



ms1 Set aw

Portable precision instrument for measuring the water activity (a_w -value) of food and pharmaceutical products



A handy, easy-to-use, battery operated water activity measurement instrument set. Its accuracy can be checked at all times with Novasina saturated salt solution standards. The instrument is supplied in a practical plastic case, together with all required accessories.

measuring range a_w	:	0.06 ... 0.98a_w, not condensing
Temperature	:	-20...+80°C
Sensor	:	enBSK-3 with a resistive electrolyte measuring cell
Accuracy	:	+/- 0.01a_w, +/- 0.3°C
Communication	:	RS232 interface (optional)



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Precise, fast, flexible

A practical, 1'000-times proven precision hand-held measurement instrument for a_w / relative humidity and temperature measurements. Thanks to the Novasina electrolyte-Sensor it is well-suited for precise a_w measurements in many types of products. The instrument and its sensor are very robust, have excellent long-term stability and are practically hysteresis-free.

The large and clear LC display is very easy to read. The instrument is powered by a 9 V battery, but an additional mains power supply is included to support long-term measurements. The air tight measurement chamber is not temperature-controlled, but the temperature is displayed at any time on the large LCD display. The instrument has a stability trend indicator function. An optional RS 232 interface is available for connecting a printer or PC, with special PC-software Novalog32.

The instrument is delivered in a sturdy plastic carrying case with space for various additional accessories. Measurements can be made with the instrument left in its case.

Examples of a_w measurements with the **Set aw**:

- All forms of baked goods
- Meat, sausages and cheese
- Dried foodstuffs, fruit concentrates
- Cosmetics
- Pharmaceuticals, natural medicines

Instrument ms1-aw:

Dimensions	: 54x43x265mm
Weight	: 280 g
Power	: 9V Battery

Humidity sensor:

Electrolyte-Measurement cell	
Range	: 0.06...0.98 a_w not condensing
Repeatability	: +/- 0.003 a_w
Accuracy	: +/- 0.01 a_w (0.10...0.95 a_w , 25°C, with 5 point calibration)

Temperature sensor :

Precise NTC-Resistance	
Range	: -20...80°C
Repeatability	: +/- 0.1°C
Precision	: +/- 0.3°C

Humidity standards:

Salt tablets SAL-T:
Saturated pure salt solutions, based on national standards are recommended, with the following humidity values:

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

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111 0137 Version:230V/50-60Hz
111 0150 Version:115V/50-60Hz

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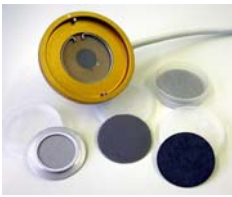
The Set aw is a simple and precise entry-level set for important aw value measurements in the food sector. It consists of an ms1 hand-held instrument with a sealed measurement chamber, and a range of accessories all housed in a robust plastic case. The latter also has space for the optional RS232 interface for attachment to a PC. SAL-T humidity standards are included for testing and recalibrating the measurement cell as required.

Bestehend aus :

Carrying case with:

Measurement instrument ms1-aw
Sensor enBSK-3/PP, with
0.5m cable
9V Battery
5 SAL-T: 11, 33, 53, 75, 90% rh
40 disposable sample dishes ePW
Tweezers
User manual
Factory report for the 5-point
calibration 11-33-53-75-90%
Weight: 2.900 kgs

Accessories to Set aw



Cell protection filters

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

-> Please consult the appropriate datasheets

Filters for enBSK head:

111 1001 -> eVC-21
111 1003 -> eVC-26
111 7212 -> Redox
111 0995 -> eVALC
111 0997 -> eVMT-2
111 0999 -> eVMS-2



111 0601 ePW sample cups

Sample dishes ePW

For an enBSK measurement chamber

Packet of 100 sample dishes for the sample sensor enBSK-3.

These are disposal, intended for a single use.

A package consists of:

100 sample dishes ePW

Material : Polypropylene

Dimensions : 40mm diameter
x 12mm deep

Weight : 440g



111 0826 Com-Port HW/SW

PC communication via RS232

RS232 interface, 1m long cable, CD with software NOVALOG32 for Win 9x/2000/NT/XP.

Interface Set comprising:

- 1m cable with D-Sub 25/25-pin
- RS-232 Interface
- CD with NOVALOG32 software for Windows systems
- User manual
Weight: 450g



111 0562 Port -> Typ Seiko

RS232 interface for Seiko printer

RS-232 interface, 1m long cable to connect a Seiko DPU 411 thermal printer. This makes it possible to control the printer using the printer parameters defined in the ms1 menu.

-> **A printer must be obtained locally**

Printer-Interface-Set Seiko:

Printer cable : Flat cable

- **1m long printer cable with D-Sub 25/25-pin**
- **RS 232 interface**
- **Seiko adapter box**

Weight : 300g



111 6256 Interface 25 / 9

D-Sub adapter 25F/9M

Additional adapter for the RS232 Interface for Seiko printer (111 0562), permitting connection to the more recent Seiko DPU 414 printer.

Adapter Interface:

Dimensions : 60 x 40 x 20 mm
Adapter D-Sub 25F/9M
25-pin female con.
9 - pin male con.
Weight: 50g



111 0661 Port -> Typ Epson

RS232 interface for Epson printer

RS-232 interface, 1m long cable to connect an Epson or other compatible 9-pin needle printer. This makes it possible to control the printer using the printer parameters defined in the ms1 menu.

-> **A printer must be obtained locally.**

Printer-Interface-Set Epson:

Printer cable: Flat cable

- **1m long printer cable with D-Sub 25/25-pin**
- RS 232 interface
- Epson adapter

Weight: 300g