, is simple and easy-to-use.

Are you ready to begin your water activity measurements?

Typical samples:

- Pastries, bread and similar
- Cereals
- Spices
- Powders, dried samples
- Dried foodstuff in general

Measurement device

LabStart-aw:

Dimensions : 85x140x225 mm (HxWxL)
Weight : 1.2 kg
Power supply : External supply

Operation ranges:

Temperature : 15 ... 30 °C
 a_w : 0.20 ... 0.80 a_w

Humidity sensor:

Electrolyte measurement cell

Type : **CM-4** incl. stored calibration values (33, 75%RH)

Temperature measurement:

Precision NTC temperature sensor

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.



LabStart-aw set



LabStart-aw set

The new LabStart-aw is a precise and handy instrument for the aw-value measurement of foodstuff, powder products. It is delivered including all accessories.

The device can be checked and adjusted at any time with the included SAL-T humidity standard.

LabStart-aw set consisting of :

- Measurement device LabStart-aw
- External universal power supply
- 1 SAL-T: 75% RH
- 25 sample dishes ePW
- Spare pre-filters white (5 pcs)
- Tension ring
- Factory certificate of 2-point calibration 33% and 75% RH

Weight : 1.500 kgs

LabStart-aw set
260 0992 incl. power supply

Accessories for *LabStart-aw*



External power supply with universal plug insert for all socket standards

Power supply and battery charger

Attention: 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

External power supply
260 0505 with universal plugs



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

111 0601 ePW sample dishes



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):

3.4 %	52.9 %
6.4 %	57.6 %
11.3 %	75.3 %
22.5 %	84.3 %
32.8 %	90.1 %
43.2 %	97.3 %

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

SAL-T 23 and SAL-T 43 can only 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
23.4	.....	21.6% rh
33.3	.....	32.4% rh
43.2	.....	43.2% 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 7440 -> SAL-T 4% RH
111 6453 -> SAL-T 6% RH
111 0930 -> SAL-T 11% RH
260 0960 -> SAL-T 23% RH
111 0932 -> SAL-T 33% RH
260 0961 -> SAL-T 43% RH
111 0934 -> SAL-T 53% RH
260 0189 -> SAL-T 58% RH
111 0936 -> SAL-T 75% RH
111 9886 -> SAL-T 84% RH
111 0938 -> SAL-T 90% RH
111 9887 -> SAL-T 97% RH



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 %	52.9 %	90.1 %
11.3 %	57.6 %	84.3 %
32.8 %	75.3 %	97.3 %

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



[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

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)

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 LabStart-aw



260 0211	Gasket	: 1
260 0183	Pre-filter white	: 2
260 0210	Tension ring	: 3

Spare parts to measurement head LabStart-aw :

1 Gasket to LabStart-aw

Recommendation: Seal ring should be replaced and lubricated regularly.

2 Pre-filter white, 5 pcs

3 Tension ring for filter fixation

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

Spare parts to LabSwift-aw:

- Gasket
- Pre-filter white
- Tension ring

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



[260 0995](#) CM-4 measurement cell

CM-4 measurement cell

(for LabStart-aw instruments only)

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-4:

Meas. range	: 0.03...1.00a _w
Storage temp.	: 0...50°C
Storage humidity	: 10...80% RH

Calibrated at the following points:
33% and 75% RH

Weight	: approx. 2 g
--------	---------------



LabSwift-aw

Portable, battery powered precision instrument for water activity measurement (a_w) in foodstuff, pharmaceuticals, chemical products and cosmetics

This compact and handy water activity measurement device with optional rechargeable batteries can be easily used for mobile measurement of the quality parameter water activity (a_w) directly at-line or in small laboratories.

Its accuracy can be checked at any time using re-usable saturated salt calibration standards.

The instrument is delivered incl. all accessories and carrying case.

Measurement range a_w	: 0.11 ... 0.90a _w , (non condensing)
Measurement range temp.	: 5 ... 45°C
Sensor	: with resistive-electrolytic measurement cell CM-2
Instrument accuracy	: +/- 0.01 a _w , +/- 0.15K
Communication	: SD card -> PC



LabSwift-aw

Mobile, fast, accurate, reliable

The *LabSwift-aw* instrument combines modern technology with measurement speed and high accuracy. Thanks to the Novasina electrolyte sensor the device is able to determine the a_w-value very accurately in products of all kinds. Furthermore it is robust, stable and maintenance-free.

The integrated large LC-Display eases the value reading. The ergonomic design and the optional Lithium-Ions long life battery allows a mobile measurement. For stationary use an external power supply is available. The air-tight measurement chamber (not temperature controlled) disposes of a spring-loaded measurement head. The temperature can be read at any time on the display. The new developed stability value settings enable an easy handling for optimal a_w measurements. The stability status is appears on the instrument's display. A data logging function by SD card permits a storage of all measurement data, including the protocols, which can be easily transferred to a PC or printer. A special software is available for a detailed analysis of these data.

The instrument is delivered with a robust plastic carrying case including accessories such as humidity standards, filters, ePW sample dishes etc..

Measurement device LabSwift-aw:

Dimensions	: 85x140x225 mm (HxWxL)
Weight	: 1.2 kg
Power supply	: External supply and/or Lithium-Ions battery (optional) 1700 mAh

Operation ranges:

Temperature	: 5 ... 45 °C
a _w	: 0.11 ... 0.90 a _w

Humidity sensor:

Electrolyte measurement cell	
Type	: CM-2 incl. stored calibration values (11, 33, 58, 75, 90%RH)

Temperature measurement:

Precision infrared surface sensor as well as NTC temperature sensor

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

Typical samples:

- Pastries, bread and similar
- Cereals
- Milk powder, spices
- Powders, dried samples
- Dried foodstuff in general

LabSwift-aw sets



LabSwift-aw set (without battery)



LabSwift-aw set (without battery)
260 0177 incl. power supply

LabSwift-aw set

The new LabSwift-aw is a precise and handy instrument for the aw-value measurement of foodstuff, pharmaceuticals and cosmetics. It is delivered with a plastic carrying case including accessories. A SD-card interface enables the transfer of all measurement data to a PC or printer.

The device can be checked and adjusted at any time with the included SAL-T humidity standards.

LabSwift-aw set consisting of :

- Measurement device LabSwift-aw
- External universal power supply
- SD card
- 3 SAL-T: 11, 58, 84% RH
- 40 sample dishes ePW
- Spare pre-filters white (5 pcs)
- Tension ring
- Operating instructions
- Factory calibration certificate of the 6-point calibration 11-33-58-75-84-90%

Weight : 3.000 kgs

LabSwift-aw Set (with battery)



LabSwift-aw set (with battery)
2600179 incl. power supply

LabSwift-aw set & BAT

The new LabSwift-aw is a precise and handy instrument for the aw-value measurement of foodstuff, pharmaceuticals and cosmetics. The built in Lithium-Ions rechargeable battery allows mobile measurements. The set is delivered with a plastic carrying case including accessories. A SD-card interface enables the transfer of all measurement data to a PC or printer.

The device can be checked and adjusted at any time with the included SAL-T humidity standards.

LabSwift-aw set consisting of :

- Measurement device LabSwift-aw
- External universal power supply
- Battery incl. electronics (built in)
- SD card
- 3 SAL-T: 11, 58, 84% RH
- 40 sample dishes ePW
- Spare pre-filters white (5 pcs)
- Tension ring
- Operating instructions
- Factory certificate of 6-point calibration, 11-33-58-75-84-90%

Weight : 3.100 kgs

Accessories for LabSwift-aw



External power supply
260 0505 with universal plugs

External power supply with universal plug insert for all socket standards

Power supply and battery charger

Attention: 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



260 0187 Battery set

Battery set to LabSwift-aw

Lithium-Ions rechargeable battery & electronics

Optional battery set for mobile power supply of the LabSwift-aw. In continuous operation the LabSwift-aw runs >20 hours with this battery.

Attention: The assembly of the battery shall only be made by a qualified Novasina representative.

Battery set to LabSwift-aw:

Lithium-Ions rechargeable battery with electronics :

Battery with PCB : +3.7 VDC
Capacity : 1700 mAh

Weight : 50 g

For LabSwift-aw only !



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



111 7440 -> SAL-T 4% RH

111 6453 -> SAL-T 6% RH

111 0930 -> SAL-T 11% RH

260 0960 -> SAL-T 23% RH

111 0932 -> SAL-T 33% RH

260 0961 -> SAL-T 43% RH

111 0934 -> SAL-T 53% RH

260 0189 -> SAL-T 58% RH

111 0936 -> SAL-T 75% RH

111 9886 -> SAL-T 84% RH

111 0938 -> SAL-T 90% RH

111 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):

3.4 %	52.9 %
6.4 %	57.6 %
11.3 %	75.3 %
22.5 %	84.3 %
32.8 %	90.1 %
43.2 %	97.3 %

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

SAL-T 23 and SAL-T 43 can only 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
23.4	.....	21.6% rh
33.3	.....	32.4% rh
43.2	.....	43.2% 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 %	52.9 %	90.1 %
11.3 %	57.6 %	84.3 %
32.8 %	75.3 %	97.3 %

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



[see price list UKAS certificate](#)

Certification

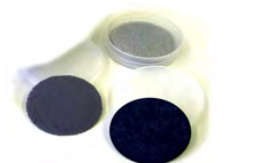
of an aw measurement instrument in an accredited European laboratory

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

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)

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.

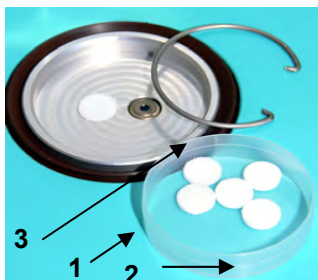
Cell protection filters:

111 7212 -> Redox (1 pc)

Dimension : 36 x 3mm

Weight : 60 g

Spare parts for LabSwift-aw



260 0211 Gasket : 1
260 0183 Pre-filter white : 2
260 0210 Tension ring : 3

Spare parts to measurement head LabSwift-aw :

1 Gasket to LabSwift-aw

Recommendation: Seal ring should be replaced and lubricated regularly.

2 Pre-filter white, 5 pcs

3 Tension ring for filter fixation

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

Spare parts to LabSwift-aw:

- Gasket
- Pre-filter white
- Tension ring

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



260 0193 SD card

SD card to LabSwift-aw

SD-card for measurement data and protocol storage. The data can be analysed by spreadsheet programs or by the optional Novalog MC PC-software.

Consisting of:

- SD memory card 4 GB
- Blister

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:

Meas. range : 0.03...1.00a_w
Storage temp. : 0...50°C
Storage humidity : 10...80% RH

Fully calibrated at 9 calibration points

Weight : approx. 2 g



LabTouch-aw

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

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

The **LabTouch-aw**, with its ergonomic design and the touch-screen, 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.

Measurement range a_w : 0.06 ... 0.97 a_w , (non condensing)

Measurement range temp. : 5 ... 45°C

Sensor : with resistive-electrolytic measurement cell CM-2

Instrument accuracy : +/- 0.005 a_w , +/- 0.15K

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 semi-temperature-stabilised measurement chamber for consistent and reproducible measurement results. 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 and protocols are stored on a **SD card** and can be transferred to a PC or printer. A software is available for data analysis. This assures confidence in readings for quality assurance and traceability of all measurement values.

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

NEW!
LabTouch-aw-Advanced - now with quick mode function for very fast measurement and user-password protection.

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)
Weight : 2.8 kg
Power supply : External supply

Operation ranges:

Temperature : 5 ... 45 °C
 a_w : 0.06 ... 0.97 a_w

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

Measurement 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.



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 LabTouch-aw
"ADVANCED"

NEW!

LabTouch-aw-Advanced - now with quick mode function for very fast measurement and USER-password protection.

LabTouch-aw "ADVANCED"

Bench-top laboratory measurement instrument with semi-temperature controlled measurement chamber and touch-screen and following functions:

- Stability parameter, time & date 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:

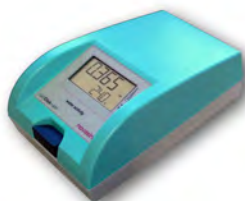
Dimensions : 200 x 300x 95 mm
Weight : 2.800 kg

- 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

External chamber with 2-line LCD display 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.



260 0838 LabClick-aw

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-aw for "BASIC" and "ADVANCED"



External power supply
260 0505 with universal plugs

External power supply with universal plug insert for all socket standards

Power supply and battery charger (for **LabSwift-aw** with akku). The same power supply is ready for the **LabTouch-aw** and **LabClick-aw**.

Attention: 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



111 7440 -> SAL-T 4% RH

111 6453 -> SAL-T 6% RH

111 0930 -> SAL-T 11% RH

260 0960 -> SAL-T 23% RH

111 0932 -> SAL-T 33% RH

260 0961 -> SAL-T 43% RH

111 0934 -> SAL-T 53% RH

260 0189 -> SAL-T 58% RH

111 0936 -> SAL-T 75% RH

111 9886 -> SAL-T 84% RH

111 0938 -> SAL-T 90% RH

111 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):

3.4 %	52.9 %
6.4 %	57.6 %
11.3 %	75.3 %
22.5 %	84.3 %
32.8 %	90.1 %
43.2 %	97.3 %

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

SAL-T 23 and SAL-T 43 can only 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
23.4	21.6% rh
33.3	32.4% rh
43.2	43.2% 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 %	52.9 %	90.1 %
11.3 %	57.6 %	84.3 %
32.8 %	75.3 %	97.3 %

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



[see price list UKAS certificate](#)

Certification

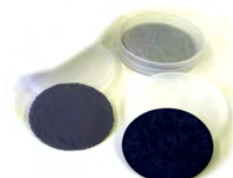
of an aw measurement instrument in an accredited European laboratory

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

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)

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



[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 LabSwift/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



[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 : 4...8 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:

Meas. range : 0.03...1.00a_w
Storage temp. : 0...50°C
Storage humidity : 10...80% RH

Fully calibrated at 9 calibration points

Weight : approx. 2 g

Upgrade kit for *LabTouch-aw*



260 0893 Firmware upgrade

Firmware upgrade : „BASIC“-„ADVANCED“

Enables an upgrade from *LabTouch-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*
- Activation of quick mode measurement
- Activation of user password protection system
- 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.



LabMaster - aw



A professional laboratory instrument for a very precise measurement of aw values (water activity) in foodstuff, drugs, cosmetics etc.. The temp. of the measurement chamber may be set in the range from 0°C to 50°C and kept consistently with an accuracy of +/-0.2K.

This instrument runs the most used aw measuring technology, the electrolytic resistive principle. The advantages are appreciated by all users around the world.

Measuring range aw	: 0.03 ... 1.00aw
Measurement chamber temperature	: selectable 0 ... 50°C +/- 0.2K
Sensor type	: electrolytic resistive measurement cell CM-2
Instrument accuracy	: +/- 0.003aw / +/- 0.2K at 25°C when the system is calibrated at 7 points
Communication	: RS-232 interface, USB, PC Software " Novalog MC "



LabMASTER-aw

A synonym for high-precision, flexibility, versatility and measurement speed

Well-proven laboratory instrument for reproducible, precise aw measurements under accurately controlled temperature conditions for all types of foodstuffs, cosmetics as well as dry pharmaceutical materials. The **LabMASTER-aw** is the only instrument that enables measurements under precisely controlled chamber temperature conditions, selectable in the following range: 0°C to 50°C, with an accuracy of 0.2K.

The device and its sensor are very robust and have an excellent long-term stability. The Novasina electrolytic resistive sensor delivers essentially hysteresis-free measurements. The implemented user management systems allows a simple and intuitive operation. The system is available in 3 different versions "**BASIC**" (single user), "**STANDARD**" (multi user) and "**ADVANCED**" (multi user and multi channel). This improves considerably the cost efficiency.

The large, illuminated graphic LC display gives a clear overview. The menu software is simple and intuitive.

For a connection to a printer or a PC, a RS-232 or USB interface is build in the device. The visualisation PC-Software NOVALOG MC for Win9x/2000/NT/XP/Vista/Windows 7 is included in the delivery (except for the "BASIC" version). A recorder can be connected to the 0...10 volt analogue output.

Typical samples:

- All kind of bakery products
- Cheese, dairy products
- Chocolate
- Chemical substances
- Fresh meat and sausages
- Fruit concentrate (solid & liquid)
- Pet food
- Pharmaceutical products, cosmetics

Water activity instrument LabMASTER-aw :

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.

Accuracy : +/- 0.003aw at 25°C
Resolution : 0.001aw / 0.1°C

Temperature sensor:

Precise NTC resistor
Range : -20...80°C
Resolution : 0.1°C

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



LabMASTER-aw



111 9971 LabMaster-aw
"BASIC"

LabMASTER-aw "BASIC"

Robust laboratory precision measurement instrument with temperature controlled measurement chamber. With integrated pre-conditioning chamber.

Further functions:

- Stability parameter, time & date displayed on LCD screen
- Memory for the last 10 aW stable value for each data file
- Stability val time can be defined directly before measurement
- Setting of measurement alarm limits
- Calibration reminder function

BASIC version = single-measurement & single-USER

Attention: no powercable included. Please order it separately.

Water activity instrument:

Ground surface: 26 x 44 cm (WxL)
Weight : 9.800 kgs

Include :

- Sensor CM-2
- 6 humidity standards SAL-T: 11, 33, 58, 75, 84 and 97% rh (incl. factory calibration certificate)
- 50 sample dishes ePW
- Operating instructions



standard

111 9972 LabMaster-aw
"STANDARD"

LabMASTER-aw "STANDARD"

Robust laboratory precision measurement instrument with temperature controlled measurement chamber. With integrated pre-conditioning chamber.

Further functions:

- Stability parameter, time & date displayed on LCD screen
- Memory for the last 10 aW stable value for each data file
- Stability val time can be defined directly before measurement
- Setting of measurement alarm limits
- Calibration reminder function
- Graphic display of aW measurement curve on LCD screen

STANDARD version = single-measurement & multi-USER

Attention: no powercable included. Please order it separately.

Water activity instrument:

Ground surface: 26 x 44 cm (WxL)
Weight : 9.800 kgs

Include :

- Sensor CM-2
- 6 humidity standards SAL-T: 11, 33, 58, 75, 84 and 97% rh (incl. factory calibration certificate)
- 50 sample dishes ePW
- RS232 interface, PC cable 1.8m
- D-Sub 9M/9F, USB port & cable
- NovalogMC PC visual. software for Win9x/2000/NT/XP/Vista/Windows 7
- Operating instructions

Accessories for LabMASTER-aw



110 8568 Power cable CH : 1
110 8304 EU/Schuko : 2
111 1748 Japan and USA : 3

Mains power cables

For connecting a LabMASTER-aw

Configured with the standard instrument connector at one end and the locally required power plug at the other.

Power cable:

Cable length : 1.5 m

For local power systems with appropriate plugs.

Weight : 260 g each



260 0188 PC-SW Novalog MC

PC software NovaLog MC

This optional Windows software allows the analysis and graphical display of the data stored on the SD-card.

Software suitable for :

Windows 98/2000/XP/Vista and Windows 7

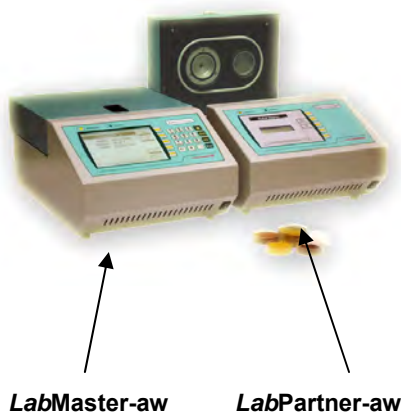
Consisting of:

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

Weight : 180g



Multi-channel system with *LabPartner-aw*



This professional laboratory instrument system allows to run from **2** to a maximum of **10** aw (water activity) measurement devices simultaneously for measuring the aw values in foodstuff, drugs and cosmetics:

1 LabMASTER-aw "ADVANCED" runs from **1** to **9 LabPARTNER-aw** units.

The temperature of each chamber can be set in the range from 0°C to 50°C.

The "ADVANCED" instrument version completes ideally the LabMASTER-aw "BASIC" and "STANDARD". It allows an extension at any time and offer an outstanding cost efficiency.

Measuring range aw	: 0.03 ... 1.00 aw
Measurement chamber temperature	: selectable 0 ... 50°C +/- 0.2K
Sensor type	: electrolyte resistive measurement cell CM-2
Instrument accuracy	: +/- 0.003aw / +/- 0.2K at 25°C when the system is calibrated at 7 points
Repeatability	: +/- 0.002aw
Communication per channel	: RS-232 or USB interface, PC- Software " Novalog MC " for single channel monitoring



Multi-Channel System (*LabPartner-aw*)

Highest flexibility and cost efficiency at any time

The LabMASTER-aw series is a new laboratory instrument generation with the flexibility to add single channels, depending on your needs. Each channel provides reproducible and accurate aw value measurements in various types of samples. This makes the system very flexible and versatile with the possibility of extension at any time.

LabMASTER/LabPARTNER-aw sensors are very robust, excel in long-term stability characteristics and have been specifically developed for continuous operation. The unique properties of the electrolytic resistive sensors with their lack of hysteresis through the complete system yield very exact and reproducible measurements.

All measured values on each channel are displayed on a large, clearly arranged illuminated LC-Display. Each channel can be configured individually and optimised using a menu-driven procedure. The **LabMASTER-aw "ADVANCED"** includes a RS-232 or USB interface for the communication with a PC. The single channel software Novalog MC is included in the delivery of this device.

Multi-Channel System:

LabMASTER-aw instrument:

Mains supply: 90V...260V, 50/60Hz,
wide range power supply
LabPartner is powered by
the LabMaster

LabMASTER / LabPARTNER-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.
Accuracy : +/- 0.003aw at 25°C
Resolution : 0.001aw / 0.1°C

Temperature sensor:

Precise NTC resistor
Range : -20...80°C
Resolution : 0.1°C

Typical samples:

- All kind of bakery products
- Cheese, dairy products
- Chocolate
- Chemical substances
- Fresh meat and sausages
- Fruit concentrate (solid & liquid)
- Pet food
- Pharmaceutical products, cosmetics

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.



Multi-Channel System



111 9973 LabMASTER-aw
"ADVANCED"

LabMASTER-aw "ADVANCED"

Robust laboratory precision measurement instrument with temperature controlled measurement chamber. With integrated pre-conditioning chamber.

Further functions:

- Stability parameter, time & date displayed on LCD screen
- Memory for the last 10 aW stable value for each data file
- Stability val time can be defined directly before measurement
- Setting of measurement alarm limits
- Calibration reminder function
- Graphic display of aW measurement curve on LCD screen

ADVANCED version: multi-measurement & multi-USER

Attention: no power cable included. Please order it separately.

Water activity instrument:

Ground surface: 26 x 44 cm (WxL)
Weight : 9.800 kgs

Include :

- Sensor CM-2
- 6 humidity standards SAL-T: 11, 33, 58, 75, 84 and 97% rh (incl. factory calibration certificate)
- 50 sample dishes ePW
- RS232 interface, PC cable 1.8m
- D-Sub 9M/9F, USB port & cable
- NovalogMC PC visual. software for Win9x/2000/NT/XP/Vista/Windows 7
- Operating instructions



111 9974 LabPARTNER-aw

Additional channels:

LabPARTNER-aw

A robust laboratory instrument with highly-sensitive humidity and temperature sensors, temperature controlled measurement chamber. With integrated pre-conditioning chamber.

A power supply cable and a communication cable are provided to connect this instrument to the LabMASTER-aw or to another LabPARTNER-aw.

Water activity instrument:

Ground surface: 26 x 44 cm (WxL)
Weight : 9.800 kgs

Include :

- Sensor CM-2
- 6 humidity standards SAL-T: 11, 33, 58, 75, 84 and 97% rh (incl. factory calibration certificate)
- 50 sample dishes ePW
- Operating instructions

Accessories for LabMASTER-aw & LabPartner-aw



110 8568 Power cable CH : 1
110 8304 EU/Schuko : 2
111 1748 Japan and USA : 3

Mains power cables

For connecting a LabMASTER-aw

Configured with the standard instrument connector at one end and the locally required power plug at the other.

Power cable:

Cable length : 1.5 m

For local power systems with appropriate plugs.

Weight : 260 g each



111 9979 SI-set

SI, sorption isotherm set

for the LabMASTER-aw and LabPARTNER-aw

This accessory, together with the Novasina humidity standards SAL-T, makes it possible to easily determine several points of a sorption isotherm. Incl. a plastic case for transportation.

In addition, a precision balance and an oven are required.

SI-Set MASTER/PARTNER complete with:

- 1 large cup insert
- 1 substance basket
- 1 weighing glass
- 1 pair of tongs



111 1001 -> eVC-21
111 1003 -> eVC-26
111 7212 -> Redox
111 0995 -> eVALC

Cell protection filters

for all LabMASTER-aw and LabPARTNER-aw.

A number of filters is available to protect the measurement cell from aggressive volatiles or abrasion.

-> 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.

Filters for cell protection against volatiles:

eVC-21	(10 pieces)
eVC-26	(10 pieces)
Redox	(1 piece)
eVALC	(2 pieces)
eVMT-2	(5 pieces)

Weight : 30 g each filter



111 0601 ePW sample dishes

Sample dishes ePW

For all LabMASTER-aw and LabPARTNER-aw

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



111 7440 -> SAL-T 4% RH
111 6453 -> SAL-T 6% RH
111 0930 -> SAL-T 11% RH
260 0960 -> SAL-T 23% RH
111 0932 -> SAL-T 33% RH
260 0961 -> SAL-T 43% RH
111 0934 -> SAL-T 53% RH
260 0189 -> SAL-T 58% RH
111 0936 -> SAL-T 75% RH
111 9886 -> SAL-T 84% RH
111 0938 -> SAL-T 90% RH
111 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):

3.4 %	52.9 %
6.4 %	57.6 %
11.3 %	75.3 %
22.5 %	84.3 %
32.8 %	90.1 %
43.2 %	97.3 %

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

SAL-T 23 and SAL-T 43 can only 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
23.4	.....	21.6% rh
33.3	.....	32.4% rh
43.2	.....	43.2% 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 %	52.9 %	90.1 %
11.3 %	57.6 %	84.3 %
32.8 %	75.3 %	97.3 %

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



[Prices see on the pricelist](#)

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 also be supplied.

Spare parts for *LabMASTER-aw* & *LabPARTNER-aw*



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:

Meas. range : 0.03...1.00a_w
Storage temp. : 0...50°C
Storage humidity : 10...80% RH

Fully calibrated at 9 calibration points

Weight : approx. 2 g



112 0174 O-Ring : 1
112 0175 Metal mesh filter : 2
260 0210 Tension ring : 3

Replacement parts for measuring chamber

- 1 O-ring seal for the measurement chamber.
Recommendation: exchange the O-ring periodically.
- 2 Metal mesh filter.
- 3 Tension ring for clamping the filter.

Chamber replacement parts for *LabMaster* / *Partner-aw*:

- O-ring seal Weight: 1 g
- Metal mesh filter Weight: 30 g
- Tension ring Weight: 10 g



Upgrade Kits for *LabMaster-aw*



111 9975 License

Upgrade License 1 : “BASIC-STANDARD”

to upgrade a *LabMASTER-aw basic*
to a *LabMASTER-aw standard*.

with functionality extension code,
PC software NovalogMC, cable 1.8m D-Sub 9M/9F,
and USB cable 1.8m.

License 1

Software code for activating the
additional software function from

BASIC to STANDARD

- Single to multi user management system
- PC-Tool NovaLog MC Software



111 9976 License

Upgrade License 2 : “STANDARD-ADVANCED”

to upgrade a *LabMASTER-aw standard*
to a *LabMASTER-aw advanced*.

with functionality extension code to control up to 9
additional *LabPARTNER-aw* units.

License 2

Software code for activating the
additional software function from

STANDARD to ADVANCED

- Single chamber to multi chamber system with *LabPartner-aw*.



112 0171 License

Upgrade License 3 : “BASIC-ADVANCED”

to upgrade a *LabMASTER-aw basic*
to a *LabMASTER-aw advanced*.

with PC software NovalogMC, cable 1.8m D-Sub
9M/9F, USB cable 1.8m, and with functionality
extension code to control up to 9 additional
LabPARTNER-aw units.

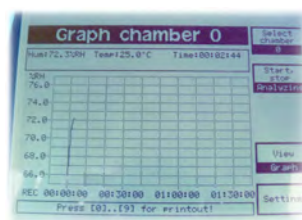
License 3

Software code for activating the
additional software function from

BASIC to ADVANCED

- single to multi user management system
- PC-Tool NovaLog MC Software
- single to multi chamber system with *LabPartner-aw*.

Software Update for *LabMaster-aw*



260 0275 Update package

Update software package for *LabMaster* only “STANDARD” & “ADVANCED” models

Software package including update code for
LabMaster-aw STANDARD & ADVANCED models.
Applicable for instruments sold before the year 2010
with serial no. : 05..... to 09.....

So the *LabMaster-aw* instrument can be updated to
the newest level and the user can benefit from the
following extended functions.

Additional functions:

- Stability parameter is displayed on instrument LCD screen flashing alternately
- Actual time and date is displayed on instrument LCD screen flashing alternately
- Memory of the last 10 aW stable values for each data file (provided that the data base is used actively)
- Stable value time can be set directly before performing the measurement (faster adaptation in case of sample change)
- Selectable upper and lower alarm limits for measurement
- Calibration reminder function
- Graphical display of aW measurement curve on LCD

Update software package: *LabMaster-aw* :

- Software package incl. update activation code for extended functions for

STANDARD

and

ADVANCED

models






Is it really necessary to have different water activity meters?

Every sample has its own characteristics in terms of ingredients, texture, color and taste.

These in- turn influence the free water and finally the water activity each in a different way. These factors, plus the temperature influence, define the measurement time and the accuracy of the tests. Stable measurement conditions are finally the key to a successful quality control!

Novasina offers three types of water activity meters, carefully developed and designed, offering the most suitable solution to customers' samples and requirements:-

- **LabMaster-aw:** Top- of- the- range instrument with full temperature-controlled chamber. It can handle all types of samples from 0.03 to 1.00aw. Measurement accuracy +/- 0.003 aW.
- **LabTouch-aw:** Semi-temperature controlled measurement chamber, optimized for the measurement of aw values in the range of 0.06 to 0.97aw. Measurement accuracy +/- 0.005 aW.
- **LabSwift-aw:** portable aw-meter with no sample temperature control, thus environmental (lab) temperature is the measurement temperature. Suitable for low to medium aw-measurement in ranges of 0.11 to 0.90aw. Measurement accuracy +/- 0.01 aW.
- **LabStart-aw:** portable aw-meter with no sample temperature control, thus environmental (lab) temperature is the measurement temperature. Suitable for low to medium aw-measurement in ranges of 0.20 to 0.80 aw. Measurement accuracy +/- 0.03 aW.
- **ClimMate-aw :** portable handheld measurement instrument incl. big sample-Box and nSens-HT technology and integrated graphic- & Datalogger function. No temp. control. Range: 0.1..0.97 AW

Indicative instrument selection table:	 LabMaster-aw	 LabTouch-aw	 LabSwift-aw	 LabStart-aw
Lean Meat (fresh, dried, processed)	✓	✓	✗	✗
Fatty meat (sausages etc) (fresh, dried, processed)	✓	✗	✗	✗
Bakery products With fillings as jam, chocolate etc	✓	✓	✗	✗
Bread and bread products	✓	✓	✓	✓
Cereals	✓	✓	✓	✓
Fish	✓	✗	✗	✗
Chocolate incl. fillings, & confectionary	✓	✓	✗	✗
Powder, spices and dried products	✓	✓	✓	✓
Milk powder, dry dairy products	✓	✓	✓	✗
Yogurt, cheese, processed milk	✓	✗	✗	✗
Pet food	✓	✓	✗	✗
Pharma products (API,..)	✓	✗	✗	✗
Hygiene products (emulsion, creams,..)	✓	✗	✗	✗