

Water Activity Meter AW-1s/AW-Multi

Easily measure water activity in samples!
The new AW-1s now supports both
capacitive-type and
electrical resistance-type sensors,
replacing the previous AW-1 model!



Capacitive
Type



Electrical
Resistance
Type



Applications (Examples)

- Food, pharmaceutical, cosmetic, and agricultural fertilizer industries
- Educational and research institutions, as well as testing and analysis agencies
- New product development and prototype evaluation
- Quality control of raw materials and manufacturing processes, as well as pre-shipment inspections



Water Activity Meter AW-1s

Features

- Compact and lightweight—ideal for portability
- Capable of measuring both powders and liquids
- Measures by inserting a sample container (sold separately) equipped with either a capacitive-type or electrical resistance-type sensor into the main unit
- Equipped with Stability Mode (standard measurement mode) and Quick Mode (fast measurement mode)
- Supports 1-point to 3-point calibration
- Stores up to 99 measurements in the main unit
- PC-exclusive software enables mode settings, data logging, and calibration

Display Examples

- PC-exclusive software



Capacitive-Type or Electrical Resistance-Type

*Actual size



Sensor-Equipped Sample Containers (Capacitive-Type / Electrical Resistance-Type)

The AW-1s and AW-Multi feature a separate main unit and sensor-equipped sample containers.

Measurement requires one or more sensor-equipped sample containers (sold separately), depending on the model and application.

Capacitive-type and electrical resistance-type sensors are available to suit your needs.



Selecting the Right Sensor Container

Sensor	Capacitive-Type	Electrical Resistance-Type
ISO 18787:2017	Compliant	Compliant
Japan Food Sanitation Act	Not Compliant	Compliant with Food Sanitation Inspection Guidelines*
Measurement Range	Great Wide range and high accuracy	Good Difficult to measure below 0.2aw
Responsiveness	Great	Good
Alcohol resistance	Good Affected by high concentrations	Great High resistance

*Measured under conditions of 25 ± 2° C

Multi-Sample Water Activity Meter AW-Multi 8CH/16CH

Features

- Measures up to 8 or 16 samples simultaneously
- Capable of measuring both powders and liquids
- Measures by inserting a sample container (sold separately) equipped with either a capacitive-type or electrical resistance-type sensor into the main unit
- Features two measurement modes similar to the AW-1s: Stability Mode and Quick Mode
- Choose between per-channel or simultaneous measurements
- Enables simultaneous calibration of multiple sensors
- Automatically saves measurement data to a PC in CSV format
- PC-exclusive software for mode settings, initiating measurements, and calibration

Display Examples

- PC-exclusive software



The perfect solution for simultaneous multi-sample measurement-compatible with both capacitive and electrical resistance-type sensors!



8 sample(8CH) Model

16 sample(16CH) Model

- Example measurement image*



*A PC is required for measurements.

3 Benefits of Detachable Sensor-Equipped Containers

1. Use Different Calibration Values for Each Sample

Calibration values for rice samples



Calibration values for seasoning liquids



Example:
Store separate calibration values for different sample types, such as rice or seasoning liquids.

2. USB Cable Compatibility

Suitable for use in a thermostatic chamber



USB Cable
USB Type-A (Plug) to Type-A (Socket) Cable
Measurements can be performed inside a thermostatic chamber using a USB Type-A (plug-to-socket) cable.

3. Easy Maintenance

The sensor has deteriorated



Replace it with a new one



Replace only the sensor-equipped sample container when the sensor deteriorates.

Specifications Overview

Water Activity Meter AW-1s (Sensor Sold Separately)

Item Code	060990-030
Model	AW-1s
Water Activity Display Range	0.000 to 1.000 aw
Screen Display Items	AW measurement value, Temperature (relative humidity optional), Battery status
Data Storage Function	Stores up to 99 measurements
Communications	Special PC Software (Windows 10/11) via a USB connection
Continuous Operating Time	Approx. 60 hours (when using AAA alkaline batteries)
Power Source	4 AAA batteries or USB power(micro-B)*1
Dimensions and Weight	Approx. 83(W) × 47(D) × 140(H) mm(excl. protrusions) Approx. 270g

※1: The USB cable is for PC connection.
 ※AW-1s does not come with a sensor.
 ※Download the communication software from the SIBATA website.
 ※A mobile battery and smartphone charger are not provided.
 ※Additionally, power cannot be supplied via the USB connection when connected to a PC.



AW-1s



AW-Multi 8CH



AW-Multi 16CH

Multi-Sample Water Activity Meter AW-Multi 8CH / 16CH

Item Code	060990-008	060990-016
Model	AW-Multi 8CH	AW-Multi 16CH
Maximum Number of Samples Measured	8 samples	16 samples
Water Activity Display Range	0.000 to 1.000 aw	
Communications	Special PC Software (Windows 10/11) via a USB connection	
Data Storage Function	Automatic Data Saving to PC (water activity, cell interior / ambient temperature, and relative humidity)	
Power Supply	AC100-240V, 50/60Hz, 0.5A	
Accessories	USB cable for AW-Multi x 1 pc, ※1 AC adapter x 1 pc	
Dimensions and Weight	Approx. 210(W) × 180(D) × 315(H) mm / Approx. 2.0kg	

※1: The USB cable is for PC connection.
 Note: A PC with the USB driver and dedicated software installed is required for operation.

Options(Saturated Salts for Calibration)

Item Code	Item Name	Type of Saturated Salt	Element symbol
060990-020	Saturated salt 0.225aw	Potassium acetate	CH ₃ COOK
060990-021	Saturated salt 0.328aw	Magnesium chloride	MgCl ₂
060990-022	Saturated salt 0.529aw	Magnesium nitrate	Mg(NO ₃) ₂
060990-023	Saturated salt 0.753aw	Sodium chloride	NaCl
060990-024	Saturated salt 0.843aw	Potassium chloride	KCl
060990-025	Saturated salt 0.930aw	Ammonium Dihydrogen Phosphate	NH ₄ H ₂ PO ₄
060990-026	Saturated salt 0.973aw	Potassium sulfate	K ₂ SO ₄

※ Prepared with reference to ISO18787:2017.
 ※ Can be used for daily inspections and user calibrations.
 ※ Simply replace the container lid with the lid from the Sensor-equipped Sample Container.
 ※ Allowed to be used repeatedly.



Saturated Salt for AW

※ All salts have a consistent appearance, with the type clearly labeled on the side for easy identification.

Sensor-Equipped Sample Containers(Sensor Sold Separately)

Item Code	060990-011	060990-031
Model	Capacitive-Type	Electrical Resistance-Type
Measurement Range	Water Activity: 0.001 to 1.000 aw Cell/Ambient Temperature: 0 to 80°C Relative Humidity: 10 to 95% RH	Water Activity: 0.200 to 1.000 aw Cell/Ambient Temperature: 0 to 80°C Relative Humidity: 10 to 95% RH
Resolution	Water Activity: 0.001 aw Cell/Ambient Temperature: 0.1°C Relative Humidity: 0.1% RH	
Water Activity Measurement Accuracy	±0.01aw ※1 (Fluctuations within ±0.2 °C of the ambient temperature)	±0.02aw ※2 (Fluctuations within ±0.2 °C of the ambient temperature)
Measurement Time	Stability Mode: 5 to 30 minutes※3 Quick Mode: 6 minutes	Stability Mode: 5 to 30 minutes※3 Quick Mode: 10 minutes
Accessories	Sample container 20 mL x 5 pcs, Protective sensor filter φ18 x 5 pcs, Type B Silica gel x 1 pack (included in the sensor-equipped sample container)	Sample container 20 mL x 5 pcs, Protective sensor filter φ35 x 5 pcs, Type B Silica gel x 1 pack (included in the sensor-equipped sample container)
Dimensions and Weight	Approx. 52(W) x 40(D) x 32(H) mm (excl. connector part) Approx. 25 g	Approx. 57(W) x 40(D) x 44(H) mm (excl. connector part) Approx. 30 g

※1: 0.12 to 0.97 aw in stability mode, within ±0.1 aw after calibration, under the same measurement conditions.
 ※2: 0.23 to 0.97 aw in stability mode, within ±0.1 aw after calibration, under the same measurement conditions.
 ※3: The measurement time may vary depending on the sample.



Capacitive-Type



Electrical Resistance-Type

Options (Small Thermostatic Chamber)



Item Code	060990-20
Model	SLC-25A
Temperature Control Range	3 to 65°C (1°C increments)
Temperature Control Accuracy	±0.2°C
Dimensions and Weight	345(W) × 445(D) × 477(H) mm · Approx. 13kg
Effective Internal Volume	25L
Power Supply and Consumption	AC100V, 50/60Hz, 98W

Consumables and spare parts

Item Code	Item Name
060990-012	Sample Container 20mL, 10pcs
060990-013	Capacitive-Type Sensor Protection Filter φ18, 10 pcs
060990-014	Electric Resistance-Type Sensor Protection Filter φ35, 10 pcs
080990-1	USB cable for AW-1s and Battery Set※
060990-2	USB cable for AW-Multi※

※ Both cables are for PC connections.

● Specifications and appearance described in this document are based on information as of March, 2026. ● The color of actual products may differ to that color in this data sheet.
 Copy right is reserved by Sibata Scientific Technology Ltd.

SIBATA
 SIBATA SCIENTIFIC TECHNOLOGY LTD.
 1-1-62, Nakane Soka, Saitama, Japan
 TEL:+81-48-933-1582 FAX:+81-48-933-1591
 E-mail:overseas@sibata.co.jp
<https://www.sibata.co.jp/en/>