

Water analysis
instruments for field
and laboratory

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About Akso

We design, manufacture, distribute and support all our products.

Akso is a privately owned group that designs, manufactures, and distributes measuring Instruments for analysis in many different industries, including Laboratory, Food and Beverage, Water Treatment, Hydroponics, Aquaculture, and Wastewater.

The company was founded in São Leopoldo - Brazil in 2003, where the production, R&D and distribution centre is located.

Akso offers dedicated customer service and technical support. From logistics enquiries to spare parts and technical service, our friendly and always available, highly trained staff are always available to answer your questions and solve your problems.

Akso is both a reliable partner and an inexhaustible source of information.

While we ensure that all our Instruments come with the best quality, our aim is providing users with quality Instruments that are reliable, economical and easy to use. Akso owes its success to the continuous attention it pays to listening to its customers in order to supply them the products they need.

If you are looking for COMMITMENT, TRUST and PARTNERSHIP, work with us.





Metrology Laboratory

ISO 9001 & ISO 17025 certifications are evidence of our ongoing commitment to pursuing best practices and exceeding industry standards. Each certification reflects our dedication to ensuring the quality of our products and services, as well as the efficient management of our business processes.

Our dedicated calibration laboratory provides documented evidence of optimal instrument performance. Next, metrology-based testing confirms the accuracy and verification of critical instrument functions.

Research & Development

Akso has built a solid foundation to develop products tailored to your needs. In addition to our product lines, we also produce pH buffer solutions and reagents.

Our products are meticulously developed to ensure accurate and reliable results in your analyses.



pH/ORP/Temperature Bench Meter



AK130

AK130 Max pH/ORP/Temperature bench meter

The built-in microprocessor enables advanced functions, such as automatic calibration, automatic temperature compensation, self-diagnosis, and low-battery indicator, and improves the response time and accuracy of your measurements.

The Max Bench pH meters feature a large LCD display that provides simultaneous pH and temperature readings with a pH resolution of 0.01 and an accuracy of ± 0.01 pH. pH electrode with integrated temperature sensor. 3 points pH automatic calibration and extended range (-2.00 to 16.00 pH).

The various types of Akso pH/Temperature electrodes, makes the Max benchtop meters versatile and can be used in many different Laboratory applications: from general use in Water and Wastewater treatment; to food industry for measurements of semi-solid samples such as milk, juices, jams, soil, shampoo and creams; and solid samples such as meat and cheese.



AK130 Max is supplied complete with:

AK1004 pH/Temp glass refillable electrode with 1 meter cable, AK1070 Electrode Holder, AK1075 12 AC/DC Adapter, 20 ml calibration solution pH 7.00, 4.01, 10.01, 20 ml KCL electrolyte solution, instruction manual.

Optional accessories:

- AK1010: ORP electrode with BNC connector and 1 meter cable
- AK4504: pH 4.01 buffer solution 250 mL
- AK4507: pH 7.00 buffer solution 250 mL
- AK4510: pH 10.01 buffer solution 250 mL
- AK4530: KCL Storage solution for pH electrodes - 250 mL
- AK4531: Cleaning solution for pH electrodes - 250 mL



Product features

- 3 point automatic calibration – choice of USA or NIST standards (4.01, 6.86, 7.00, 9.18 and 10.01 pH)
- Extended pH range: -2.00 to 16.00 pH
- Automatic Temperature Compensation
- pH/Temp glass refillable electrode
- Stability indicator
- Hold Function
- Self-Diagnostic, message codes for easy troubleshooting
- Large dual LCD provides optimal viewing



Specifications

Range	pH: – 2.00 to 16.00 pH / ORP: -1999 to 1999 mV / Temperature: 0 to 80 °C
Resolution	pH: 0.01 pH / ORP: 1mV / Temperature: 0.1°C
Accuracy	pH: ± 0.01 pH / ORP: ± 3 mV / Temperature: ± 0.5°C
Calibration	up to 3 points automatic – 5 standard buffers 4.01, 6.86, 7.00, 9.18 and 10.01 pH
ATC	0 to 80 °C
MTC	0 to 80 °C
Backlight LCD	On/Off
Reading (HOLD)	Manual
Instrument operating temp / RH	0 to 50 °C / 10 to 90 % RH
Power supply	AK1075 12Vdc Adapter
Dimensions (W x L x H)	216 x 190 x 59 mm
Weight	600g



Max pH/ORP/Temperature portable meter

The built-in microprocessor enables advanced functions, such as automatic calibration, automatic temperature compensation, self-diagnosis, auto power-off, and low-battery indicator, and improves the response time and accuracy of your measurements.

The Max portable pH meters are water resistant (IP65) and feature a large LCD display that provides simultaneous pH and temperature readings with a pH resolution of 0.01 and an accuracy of ± 0.01 pH. pH electrode with integrated temperature sensor.

With 3 points pH automatic calibration and extended range (-2.00 to 16.00 pH) the Max portable meters offer the pH electrode slope indication.

The various types of Akso pH/Temperature electrodes, makes the Max meters versatile and can be used in many different applications: from general use in Water treatment, laboratory applications and Fish farming (AK110 Max with the **AK1001** plastic body pH/Temperature electrode); to food industry for measurements of semi-solid samples such as milk, juices, jams, and soil, shampoo and creams (AK111 Max Food with **AK1002** pH/Temp Food electrode); and solid samples such as meat and cheese (AK112 Max Meat with **AK1003** pH/Temp electrode with Knife).



AK110



AK111



AK112

Product features

- 3 point automatic calibration – choice of USA or NIST standards
- Extended pH range: -2.00 to 16.00 pH
- Automatic Temperature Compensation
- pH electrode with integrated temperature sensor
- Stability indicator
- Hold Function
- Auto Power Off
- Self-Diagnostic with message codes for easy troubleshooting
- Large dual LCD provides optimal viewing
- Splash-proof and dust-resistant rated IP65

Max portable meters are supplied complete with:

Hard carrying case, AK1001 pH/Temperature electrode, 20 ml calibration solution pH 7.00, pH 4.01, pH 10.01, 20 ml KCL electrolyte solution, instruction manual, 1 x 9V battery.



Optional accessories:

AK1010: ORP electrode with BNC connector and 1 meter cable

AK1060: Rubber sleeve for Max portable meters

AK4504: pH 4.01 buffer solution 250 mL

AK4507: pH 7.00 buffer solution 250 mL

AK4510: pH 10.00 buffer solution 250 mL

AK4530: KCL Storage solution for pH electrodes - 250 mL

AK4531: Cleaning solution for pH electrodes - 250 mL



Specifications

Range	pH: -2.00 to 16.00 pH ORP: -1999 to 1999 mV Temperature: 0 to 80 °C
Resolution	pH: 0.01 pH / ORP: 1mV Temperature: 0.1°C
Accuracy	pH: ± 0.01 pH / ORP: ± 3 mV Temperature: ± 0.5°C
Calibration	up to 3 points automatic – 5 standard buffers 4.01, 6.86, 7.00, 9.18 and 10.01 pH
ATC	0 to 80 °C
Auto Power Off	15 minutes
Reading (HOLD)	Manual
Instrument operating temp / RH	0 to 50 °C / 10 to 90 % RH
Power supply	1 x 9V battery (included)
Dimensions (W x L x H)	83 x 175 x 34 mm
Weight	257g

EC/TDS/Salinity/Temperature Bench Meter



AK135

AK135 Max EC/TDS/Salinity/Temperature bench meter

The Max Benchtop Conductivity/TDS/Salinity/Temperature meter feature a large LCD display that provides simultaneous Conductivity and temperature readings with a resolution of 0.1 $\mu\text{S}/\text{cm}$ and an accuracy of $\pm 2\%$ Full scale. Conductivity probe with integrated temperature sensor. Automatic calibration and extended range up to 150.0 mS/cm.

Specifications

Range	0.0 to 199.9 $\mu\text{S}/\text{cm}$ / 200 to 1999 $\mu\text{S}/\text{cm}$ 2.00 to 19.99 mS/cm/ 20.0 to 150.0 mS/cm / 0.00 to 9.99 ppt / 10.0 to 42.0 ppt / 0 to 199.9 ppm / 200 to 1999 ppm 2.00 to 19.99 ppt / 20.0 to 75.0 ppt -5.0 to 60.0°C
Resolution	0.1 $\mu\text{S}/\text{cm}$ / 1 $\mu\text{S}/\text{cm}$ / 0.01 mS/cm 0.1 mS/cm / 0.01 ppt / 0.1 ppt / 0.1 ppm 1 ppm / 0.01 ppt / 0.1 ppt / 0.1°C
Accuracy	$\pm 2\%FS$ / $\pm 2\%FS$ / $\pm 2\%FS$ / $\pm 0.5^\circ\text{C}$
Calibration	1 point automatic – 5 standard buffers
ATC	0 to 80 °C
Reading (HOLD)	Manual
Instrument operating temp / RH	0 to 50 °C / 10 to 90 % RH
Power supply	AK1075 12Vdc Adapter
Dimensions (W x L x H)	216 x 190 x 59 mm
Weight	600g

Product features

- Automatic calibration
- Auto-Ranging feature for EC/TDS
- Automatic Temperature Compensation
- Stability indicator
- TDS Conversion factor
- Hold Function
- Self-Diagnostic with message codes for easy troubleshooting
- Large dual LCD for optimal viewing

AK135 Max is supplied complete with:

AK1020 EC/TDS/Salinity/Temp probe, AK1070 Electrode Holder, AK1075 12 AC/DC Adapter, 20 ml calibration solution 1413 $\mu\text{S}/\text{cm}$, 20 ml calibration solution 12.88 mS/cm, instruction manual.

Optional accessories:

AK4523: 1413 $\mu\text{S}/\text{cm}$ Calibration solution – 250 mL bottle

AK4524: 12.88 mS/cm Calibration solution – 250 mL bottle





AK115

AK115 Max portable EC/TDS/Salinity/Temperature meter

The Max portable Conductivity/TDS/Salinity/Temperature meter is water resistant (IP65) and feature a large LCD display that provides simultaneous Conductivity and temperature readings with a resolution of 0.1 $\mu\text{S}/\text{cm}$ and an accuracy of $\pm 2\%$ Full scale. Conductivity probe with integrated temperature sensor. Automatic calibration and extended range up to 150.0 mS/cm .

Product features

- Automatic calibration
- Auto-Ranging feature for EC/TDS
- ATC
- Stability indicator
- TDS Conversion factor
- Hold Function
- Auto-Power Off
- Self-Diagnostic with message codes for easy troubleshooting
- Large dual LCD for optimal viewing
- Splash-proof and dust-resistant IP65

AK115 Max is supplied complete with:

Hard carrying case, AK1020 EC/TDS/Salinity/Temp probe, 20 ml calibration solution 1413 $\mu\text{S}/\text{cm}$, 20 ml calibration solution 12.88 mS/cm , instruction manual, 1 x 9V battery.

Optional accessories:

AK1060: Rubber sleeve for Max portable meters

AK4523: 1413 μS Calibration solution – 250 mL bottle

AK4524: 12.88 mS Calibration solution – 250 mL bottle

Specifications

Range	0.0 to 199.9 $\mu\text{S}/\text{cm}$ / 200 to 1999 $\mu\text{S}/\text{cm}$ 2.00 to 19.99 mS/cm / 20.0 to 150.0 mS/cm 0.00 to 9.99 ppt / 10.0 to 42.0 ppt / 0 to 199.9 ppm / 200 to 1999 ppm / 2.00 to 19.99 ppt / 20.0 to 75.0 ppt / -5.0 to 60.0°C
Resolution	0.1 $\mu\text{S}/\text{cm}$ / 1 $\mu\text{S}/\text{cm}$ / 0.01 mS/cm 0.1 mS/cm / 0.01 ppt / 0.1 ppt / 0.1 ppm 1 ppm / 0.01 ppt / 0.1 ppt / 0.1°C
Accuracy	$\pm 2\% \text{FS}$ / $\pm 2\% \text{FS}$ / $\pm 2\% \text{FS}$ / $\pm 0.5^\circ\text{C}$
Calibration	1 point automatic – 5 standard buffers
ATC	0 to 80 °C
Auto Power Off	15 minutes
Reading (HOLD)	Manual
Instrument operating temp / RH	0 to 50 °C / 10 to 90 % RH
Power supply	AK1075 12Vdc Adapter
Dimensions (W x L x H)	83 x 175 x 34 mm
Weight	257g



AK121

AK121 Max portable DO/Temperature meter with Optical DO probe

Portable, precise, accurate and versatile Measurements

The built-in microprocessor enables advanced functions, such as automatic calibration, automatic temperature compensation, self-diagnosis, auto power-off, and low-battery indicator, and improves the response time and accuracy of your measurements.

The Max portable Dissolved Oxygen/Temperature meter is water resistant (IP65) and feature a large LCD display that provides simultaneous D.O. and temperature readings with a resolution of 0.01 mg/L and an accuracy of $\pm 0.3\text{mg/L}$ (0 a 10.00 mg/L).

The AK1030 Optical probe with built-in temperature sensor, means accurate measurements, holds calibration longer, no stirring required, no probe or membranes to clean.

Product features

- Minimum maintenance required
- Optical benefits include: no interferences from gases such as hydrogen sulphide
- 2 points calibration: 100% air and 0 oxygen
- Automatic altitude and salinity compensation: 0 to 3500m / 0 to 45ppt
- Automatic Temperature Compensation (0 to 40°C) for higher accuracy under fluctuating temperatures
- Stability indicator
- Hold Function momentarily freezes reading for easy viewing and recording
- Auto Power Off saves battery power after non-use
- Self-Diagnostic with message codes for easy troubleshooting
- Large custom dual LCD provides optimal viewing
- Protective Rubber Boot shields meter from accidental knocks
- Splash-proof and dust-resistant rated IP65 – for use under harsh environments

AK1030 DO/Temperature Optical probe

Optical dissolved oxygen sensors combine precise measurement with low maintenance to monitor the dissolved oxygen level in water applications. The AK121 Max is ideal for Aquaculture and Environmental applications.



Specifications

Range	0 to 20.00 mg/L (ppm) / 0 to 200 % Saturation 0 to 40 °C
Resolution	0.01 / 0.1 mg/L / 0.1 % / 0.1°C
Accuracy	± 0.3mg/L (0 a 10.00 mg/L) / ± 2% of reading (from 10.00 to 20.00 mg/L) / ± 0.5°C
Calibration	2 points automatic / in 100% air and 0 oxygen
ATC	0 to 40 °C
Auto Power Off	10 minutes
Reading (HOLD)	Manual
Instrument operating temp / RH	0 to 40 °C / 10 to 90 % RH
Power supply	1 x 9V battery (included)
Dimensions (W x L x H)	83 x 175 x 34 mm
Weight	257g

AK121 Max is supplied complete with:

Hard carrying case, AK1030 Optical DO/Temp probe with 4-meter cable, 20ml sodium sulphite solution for 0 calibration, instruction manual, 1 x 9V battery.



Optional accessories:

AK1060: Rubber sleeve for Max portable meters

AK4529: Sodium sulphite 0 oxygen calibration 250ml

pH, Free and Total Chlorine portable photometer



AK400

AK400 Max pH, Free and Total Chlorine portable photometer with 0.00 to 5.00 ppm and 6.5 to 8.0 pH range

Developed and manufactured by Akso, the Max line of portable photometers are ideal for those looking for practical measurements.

The AK400 Max photometer is the ideal tool for fast and accurate analysis of pH, Free and Total chlorine in Water. This instrument can be used in a variety of applications: from swimming pools to drinking water, Boiler and cooling towers, Food and Beverage and environmental.

Product features

- Large, easy to read display
- PC communication (USB)
- Date and time settings
- Calibration verification
- Built-in reaction time countdown
- Error messages
- Multiple measurements methods
- Works with liquid and powder reagents
- Battery status indicator

Specifications

Range	0.00 to 5.00 ppm 6.5 to 8.0 pH
Resolution	0.01 ppm / 0.1 pH
Accuracy	± 0.03 ppm +3% reading ± 0.2 pH
Calibration	6 points for Chlorine (0, 0.5, 1.0, 2.0, 3.0, 4.0 ppm) 4 points for pH (6.5, 7.0, 7.5, 8.0 pH)
Sample temp	15 to 35 °C
Sample volume	10 mL
Light source	Light emitting Diode (LED)
Wavelength	525 nm
Measuring cell	Glass Cuvette (Ø 24,9 mm)
User ID / Sample ID	9 options / 8 options
Internal memory	1000 log groups
PC Communication	USB (type C)
Auto power off	After 2 minutes
Languages	English, Spanish, Italian, Portuguese
Operating temp/humidity	0 to 50 °C / 10 to 90 % RH
Power supply	9V battery or AC/DC adapter (5Vdc-500mA)
Dimensions (W x H x D)	95x80x190 mm
Weight	300 g (with battery)



AK405

AK405 Max Color portable photometer with 0 to 500 PCU range

AK405 Max Color photometer performs digital readout measurements quickly and efficiently using the Platinum-Cobalt method, which is considered the standard method for measuring colour in drinking water and natural waters. The measurement of this parameter is used to assess the potability of water. The AK405 Color photometer performs True and Apparent colour analyses in the range of 0 to 500 PCU, where true colour is the result of measuring filtered water, i.e. without suspended solids. Apparent colour is the result obtained without filtering the sample.

Product features

- Large, easy to read display
- PC communication (USB)
- Date and time settings
- Calibration verification
- Error messages
- Multiple measurements methods
- Battery status indicator

Specifications

Range	0 to 500 PCU
Resolution	1 PCU
Accuracy	± 3 ppm +3% reading
Calibration	5 points (0, 20, 100, 300, 500 PCU)
Sample temp	15 to 35 °C
Sample volume	15 mL
Light source	Light emitting Diode (LED)
Wavelength	455 nm
Measuring cell	Glass Cuvette (Ø 24,9 mm)
User ID / Sample ID	9 options / 8 options
Internal memory	1000 log groups
PC Communication	USB (type C)
Auto power off	After 2 minutes
Languages	English, Spanish, Italian, Portuguese
Operating temp/humidity	0 to 50 °C / 10 to 90 % RH
Power supply	9V battery or AC/DC adapter (5Vdc-500mA)
Dimensions (W x H x D)	95x80x190 mm
Weight	300 g (with battery)
Method of measurement	Platinum-cobalt colorimetric method

Turbidity portable photometer



AK410

AK410 Max Turbidity portable photometer with 0 to 1000 NTU range

AK410 MaxTurbidity meter performs digital readout measurements quickly and efficiently using the EPA 180.1 method.

Turbidity is one of the most important parameters used to determine the quality of water in various applications, including drinking water, Food and beverage and Environment. Turbidity of water is an optical property that causes the scattering and absorption of light. The scattering of light passing through a liquid is mainly caused by the suspended solids present. The greater the turbidity, the greater the amount of scattered light.

Product features

- Large, easy to read display
- PC communication (USB)
- Date and time settings
- Calibration verification
- Error messages
- Multiple measurements methods
- Battery status indicator

Specifications

Range	0.01 to 9.99 NTU 10.0 to 99.9 NTU 0 to 1000 NTU
Resolution	0.01 NTU (0.01 to 9.99 NTU) 0.1 NTU (10.0 to 99.9 NTU) 1 NTU (100 to 1000 NTU)
Accuracy	± 0.2 NTU + 5% reading
Calibration	5 points (0, 20, 200, 500, 800 NTU)
Sample temp	15 to 35 °C
Sample volume	15 mL
Light source	Light emitting Diode (LED)
Wavelength	525 nm
Measuring cell	Glass Cuvette (Ø 24,9 mm)
User ID / Sample ID	9 options / 8 options
Internal memory	1000 log groups
PC Communication	USB (type C)
Auto power off	After 2 minutes
Languages	English, Spanish, Italian, Portuguese
Operating temp/humidity	0 to 50 °C / 10 to 90 % RH
Power supply	9V battery or AC/DC adapter (5Vdc-500mA)
Dimensions (W x H x D)	95x80x190 mm
Weight	300 g (with battery)



Max Photometers are supplied complete with:

hard carrying case, 2 cuvettes (Ø 24,9 mm x 68mm), 1 USB cable for power supply and PC communication, AC/DC adapter (100-240 Vac / 5Vdc), tissue to clean cuvette, instruction manual, 1 x 9V battery, and relevant calibration solutions and reagents depending on the model.

Optional accessories:

- AK4001: Liquid reagent for Free & Total Chlorine (150 tests)
- AK4002: Liquid reagent for Free & Total Chlorine (300 tests)
- AK4003: Liquid reagent for Free Chlorine (150 tests)
- AK4004: Liquid reagent for Free Chlorine (300 tests)
- AK4012: Kit standard calibration solution (0, 1, 2 and 4 ppm), 4 cuvettes
- AK4101: Standard calibration solution (0, 100, 300 and 500 PCU), 4 cuvettes
- AK4107: Kit 5 syringe filters for Color Max photometer
- AK4411: Turbidity Standard calibration solution 0 NTU, 1 cuvette
- AK4412: Turbidity Standard calibration solution 20 NTU, 1 cuvette
- AK4413: Turbidity Standard calibration solution 200 NTU, 1 cuvette
- AK4414: Turbidity Standard calibration solution 500 NTU, 1 cuvette
- AK4415: Turbidity Standard calibration solution 800 NTU, 1 cuvette
- AK4550: Cuvette for Max photometers (1pcs.)



Handy Tester Photometers



The Akso testers are both accurate and affordable.

The tester line of photometers are handy and can be easily transported anywhere you need them to go. What's more, the one-button operation makes getting accurate results simple.

Get accurate water test results with our easy-to-use handheld meter. No more struggling to determine colours, our handheld photometers take the hassle out of matching to a colour chart, providing a straightforward result.

Our testers measure **Free & Total Chlorine, Color, Alkalinity, Ammonia, Iron, Nitrites, Total Hardness and Fluoride** and work with both liquid and powder reagents.

- Good accuracy and immediate results
- Easy to operate
- Large, easy to read colour display
- Auto shut-off
- Calibration verification
- Built-in reaction time countdown
- Error messages
- Multiple measurements methods
- Works with liquid and powder reagents



AK40 – Free & Total Chlorine tester with a range of 0.00 to 3.50 ppm.

With AK40 you can routinely monitor Chlorine levels to ensure that water is free of harmful bacteria. Due to his disinfection, oxidation and bleaching properties this chemical is used in many different applications such as drinking water and food processing, waste water and swimming pools.

AK41 - Chlorine + tester with a range of 500 ppm is ideal for fruit and vegetable washing where high levels of Chlorine is used as disinfectant.



Specifications

Model number	AK40 (Chlorine)	AK41 (High Range Chlorine)
Measuring range	0.00 to 3.50 ppm	0 to 500 ppm
Resolution	0.01 ppm	1 ppm
Accuracy	± (0.05 ppm + 3% of reading)	± (5 ppm + 5% of reading)
Sample temperature	15 to 35 °C	15 to 35 °C
Light source	Light emitting diode	Light emitting diode
Wavelength	525 nm	525 nm
Operational: °C & RH	0 to 50 °C / 10 to 90 %RH	0 to 50 °C / 10 to 90 %RH
Power supply	9Vdc (9V battery)	9Vdc (9V battery)



AK40 & AK41 are supplied complete with:

hard carrying case, 2 glass cuvettes (AK4551), cleaning cloth, instruction manual and 9V battery.

Optional accessories:

AK4001: Liquid reagent for Free & Total Chlorine (150 tests)

AK4002: Liquid reagent for Free & Total Chlorine (300 tests)

AK4003: Liquid reagent for Free Chlorine (150 tests)

AK4004: Liquid reagent for Free Chlorine (300 tests)

AK4011: Kit standard calibration solution (0 and 2 ppm) for Chlorine Tester

AK4551: Cuvette for Tester photometers (1 pcs.)



Alkalinity, Ammonia & Color Testers

AK42 - Color Tester with a range of 0 to 500 PCU measures True and Apparent color, where true color is the result of measuring filtered water and apparent color is obtained without filtering the sample.

AK43 - An accurate photometer that measures NH₃ concentration both in fresh and salt water. Ammonia is generally present in small amounts in unpolluted water; higher levels indicate organic pollution, which is toxic to aquatic life.

AK44 - Alkalinity indicates calcium and magnesium carbonates, bicarbonates chlorides and sulphates contained in water and it refers to the capacity of water to neutralize acids.

Specifications



Model number	AK42 (Color)	AK43 (Ammonia)	AK44 (Alkalinity)
Measuring range	0 to 500 PCU	0.00 to 5.00 ppm	0 to 500 ppm
Resolution	1 PCU	0.01 ppm	1 ppm
Accuracy	± (10 PCU + 5% of reading)	± (0.10 ppm + 5% of reading)	± (5 ppm + 5% of reading)
Sample temperature	15 to 35 °C	15 to 35 °C	15 to 35 °C
Light source / Wavelength	LED / 455 nm	LED / 470 nm	LED / 630 nm
Operational: °C & RH	0 to 50 °C / 10 to 90 %RH	0 to 50 °C / 10 to 90 %RH	0 to 50 °C / 10 to 90 %RH
Power supply	9Vdc (9V battery)	9Vdc (9V battery)	9Vdc (9V battery)



AK42, AK43 & AK44 are supplied complete with:

hard carrying case, 2 glass cuvettes (AK4551), cleaning cloth, instruction manual and 9V battery.

Optional accessories:

AK4101: Color calibration solutions kit (0-100-300-500 PCU)

AK4106: Kit standard calibration solution (0-100 PCU) for AK42 Color Tester

AK4107: Kit 5 syringe filters for Color Tester

AK4043: Ammonia liquid reagent 50 tests

AK4044: Alkalinity reagent

AK4220: Kit standard calibration solution AK44 Alkalinity Tester

AK4551: Cuvette for Tester photometers (1 pcs.)



AK45 - Nitrite Tester with 0 to 150 ppm range. Nitrite is added to water in cooling towers at high concentrations to act as a corrosion inhibitor. Food Industry uses Nitrite compounds as preservatives.

AK46 - Iron Tester with a range of 0.00 to 4.00 ppm. Iron is usually present in water in low concentrations and can affect the taste. Iron is also an indicator of corrosion and is monitored in industrial plants and in water cooling and heating systems.

Specifications



Model number	AK45 (Nitrite)	AK46 (Iron)
Measuring range	0 to 150 ppm	0.00 to 4.00 ppm
Resolution	1 ppm	0.01 ppm
Accuracy	$\pm (3 \text{ ppm} + 5\% \text{ of reading})$	$\pm (0.04 \text{ ppm} + 2\% \text{ of reading})$
Sample temperature	15 to 35 °C	15 to 35 °C
Light source	Light emitting diode	Light emitting diode
Wavelength	575 nm	525 nm
Operational: °C & RH	0 to 50 °C / 10 to 90 %RH	0 to 50 °C / 10 to 90 %RH
Power supply	9Vdc (9V battery)	9Vdc (9V battery)



AK45 & AK46 are supplied complete with:

hard carrying case, 2 glass cuvettes (AK4551), cleaning cloth, instruction manual and 9V battery.

Optional accessories:

AK4045: Powder reagent for AK45 Nitrite Tester (48 tests)

AK4046: Liquid reagent for Iron (100 tests)

AK4230: Kit Standard calibration solution Iron Tester

AK4215: Kit standard calibration solution Nitrite Tester

AK4551: Cuvette for Testers Photometers (1 pcs.)



Fluoride & Total Hardness Testers

AK47 - Fluoride Tester with 0.00 to 2.00 ppm range. Fluorides are one of the few chemicals that can have a significant impact on humans through drinking water. Ideal levels of fluoride in drinking water should be 0.5 to 1.0 mg/L.

AK48 - Total Hardness Tester with 0 to 300 ppm range. Total Hardness in water is generally the concentration of Calcium and Magnesium Ions in Water. Ideal recommended drinking water should have a hardness between 60 ppm and 120 ppm.

Specifications



Model number	AK47 (Fluoride)	AK48 (Hardness)
Measuring range	0.00 to 2.00 ppm	0 to 300 ppm
Resolution	0.01 ppm	1 ppm
Accuracy	± (0.10 ppm + 5% of reading)	± (3 ppm + 5% of reading)
Sample temperature	15 to 35 °C	15 to 35 °C
Light source	Light emitting diode	Light emitting diode
Wavelength	520 nm	470 nm
Operational: °C & RH	0 to 50 °C / 10 to 90 %RH	0 to 50 °C / 10 to 90 %RH
Power supply	9Vdc (9V battery)	9Vdc (9V battery)



AK47 & AK48 are supplied complete with:

hard carrying case, 2 glass cuvettes (AK4551),
cleaning cloth, instruction manual and 9V battery.

Optional accessories:

AK4047: Liquid reagent for Fluoride (100 tests)

AK4225: Kit Standard calibration solution Fluoride Tester

AK4048: liquid reagent for AK48 Hardness Tester (100 tests)

AK4210: Kit standard calibration solution AK48 Hardness Tester

AK4551: Cuvette for Testers Photometers (1 pcs.)





Accessories & reagents for Testers

- AK4001: Liquid reagent for Free & Total Chlorine (150 tests)
- AK4002: Liquid reagent for Free & Total Chlorine (300 tests)
- AK4003: Liquid reagent for Free Chlorine (150 tests)
- AK4004: Liquid reagent for Free Chlorine (300 tests)
- AK4010: Powder total chlorine reagent (48 sachets)
- AK4011: Kit standard cal solution (0 and 2 ppm) for Chlorine photometer, 2 cuvettes
- AK4013: Kit Standard cal solution Chlorine+
- AK4043: Liquid reagent for Ammonia Tester (50 tests)
- AK4044: Liquid reagent for Alkalinity Tester (100 tests)
- AK4045: Powder reagent for Nitrite Tester (48 tests)
- AK4046: Liquid reagent for Iron Tester (100 tests)
- AK4047: Liquid reagent for Fluoride Tester (100 tests)
- AK4048: Hardness reagent for Hardness tester (48 tests)
- AK4106: Kit standard cal solution (0-100 PCU) for Color photometer, 2 cuvettes
- AK4107: Kit 5 syringe filters for Color Tester/ Color Max photometers
- AK4205: Kit Standard calibration solution Ammonia
- AK4210: Kit Standard calibration solution Hardness
- AK4215: Kit Standard calibration solution Nitrite
- AK4220: Kit Standard calibration solution Alkalinity
- AK4225: Kit Standard calibration solution Fluoride
- AK4230: Kit Standard calibration solution Iron
- AK4235: Kit Standard calibration solution Copper
- AK4551: Cuvette for Tester photometers (1 pcs.)





AK90 pH/Temperature Tester

The AK90 Tester is a practical and versatile instrument suitable to monitor pH and temperature parameters in a variety of applications: drinking water and wastewater treatment, Food and beverage industry, Horticulture, Hydroponics, Agriculture, Swimming Pools, lithographic processes, boiler and cooling tower, aquaculture, aquarium and brewing.

- Automatic calibration, up to 3 points
- Automatic Temperature Compensation
- 0.1 pH resolution
- Hold Function
- Auto Power Off
- Large dual LCD provides optimal viewing
- Replaceable pH/Temperature probe (AK1050)
- Splash-proof and dust-resistant IP54 casing

Specifications

Range	0.0 to 14.00 pH / 0 to 50 °C
Resolution	pH: 0.1 pH / 0.1°C
Accuracy	pH: ± 0.1 pH / $\pm 1^\circ\text{C}$
Calibration	1 or 2 points automatic 3 standard buffers: 4.01, 7.00 and 10.01 pH
ATC	0 to 50 °C
Auto Power Off	10 minutes
Reading (HOLD)	Manual
Operating temp / RH	0 to 50 °C / 10 to 90 % RH
Casing	IP54
Power supply	6VDC (4 batteries LR44 included)
Dimensions (W x L x H)	38 x 188 x 38mm
Weight	85g

AK90 is supplied complete with:

Hard carrying case, 20 ml calibration solution pH 4.01, pH 7.01, pH 10.01, 20 ml KCL electrolyte solution, 20 mL cleaning solution, instruction manual, 4 x LR44 batteries.



Optional accessories:

AK1050: Replaceable pH/Temp electrode for AK90

AK4504: pH 4.01 buffer solution 250 mL

AK4507: pH 7.00 buffer solution 250 mL

AK4510: pH 10.00 buffer solution 250 mL

AK4530: KCL Storage solution for pH electrodes - 250 mL

AK4531: Cleaning solution for pH electrodes - 250 mL



AK51/AK52 EC/Temperature Testers

The AK51 and AK52 Tester are practical and versatile instruments suitable to monitor Conductivity and temperature in a variety of applications: wastewater treatment, Food and beverage industry, Horticulture, Hydroponics, Agriculture, Swimming Pools, lithographic processes, boiler and cooling tower, aquaculture, aquarium and brewing.

- Automatic Temperature Compensation
- Hold Function
- Auto Power Off
- Large dual LCD provides optimal viewing
- Replaceable Conductivity/Temperature probe (AK1055)
- Splash-proof and dust-resistant IP54 casing
- Complete kit including Calibration solutions, in a practical carrying case

Specifications

Model	AK51	AK52
Range	0.01 to 19.99 mS/cm 0 to 50 °C	0 to 3999 µS/cm 0 to 50 °C
Resolution	0.01 mS/cm / 0.1°C	1 µS/cm / 0.1°C
Accuracy	± 2%FS / ± 1°C	± 2%FS / ± 1°C
Calibration	1 point automatic – 1.41 mS/cm or 12.88 mS/cm	1 point automatic – 1.413 µS/cm
ATC	0 to 50 °C	0 to 50 °C
Auto Power Off	10 minutes	10 minutes
Reading (HOLD)	Manual	Manual
Operating temp / RH	0 to 50 °C / 10 to 90 % RH	0 to 50 °C / 10 to 90 % RH
Casing	IP54	IP54
Power supply	6VDC (4 batteries LR44)	6VDC (4 batteries LR44)
Dimensions	38 x 188 x 38mm	38 x 188 x 38mm
Weight	85g	85g

AK51 & 52 are supplied complete with:

Hard carrying case, 20 ml calibration solution 1413 µS/cm (AK52), 20 ml calibration solution 12.88 mS/cm (AK51), instruction manual, 4 x LR44 batteries.



Optional accessories:

AK1055: Replaceable probe for AK51

AK1056: Replaceable probe for AK52

AK4523: 1413 µS Calibration solution – 250 mL bottle

AK4524: 12.88 mS Calibration solution – 250 mL bottle

AKSO

quality you can measure

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