

Water analysis instruments for field and laboratory



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quality you can measure

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About AKSO®

AKSO® is a privately owned group specializing in the design, manufacture, and distribution of high-quality measuring instruments for a wide range of industries, including Laboratory, Food & Beverage, Water Treatment, Hydroponics, Aquaculture, and Wastewater.

We are committed to delivering reliable, economical, and easy-to-use instruments, supported by dedicated customer service and technical support. Our ISO 9001 and ISO 17025 certifications reflect our focus on quality, compliance, and continuous

improvement.

Our calibration laboratory ensures optimal instrument performance through rigorous metrology-based testing, and we also offer verification services for non-AKSO® instruments.

With a sales office in Italy, we are well-positioned to serve European clients with prompt support and local availability.

At AKSO®, we build lasting relationships through **commitment, trust, and partnership.**



MAX BENCH METERS

AK131 MAX

Advanced Bench pH/ ORP/Temperature Meter

The AK131 is designed for laboratories that demand accurate results, full traceability, and reliable compliance. With advanced calibration, GLP functionality, extensive memory, and PC/printer connectivity, it ensures consistent and verifiable measurement performance.



Automated, Compliant, High-Performance

Included

- AK1005 glass refillable double junction pH electrode (1 m cable)
- AK1040 temperature probe (1 m cable)
- Electrode holder, AC/DC adapter
- Calibration solutions (pH 4.01, 7.01, 10.01, KCL 20 ml)



Key Features

- Automatic & Manual Temperature Compensation (ATC/MTC)
- 5-point calibration (USA, NIST + 2 custom points)
- Illuminated display for clear readings in any environment
- Internal memory: stores up to 1000 records
- USB data transfer to PC
- RS232 printer communication for direct reporting
- Full GLP compliance: calibration validity, audit trail, electrode slope monitoring

Specifications

PARAMETER	RANGE	RESOLUTION	ACCURACY
pH	-2.00 to 19.99 pH -2.000 to 19.999 pH	0.01 / 0.001 pH	±0.01 / ±0.002 pH
ORP	±1999.9 mV	0.1 mV	±0.2 mV (±999.9 mV) ±1 mV (up to ±2000 mV)
Temperature	-5.0 to 100.0 °C	0.1 °C	±0.5 °C
Other Specs	Memory: Up to 1000 records · Data Logging: Interval: 1–120 min / Capacity: 1–200 measurements · Calibration: 5 fixed points (1.68, 4.01, 6.86, 7.01, 9.18, 10.01, 12.45 pH) + 2 custom points		

MAX BENCH METERS



AK130 MAX

Standard pH/ORP/ Temperature Bench Meter

The AK130 MAX delivers fast, accurate pH, ORP, and temperature measurements with advanced features like automatic calibration, temperature compensation, stability indicator, self-diagnosis, auto power-off, and a large dual LCD display.

**Precise,
Reliable,
Versatile**

Compatible with:

AK1001 (Ideal for Water Solutions) AK1002 (Milk and Semi-solid Samples) AK1003 (Meat and Solid Samples) AK1004 (Standard Lab Use) AK1005 (Laboratory Use) AK1006 (Surface Measurements) AK1010 (ORP Electrode)



Key Features

- pH range: -2.00 to 16.00 | ORP: -1999 to 1999 mV | Temp: 0-80 °C
- 3-point automatic calibration (pH 4.01, 6.86, 7.00, 9.18, 10.01)
- Automatic and /Manual Temperature Compensation (ATC/MTC)
- Hold function, stability indicator, auto shut-off
- Self-diagnosis with error codes

Included

- AK1004 glass refillable pH electrode (1 m cable)
- AK1040 temperature probe (1 m cable)
- Electrode holder
- AC/DC adapter
- Calibration solutions (pH 4.01, 7.01, 10.01, KCL 20 ml each)



Specifications

PARAMETER	RANGE	RESOLUTION	ACCURACY
pH	-2.00 to 16.00 pH	0.01 pH	±0.02 pH
ORP	-1999 to 1999 mV	1 mV	±3 mV
Temperature	0 to 80 °C	0.1 °C	±0.5 °C
Other Specs	Automatic Temperature compensation: 0 to 80 °C · Manual Temperature compensation: 0 to 80 °C · Operating temperature: 0 to 50 °C / 10 to 90% RU		



AK135 MAX

EC/TDS/Salinity/ Temperature Bench Meter

The AK135 MAX delivers fast, precise EC, TDS, salinity, and temperature measurements. Equipped with automatic calibration, auto-ranging, ATC, stability indicator, HOLD function, self-diagnosis, and auto shut-off, it ensures consistent results for labs, schools, water testing, food quality (HACCP), soil/fertilizer testing, and industrial R&D.

**Accurate,
Reliable,
Versatile**

Included

- AK1020 EC/TDS/Salinity/Temp probe
- Electrode holder
- AC/DC adapter
- 20 ml Calibration solutions (1413 $\mu\text{S}/\text{cm}$ & 12.88 mS/cm)



Key Features

- 5-point automatic calibration
- Auto-ranging for EC/TDS
- Automatic Temperature Compensation (ATC)
- Integrated EC/TDS/Salinity/Temp probe
- HOLD function, stability indicator
- Large backlit dual LCD
- Auto-power off & self-diagnosis

Specifications

PARAMETER	RANGE	RESOLUTION	ACCURACY
Conductivity	0.00 to 19.99 $\mu\text{S}/\text{cm}$ 20.0–199.9 $\mu\text{S}/\text{cm}$ 200–1999 $\mu\text{S}/\text{cm}$ 2.00–19.99 mS/cm	0.01/ 0.1 $\mu\text{S}/\text{cm}$ 1 $\mu\text{S}/\text{cm}$ 0.01 mS/cm	$\pm 2\%$ FS
Salinity	2.00–9.99 ppt	0.01 ppt	$\pm 2\%$ FS
TDS	0–199.9 ppm 0.00–19.99 ppm 20.0–199.9 ppm 200–1999 ppm 2.00–9.99 ppt	0.1 ppm 1 ppm 0.01 ppt	$\pm 2\%$ FS
Temperature	–5.0 to 60.0 °C	0.1 °C	± 0.5 °C

MAX PORTABLE METERS



AK110
(With pH electrode
ideal for aqueous
solutions)

AK111
(With pH electrode
ideal for milk and
semi-solid samples)

AK112
(With pH
electrode ideal
for solid samples)

AK110/AK111/AK112 MAX

pH/ORP/Temperature Portable Meters

Rugged and water-resistant (IP65), MAX Portable Meters deliver accurate pH, ORP, and temperature measurements. With 3-point auto calibration, ATC, stability indicator, HOLD function, backlit LCD, and protective rubber boot (optional), they are ideal for laboratories, water testing, food quality control, aquaculture, and industrial use.

Portable, Accurate, Versatile

Versions & Applications

- **AK110 MAX** – General use with **AK1001 pH electrode**: Water treatment, labs, aquaculture, hydroponics.
- **AK111 MAX FOOD** – Food pH electrode **AK1002**: Semi-solids: milk, juices, jams, soil, shampoo, creams.
- **AK112 MAX MEAT** – Knife pH electrode **AK1003**: Solids: meat.

Included (all versions)

- pH/Temp electrode (AK1001 for AK110, AK1002 for AK111, AK1003 for AK112)
- Hard carrying case
- Calibration solutions (pH 4.01, 7.01, 10.01 + KCl)
- Battery & Instruction manual

Key Features

- 3-point auto calibration (USA/NIST buffers)
- pH range -2.00 to 16.00 pH
- Automatic Temperature Compensation (ATC)
- Stability indicator & HOLD function
- Auto shut-off, self-diagnosis
- Large backlit dual LCD



Specifications

PARAMETER	RANGE	RESOLUTION	ACCURACY
pH	-2.00 to 16.00 pH	0.01 pH	±0.02 pH
ORP	-1999 to 1999 mV	1 mV	±3 mV
Temperature	0 to 80 °C	0.1 °C	±0.5 °C
Other Specs	Operating temperature: 0 to 50 °C / 10 to 90% · RU 3-point calibration · ATC/MTC 0-80 °C · Built-in temp sensor · Backlit LCD · Auto shut-off (10 min) · HOLD function · Casing IP65		



AK115 MAX

Portable EC/TDS/Salinity/ Temperature Meter

The AK115 MAX delivers quick and precise measurements of conductivity, TDS, salinity, and temperature. Designed for laboratories, schools, aquaculture, hydroponics, pools, and industrial applications, it combines advanced features with rugged, splash-proof IP65 protection.

Portable, Accurate, Consistent

Supplied Complete

- Hard carrying case
- AK1020 EC/TDS/Salinity/Temp probe
- Calibration solutions (1413 $\mu\text{S}/\text{cm}$ & 12.88 mS/cm)
- Manual & 9V battery
- **Optional Accessories:** Rubber sleeve · 250 mL calibration solutions



Key Features

- Wide measuring ranges for EC, TDS, salinity & temperature
- Automatic temperature compensation (ATC)
- One-point automatic calibration (5 standard buffers)
- Stability indicator & HOLD function
- Auto shut-off, self-diagnosis
- Large backlit dual LCD for easy reading
- Compact, lightweight design with protective casing

Specifications

PARAMETER	RANGE	RESOLUTION	ACCURACY
Conductivity	0.00 to 19.99 $\mu\text{S}/\text{cm}$ 20.0–199.9 $\mu\text{S}/\text{cm}$ 200–1999 $\mu\text{S}/\text{cm}$ 2.00–19.99 mS/cm	0.01/ 0.1 $\mu\text{S}/\text{cm}$ 1 $\mu\text{S}/\text{cm}$ 0.01 mS/cm	$\pm 2\%$ FS
Salinity	2.00–9.99 ppt	0.01 ppt	$\pm 2\%$ FS
TDS	0–199.9 ppm 0.00–19.99 ppm 20.0–199.9 ppm 200–1999 ppm 2.00–9.99 ppt	0.1 ppm 1 ppm 0.01 ppt	$\pm 2\%$ FS
Temperature	-5.0 to 60.0 °C	0.1 °C	± 0.5 °C
Other Specs	ATC/MTC 0–80 °C · Built-in temp sensor · Backlit LCD · Auto shut-off (10 min) · HOLD function · IP65 · 1×9V battery · 83×175×34 mm · 257 g		

MAX PORTABLE METERS



AK121 MAX

Portable MAX DO/ Temperature Meter with Optical probe

The AK121 MAX delivers fast and precise dissolved oxygen (DO) and temperature measurements. Its **optical DO probe (AK1030)** ensures long-lasting calibration, minimal maintenance, and no membranes or stirring required. With IP65 protection and a large dual LCD, it's ideal for **aquaculture, environmental monitoring, and water quality control.**

Portable, Accurate, Low Maintenance

Supplied Complete

- AK1030 Optical DO/Temp probe (4 m cable)
- Hard carrying case
- Instruction manual
- Rechargeable battery



Key Features

- Optical DO probe: stable, accurate, no cleaning or membranes
- 2-point calibration (0% and 100% oxygen)
- Automatic temperature compensation (0–40 °C)
- Manual altitude & salinity compensation (0–3500 m / 0–45 ppt)
- Stability indicator & HOLD function
- Auto shut-off, self-diagnosis, low battery alert
- Rugged, splash-proof IP65 casing with rubber boot

Specifications

PARAMETER	RANGE	RESOLUTION	ACCURACY
Dissolved Oxygen	0–20.00 mg/L (0–200%)	0.01 / 0.1 mg/L, 0.1%	±0.3 mg/L (0–10 mg/L) ±2% (10–20 mg/L)
Temperature	0–40 °C	0.1 °C	±0.5 °C
Other Specs	DO calibration: 2 points (0% & 100% air) · Auto Temp Compensation: 0–40 °C · Operating: 0–40 °C, 10–90% RH · Power: rechargeable battery (included) · IP65 protection		



AK120 MAX

Dissolved Oxygen Meter with polarographic probe

The AK120 MAX is designed for professionals who need routine **dissolved oxygen (DO) monitoring** in aquaculture, wastewater, research, and environmental studies. Compact and durable, it delivers fast and accurate readings, making it an essential tool wherever water quality matters.

The **polarographic probe** ensures consistent performance with quick membrane replacement, while **automatic temperature compensation** improves accuracy across varying conditions. With its clear display, long probe cable, and simple calibration, the AK120 combines **field-ready toughness with lab-quality precision**.

How to Extend the Life of Your DO Polarographic Probe

For accurate results and long service life, follow these key steps:

- 1. Conditioning** – Prepare the probe before first use as per the manual.
- 2. Electrolyte & Pin** – Periodically replace the electrolyte and check/clean the metal pin if needed.
- 3. Membrane** – Inspect regularly to ensure the tip is undamaged.

Routine care ensures reliability, durability, and consistent measurement accuracy.

Specifications

PARAMETER	RANGE / FEATURE
O ₂ Range	0.00– 20.00 mg/L
% Saturation	0 up to 200% / 0–40 °C
Resolution	0.01 mg/L / 0.1% / 0.1 °C
Accuracy	±1.5% FS / ±0.5 °C
Calibration	2-point (zero & slope)
Temp.Compens.	Automatic, 0 – 30 °C
DO Probe	AK1031 DO probe included

Portable, Accurate, Built for the field

Supplied Complete

- AK1031 polarographic DO/Temp probe (4 m cable)
- Hard carrying case
- 9V battery and Instruction manual

Key Benefits

- **High accuracy** – with 0.1 mg/L resolution
- **Quick calibration** – 2-point manual (zero & slope)
- **Field use ready** – lightweight, portable, battery-powered
- **Durable probe** – AK1031 polarographic probe with membrane
- **Easy to read** – large dual LCD for optimal viewing
- **Flexible** – 4 m probe cable for varied applications

MAX PORTABLE PHOTOMETERS WITH GLP



AK400 MAX

pH, Free & Total Chlorine

The AK400 MAX is a modern photometer designed for fast and accurate **pH, Free and Total Chlorine analysis** (0.00–5.00 ppm; 6.5–8.0 pH). Compact, user-friendly, and versatile, it is ideal for **swimming pools, drinking water, food & beverage, boilers, cooling towers, and environmental applications.**

A standout feature is its **GLP functionality**, ensuring **traceability, compliance, and data integrity:**

- Records date, time, user ID, and sample ID
- Stores up to **2000 results** in internal memory
- Calibration verification with multiple points
- USB connectivity for data transfer, eliminating transcription errors

Reliable, Traceable, GLP-Compliant

Supplied Complete

- Hard carrying case
- 2 glass cuvettes (Ø24.9 × 68 mm)
- Reagent kit for 150 tests (pH, Free & Total Chlorine)
- USB cable & AC/DC adapter
- Cleaning tissue & manual
- Rechargeable battery



Key Features

- High accuracy & immediate results
- Large backlit display with countdown timer
- Works with liquid or powder reagents
- Multilingual (EN, ES, IT, PT)
- Auto shut-off, error messages, battery status indicator
- Rechargeable battery

Specifications

PARAMETER	RANGE	RESOLUTION	ACCURACY
Chlorine	0.00–5.00 ppm	0.01 ppm	±0.03 ppm + 3% reading
pH	6.5–8.0 pH	0.1 pH	±0.2 pH
Other Specs	Calibration verification: 6 points (Cl), 4 points (pH) · Light source: LED, 525 nm · Glass cuvette Ø24.9 mm · Sample: 10 mL, 15–35 °C · Memory: 2000 logs · User ID: 9 · Sample ID: 8 · Connectivity: USB-C to PC · Auto power-off: 2 min · Power: rech.battery or AC/DC adapter · Methods: EPA 330.5, 4500-Cl G, DIN, ISO 7393/2 (Cl); Phenol Red (pH)		



AK405 MAX

Color Photometer

The **AK405 MAX Color Photometer** is a high-performance instrument designed for precise, rapid, and reliable determination of water colour. Using the internationally recognized **Platinum-Cobalt (Pt/Co) method**, the reference standard for drinking water and natural waters, it ensures compliance with regulatory requirements and laboratory best practices.

The instrument is capable of measuring both **true colour** (from filtered samples, excluding suspended solids) and **apparent colour** (from unfiltered samples), providing a comprehensive assessment of water quality and potability. This dual functionality makes it an indispensable tool for laboratories, water utilities, and environmental monitoring professionals who require accurate results in routine and field operations.

Engineered for professional use, the **MAX line** combines **portability, accuracy, and intuitive operation**. Its modern, ergonomic design features a **large backlit display** for easy reading in all environments, a **multilingual user interface** for international applications, and flexible **power options** with both battery operation and USB connectivity.

Reliable, Traceable, GLP-Compliant

Supplied Complete

- Hard carrying case
- 2 glass cuvettes (Ø24.9 × 68 mm)
- Calibration solutions
- USB cable & AC/DC adapter
- Cleaning tissue & manual



Specifications

PARAMETER	RANGE
Range	0–500 PCU
Resolution	1 PCU
Accuracy	±3 PCU + 3% reading
Calibration	5 points (0, 20, 100, 300, 500 PCU)
Memory	2000 log groups
Connectivity	USB (Type-C)
Measuring cell	Glass Cuvette (Ø 24,9 mm)
User ID	9 options
Sample ID	8 options
Auto power off	After 2 minutes
Operating Temperature	0 to 50 °C

Key Features

- GLP compliance: Internal memory (2000 logs), date/time, user & sample ID tracking – ensuring full traceability and compliance
- Quick, accurate results with 5-point calibration
- Easy operation with error messages and built-in reaction timer
- Rechargeable battery
- USB communication for direct PC data transfer
- Auto shut-off and battery status indicator

MAX PORTABLE PHOTOMETERS WITH GLP



AK410 MAX

Turbidity Meter

The **AK410 MAX Turbidity Meter** delivers fast, accurate, and reliable turbidity measurements with a clear digital readout, using the **EPA 180.1 method**, the internationally recognized standard for turbidity analysis. Built for both laboratory and field use, it combines advanced optics, robust construction, and user-friendly operation, ensuring confidence in every measurement.

The AK410 MAX combines **precision and practicality**. Its intuitive interface, large backlit display, and multilingual menu make it accessible to operators of all experience levels, while its durable design ensures dependable performance in both laboratory and field conditions.

Reliable, Traceable, GLP-Compliant

Supplied Complete

- Hard carrying case
- 2 cuvettes + cleaning tissue
- Calibration standards kit
- USB cable & AC/DC adapter
- Instruction manual
- Rechargeable battery



Specifications

PARAMETER	RANGE
Range	0.01–9.99 NTU; 10.0–99.9 NTU; 100–1000 NTU
Resolution	0.01 / 0.1 / 1 NTU
Accuracy	±0.2 NTU + 5% of reading
Calibration	5 points (0, 20, 200, 500, 800 NTU)
Memory	2000 log groups
Connectivity	USB (Type-C)
Sample temperature	15 to 35 °C
Light source	LED - 525 nm
Measuring cell	Glass Cuvette (Ø 24,9 mm)
User ID	9 options
Sample ID	8 options

GLP Compliance and Traceability

The instrument is fully compliant with **Good Laboratory Practice (GLP)** standards. It features an internal memory capable of storing up to **2000 logs**, each including **date and time stamps, user ID, and sample ID tracking**, ensuring complete traceability and simplified data management for audits and reporting.

Key Features

- **GLP compliance:** 2000-log memory with **date/time, user ID & sample ID tracking** for full traceability
- Supplied with a **rechargeable battery** (or USB power) for extended field use
- 5-point calibration with standards included (0, 20, 200, 500, 800 NTU)
- Clear results with adjustable backlight and error messages
- IP65 Water resistant casing
- Rechargeable battery
- NTU,FTU,FNU and EBC unit conversion function



Accessories for Max Photometers

MAX photometers are supplied complete with: hard carrying case, 2 glass cuvettes ($\text{Ø}24.9 \times 68 \text{ mm}$), 1 USB cable for power supply and PC communication, AC/DC adapter (100-240 Vac/5Vdc), rechargeable battery, tissue to clean cuvette, and relevant calibration solutions and reagents depending on the model.

MAX photometers can be supplied in larger optional hard carrying cases, with capacity for two or three units, making them ideal for field use.



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:** Free & Total Chlorine calibration solution (0, 1, 2 and 4 ppm) for AK400, 4 cuvettes
- **AK4101:** Standard calibration solution (0, 100, 300 and 500 PCU), 4 cuvettes
- **AK4107:** Kit 5 syringe filters for Color MAX photometer
- **AK4410:** Kit Turbidity Cal solutions (0-20- 200- 500- 800 NTU)
- **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 PHOTOMETERS

AK40

Free & Total Chlorine

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

With AK40 Tester 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, food processing, wastewater and swimming pools.



AK41

Chlorine +

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	AK40	AK41
Measuring range	0.00 to 3.50 ppm	0 to 500 ppm
Resolution	0.01 ppm	1 ppm
Accuracy	± 0.05 ppm +3% reading	± 5 ppm +5% reading
Sample temperature	15 to 35 °C	15 to 35 °C
Sample volume	10 mL	12 mL
Light source	LED – 525 nm	LED – 525 nm
Auto power off	After 2 minutes	After 2 minutes
Display	Oled	Oled
Languages	English, Spanish, Italian, Portuguese	English, Spanish, Italian, Portuguese
Operating Temperature	0 to 50 °C	0 to 50 °C
Operating Humidity	10 to 90 % RH (non-condensing)	10 to 90 % RH (non-condensing)
Power Supply	9V Battery	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)
- **AK4010:** Total Chlorine powder reagent (50 sachets)
- **AK4011:** Kit standard calibration solution (0 and 2 ppm) for Chlorine Tester , 2 cuvettes
- **AK4551:** Cuvette for Tester photometers (1pcs.)

AK40 & AK41 are supplied complete with: Hard carrying case, 2 glass cuvettes (AK4551), cleaning cloth, Instruction manual and 9V battery.



AK42

Color Tester

Measures both **True** (filtered) and **Apparent** (unfiltered) colour.

AK43

Ammonia Tester

Monitors ammonia in fresh and salt water; high levels indicate pollution.

AK44

Alkalinity Tester

Assesses water's **acid-neutralizing capacity**, key for pH stability.



SPECIFICATIONS	AK42	AK43	AK44
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% reading	± 0.10 ppm +3% reading	± 5 ppm +5% reading
Sample temperature	15 to 35 °C	15 to 35 °C	15 to 35 °C
Sample volume	12 mL	10 mL	10 mL
Light source	LED – 455 nm	LED – 455 nm	LED – 455 nm
Auto power off	After 2 minutes	After 2 minutes	After 2 minutes
Display	Oled	Oled	Oled
Languages	English, Spanish, Italian, Portuguese	English, Spanish, Italian, Portuguese	English, Spanish, Italian, Portuguese
Operating Temperature	0 to 50 °C	0 to 50 °C	0 to 50 °C
Operating Humidity	10 to 90 % RH (non-condensing)	10 to 90 % RH (non-condensing)	10 to 90 % RH (non-condensing)
Power Supply	9V Battery	9V Battery	9V Battery

Optional accessories

- **AK4101:** Color CAL solutions (0-100-300-500 PCU)
- **AK4106:** Standard calibration solution (0 and 100 PCU) for AK42 Color Tester, 2 cuvettes
- **AK4107:** Kit 5 syringe filters for Color Tester
- **AK4551:** Cuvette for Tester photometers (1pcs.)
- **AK4043:** Liquid reagent for Ammonia tester AK43 (50 tests)
- **AK4551:** Cuvette for Tester photometers (1pcs.)
- **AK4044:** Liquid reagent for Alkalinity Tester AK44 (100 tests)
- **AK4220:** Kit standard calibration solution Alkalinity Tester AK44
- **AK4551:** Cuvette for Tester photometers (1pcs.)

AK42, AK43 & AK44 are supplied complete with: Hard carrying case, 2 glass cuvettes (AK4551), cleaning cloth, Instruction manual and 9V battery.



HANDY PHOTOMETERS

AK45

Nitrite Tester

Designed for accurate monitoring of nitrite levels in water. In cooling tower systems, nitrite is often added at high concentrations as a corrosion inhibitor. In the food industry, nitrite compounds are commonly used as preservatives.

AK46

Iron Tester

Enables precise measurement of iron, a naturally occurring element in rivers, lakes, and groundwater. Iron may also enter water supplies through industrial discharges or the corrosion of iron piping. It can be found in two forms: soluble ferrous iron (Fe^{2+}) and insoluble ferric iron (Fe^{3+}).



SPECIFICATIONS	AK45	AK46
Measuring range	0 to 150 ppm	0.00 to 4.00 ppm
Resolution	1 ppm	0.01 ppm
Accuracy	± 3 ppm +5% reading	± 0.04 ppm +2% reading
Sample temperature	15 to 35 °C	15 to 35 °C
Sample volume	10 mL	10 mL
Light source	LED – 575 nm	LED – 525 nm
Auto power off	After 2 minutes	After 2 minutes
Display	Oled	Oled
Languages	English, Spanish, Italian, Portuguese	English, Spanish, Italian, Portuguese
Operating Temperature	0 to 50 °C	0 to 50 °C
Operating Humidity	10 to 90 % RH (non-condensing)	10 to 90 % RH (non-condensing)
Power Supply	9V Battery	9V Battery

Optional accessories

- **AK4045:** powder reagent for Nitrite Tester AK45 (50 tests)
- **AK4046:** powder reagent for Iron (50 tests)
- **AK4215:** Kit standard calibration solution Nitrite Tester AK45
- **AK4230:** Kit Standard calibration solution Iron Tester
- **AK4551:** Cuvette for Tester photometers (1pcs.)

AK45 & AK46 are supplied complete with: Hard carrying case, 2 glass cuvettes (AK4551), cleaning cloth, Instruction manual and 9V battery.



AK47

Fluoride Tester

Fluorides are one of the few chemicals that can have a significant impact on humans through drinking water. Fluorides in drinking water, in low concentrations, have beneficial effects on dental hygiene, but excessive exposure to fluorides, either in drinking water or in combination with fluoride exposure from other sources, can give rise to numerous harmful effects.



AK48

Total Hardness Tester

The AK48 is a precise photometer designed to measure **total hardness** in water, expressed as the combined concentration of calcium and magnesium ions. These minerals are naturally present in groundwater and surface waters, originating from the dissolution of rocks and soils. Ideal recommended drinking water should have a hardness between 60 ppm and 120 ppm.



SPECIFICATIONS	AK47	AK48
Measuring range	0.00 to 2.00 ppm	0 to 300 ppm
Resolution	0.01 ppm	1 ppm
Accuracy	± 0.10 ppm +5% reading	± 3 ppm +5% reading
Sample temperature	15 to 35 °C	15 to 35 °C
Sample volume	10 mL	10 mL
Light source	LED – 520 nm	LED – 470 nm
Auto power off	After 2 minutes	After 2 minutes
Display	Oled	Oled
Languages	English, Spanish, Italian, Portuguese	English, Spanish, Italian, Portuguese
Operating Temperature	0 to 50 °C	0 to 50 °C
Operating Humidity	10 to 90 % RH (non-condensing)	10 to 90 % RH (non-condensing)
Power Supply	9V Battery	9V Battery

Optional accessories

- **AK4047:** Liquid reagent for Fluoride (100 tests)
- **AK4048:** Powder reagent for Hardness Tester AK48 (50 tests)
- **AK4210:** Kit standard calibration solution Hardness Tester AK48
- **AK4225:** Kit Standard calibration solution Fluoride Tester
- **AK4551:** Cuvette for Tester photometers (1pcs.)

AK47 & AK48 are supplied complete with:
 Hard carrying case,
 2 glass cuvettes
 (AK4551),
 cleaning cloth,
 Instruction
 manual
 and 9V
 battery.



POCKET PH TESTER



Robust, for accurate and fast checks

Product features

- Automatic calibration, up to 3 points
- Automatic Temperature Compensation (ATC)
- 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

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

AK90

pH/Temperature Tester

The AK90 Tester is a practical and versatile instrument suitable for controlling 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.

Specifications

PARAMETER	RANGE
Range	pH: 0.0 to 14.00 pH Temperature: 0 to 50 °C
Resolution	pH: 0.1 pH Temperature: 0.1°C
Accuracy	pH: ± 0.1 pH Temperature: $\pm 1^\circ\text{C}$
pH calibration	1 or 2 points automatic – 3 standard buffers: 4.01, 7.00 and 10.01 pH
Automatic Temperature compensation	0 to 50 °C
pH/Temp electrode	AK1050 (included)
Auto shut-off	10 minutes
Operating Temperature	0 to 50 °C
Operating RH	10 to 90 % RH
Casing	IP54

AK90 is supplied complete with:
Hard carrying case, 20 ml calibration solution pH 4.01, pH 7.01, pH 10.01, KCL electrolyte solution, cleaning solution, Instruction manual and 4 x LR44 batteries.



POCKET CONDUCTIVITY TESTERS



Robust design for accurate and fast measurements

Product features

- Easy automatic calibration, in 2 calibration points (for AK51)
- Automatic Temp. Compensation (ATC)
- Conductivity probe with integrated temperature sensor
- Hold Function
- Auto shutoff extends battery life
- Large custom 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

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

AK51/AK52

EC/Temperature Tester

The AK51 and AK52 are compact, reliable, and easy-to-use testers designed for precise monitoring of **electrical conductivity (EC)** and **temperature** across a wide range of applications. Built with durability and accuracy in mind, these instruments ensure stable readings and fast response times, making them ideal for both field and laboratory use. Key applications include wastewater treatment, Food and beverage industry, Horticulture, Hydroponics, Agriculture, Swimming Pools, lithographic processes, boiler and cooling tower, aquaculture, aquarium and brewing.

Specifications

PARAMETER	AK51	AK52
Range	Conductivity: 0.01 to 19.99 mS/cm / Temperature: 0 to 50 °C	Conductivity: 0 to 3999 µS/cm / Temperature: 0 to 50 °C
Resolution	Conductivity: 0.01 mS/cm / Temperature: 0.1°C	Conductivity: 1 µS/cm / Temperature: 0.1°C
Accuracy	Conductivity: ± 2%FS / Temperature: ± 1°C	Conductivity: ± 2%FS / Temperature: ± 1°C
Conductivity calibration	1 point automatic – 1.41 mS/cm or 12.88 mS/cm	1 point automatic – 1.413 µS/cm
Automatic Temperature compensation	0 to 50 °C	0 to 50 °C
Auto shut-off	10 minutes	10 minutes
Reading (HOLD)	Manual	Manual
Operating Temperature	0 to 50 °C	0 to 50 °C
Operating RH	10 to 90 % RH	10 to 90 % RH
Casing	IP54	IP54

AK51 & AK52 are supplied complete with: Hard carrying case, 20 ml calibration solution 1413 µS/cm (AK51,AK52), 20 ml calibration solution 12.88 mS/cm (AK51), Instruction manual and 4 x LR44 batteries.



A K S O[®]
quality you can measure

AKSO INSTRUMENTS SRL

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