

Adwa

The New Dimension in Measurements

Consistency, Reliability,
Durability and Performance

- **Waterproof Pocket Testers**
- **Professional Portable Meters**
- **Professional Bench Meters**

*instruments for
Water Analysis*



pH
ISE
ORP
EC
TDS
DO
TEMP





AD1000-AD1020

Professional Multi-Parameter pH-ORP-ISE-TEMPERATURE Bench Meters with RS232/USB interface & GLP

AD1000 and AD1020 are professional bench meters with ranges for pH, ORP (Oxidation Reduction Potential), ISE (AD1020 only) and temperature measurements. Relative mV readings are also provided. Main features include:

- Up to 5-point calibration with 7 memorized buffers and two custom buffers
- Calibration time-out alarm
- Log-on-demand (up to 50 samples) and automatic logging (up to 1000 samples)
- Two selectable alarm limits
- User selectable logging interval mode
- HOLD feature to freeze the stable reading on the LCD
- GLP feature to view last calibration data for pH, ISE and relative mV
- PC interface/RS232/USB

AD1000 and AD1020 are supplied complete with A1131B refillable glass body pH electrode with BNC connector and 1 m cable, A7662 stainless steel temperature probe with 1 m cable, electrode holder, calibration solutions in sachets (pH7 and pH4, 20 ml each), 12 Vdc power adapter, and user manual.

AD1030-AD1040-AD1200

Professional Multi-Parameter pH-ORP-ISE-TEMPERATURE Bench Meters with GLP

AD1030, AD1040 and AD1200 are professional bench meters for pH, ORP (Oxidation Reduction Potential), ISE (AD1200 only) and temperature measurements. Relative mV readings are also provided. Main features include:

- Up to three-point calibration with seven memorized buffers and two custom buffers
- Calibration time-out alarm
- pH calibration using buffers with 0.001 resolution
- pH readings with manual or automatic temperature compensation
- Up to 50 samples for log-on-demand (not for AD1030)
- Two selectable alarm limits
- HOLD feature to freeze the stable reading on the LCD
- GLP feature (not for AD1030) to view last calibration data for pH, ISE and relative mV ranges

AD1030, AD1040 and AD1200 are supplied complete with A1131B refillable glass body pH electrode with BNC connector and 1 m cable, A7662 stainless steel temperature probe with 1 m cable, electrode holder, calibration solutions in sachets (pH7 and pH4, 20 ml each), 12 Vdc power adapter, and user manual.



	AD1000/AD1020
Range	-2.00 to 16.00 pH / -2.000 to 16.000 pH ±2000 mV 0.001 to 19999 ppm (AD1020 only) -20.0 to 120.0°C (-4.0 to 248.0°F)
Resolution	0.01 pH / 0.001 pH 0.1 mV (±999.9 mV) / 1 mV (outside) 0.001 ppm (0.001 to 9.999) 0.01 ppm (10.00 to 99.99) 0.1 ppm (100.0 to 999.9) 1 ppm (1000 to 19999) (AD1020 only) 0.1°C (0.1°F)
Accuracy (@20°C/68°F)	±0.01 pH / ±0.002 pH ±0.2 mV up to ±699.9 mV ±0.5 mV up to ±999.9 mV ±2 mV outside ±0.5% f.s. ISE (AD1020 only) ±0.4°C (±0.7°F) (excluding probe error)
pH Calibration	Up to 5 point calibration, with 2 custom and 7 standard buffers (pH 1.68, 4.01, 6.86, 7.01, 9.18, 10.01, 12.45)
ISE Calibration	Up to two-point calibration, (AD1020 only) 5 standard solutions available (0.1, 1, 10, 100, 1000 ppm)
PC Interface	USB and RS232

	AD1030/AD1040/AD1200
Range	-2.00 to 16.00 pH / -2.000 to 16.000 pH ±2000 mV 0.001 to 19999 ppm (AD1200 only) -20.0 to 120.0°C (-4.0 to 248.0°F)
Resolution	0.01 pH / 0.001 pH 0.1 mV (±999.9) / 1 mV (outside) 0.001 ppm (0.001 to 9.999) 0.01 ppm (10.00 to 99.99) 0.1 ppm (100.0 to 999.9) 1 ppm (1000 to 19999) (AD1200 only) 0.1°C (0.1°F)
Accuracy (@20°C/68°F)	±0.01 pH / ±0.002 pH ±0.2 mV up to ±699.9 mV ±0.5 mV up to ±999.9 mV ±2 mV outside ±0.5% f.s. for ISE (AD1200 only) ±0.4°C (±0.7°F) (excluding probe error)
pH Calibration	Up to 3 point calibration, with 2 custom and 7 standard buffers (pH 1.68, 4.01, 6.86, 7.01, 9.18, 10.01, 12.45)
ISE Calibration	Up to two-point calibration, (AD1200 only) 5 standard solutions available (0.1, 1, 10, 100, 1000 ppm)

AD3000

Professional Multi-Parameter Conductivity-TDS-TEMPERATURE Bench Meter with GLP

AD3000 is a microprocessor-based conductivity, TDS and temperature meter.

The autoranging feature of the EC and TDS ranges automatically sets the instrument to the scale with the highest resolution. Measurements are compensated for temperature effect automatically (ATC) or manually (MTC) with the conductivity probe with built-in temperature sensor. It is also possible to disable the temperature compensation and measure the actual conductivity. The temperature coefficient is user selectable. The instrument is equipped with a stability indicator, to indicate when measurement is to be recorded.

AD3000 includes also GLP capability. In addition, the meter allows the user to enter an ID code to uniquely identify the instrument.

AD3000 is supplied complete with **A76309** conductivity probe with built-in temperature sensor and 1 m cable, 12 Vdc power adapter, calibration solutions in sachets (1413 $\mu\text{S}/\text{cm}$ and 12,88 mS/cm, 20 ml each), and user manual.

AD3000	
Range	0.00 to 19.99 $\mu\text{S}/\text{cm}$; 0.00 to 9.99 ppm 20.0 to 199.9 $\mu\text{S}/\text{cm}$; 10.0 to 99.9 ppm 200 to 1999 $\mu\text{S}/\text{cm}$; 100 to 999 ppm 2.00 to 19.99 mS/cm; 1.00 to 9.99 ppt 20.0 to 199.9 mS/cm; 10.0 to 99.9 ppt -9.9 to 120.0°C
Resolution	0.01, 0.1, 1 $\mu\text{S}/\text{cm}$; ppm 0.01, 0.1 mS/cm; ppt 0.1°C
Accuracy (@20°C/68°F)	$\pm 1\%$ f.s. (EC/TDS) (@20°C/68°F) $\pm 0.5^\circ\text{C}$
EC Calibration	Offset at 0.00 $\mu\text{S}/\text{cm}$; Slope at 1 point with 6 memorized values (84.0, 1413 $\mu\text{S}/\text{cm}$; 5.00, 12.88, 80.0, 111.8 mS/cm) or with custom value



AD8000

Professional Multi-Parameter pH/ORP/Conductivity/TDS/TEMPERATURE Bench Meter with GLP

AD8000 is a microprocessor-based pH, ORP, conductivity, TDS and temperature bench meter. Relative mV feature is also provided. The autoranging feature of the EC and TDS ranges automatically sets the instrument to the scale with the highest resolution. pH measurements are compensated for temperature effect automatically (ATC) using AD5006 temperature probe, while the EC readings can be compensated automatically (ATC) using the conductivity probe with built-in temperature sensor or manually (MTC). It is also possible to disable the temperature compensation and measure the actual conductivity. The temperature coefficient is user selectable.

The pH calibration can be performed at 1, 2 or 3 points with five memorized buffers (pH 4.01, 6.86, 7.01, 9.18, 10.01). In addition, **AD8000** is provided with calibration timeout alarm, GLP feature to view last calibration data and automatic HOLD feature to freeze the first stable reading on the LCD.

AD8000 is supplied complete with A1131B refillable glass body pH electrode with BNC connector and 1 m cable, A76309 conductivity probe with built-in temperature sensor and 1 m cable, A7662 stainless steel temperature probe with 1 m cable, calibration solutions in sachets (pH4, pH7, 1413 $\mu\text{S}/\text{cm}$ and 12,88 mS/cm, 20 ml each), 12 Vdc power adapter and user manual.

AD8000	
Range	-2.00 to 16.00 pH / -2.000 to 16.000 pH ± 699.9 mV / ± 2000 mV 0.00 to 19.99 $\mu\text{S}/\text{cm}$; 0.00 to 9.99 ppm 20.0 to 199.9 $\mu\text{S}/\text{cm}$; 10.0 to 99.9 ppm 200 to 1999 $\mu\text{S}/\text{cm}$; 100 to 999 ppm 2.00 to 19.99 mS/cm; 1.00 to 9.99 ppt 20.0 to 199.9 mS/cm; 10.0 to 99.9 ppt -9.9 to 120.0°C (pH range) 0.0 to 100.0°C (EC range)
Resolution	0.01 pH / 0.001 pH 0.1 mV (± 699.9 mV) / 1 mV (± 2000 mV) 0.01, 0.1, 1 $\mu\text{S}/\text{cm}$; ppm 0.01, 0.1 mS/cm; ppt 0.1°C
Accuracy (@20°C)	± 0.01 pH / ± 0.002 pH ± 0.2 mV up to ± 699.9 mV ± 1 mV up to ± 2000 mV $\pm 1\%$ f.s. (EC/TDS) $\pm 0.5^\circ\text{C}$



AD130

Professional Multi-Parameter Splash-Proof pH-ORP-TEMP Portable Meter

AD130 is a heavy-duty portable pH meter designed to provide laboratory results and accuracy even under harsh industrial conditions.

Main features include:

- 7 memorized buffers for pH calibration (pH 1.68, 4.01, 6.86, 7.01, 9.18, 10.01 and 12.45)
- Messages on the LCD to make the calibration easy and accurate
- pH readings with manual or automatic temperature compensation
- pH calibration using pH buffers with 0.01 resolution
- Temperature range from -20 to 120°C (-4 to 248°F) using A7662 probe AD130 can also use ORP electrodes to measure mV, with a resolution up to 0.1 mV.

AD130	
Range	pH -2.00 to 16.00 ORP -1999 to +1999 mV Temp -20.0 to 120.0°C (-4.0 to 248.0°F)
Resolution	pH 00.01 ORP 0.1 up to ±699.9 mV / 1 outside Temp 0.1 °C (0.1°F)
Accuracy	pH ± 0.01 pH ORP ±0.2 up to ±699.9 mV / ±1 outside Temp ±0.4°C (±0.8°F)
Calibration	pH up to 2-points
Buffers	pH 1.68, 4.01, 6.86, 7.01, 9.18, 10.01, 12.45
Temperature compensation	ATC/MTC (-20 to 120°C)
Calibration ORP	factory
UNIT	°C and °F
LCD	2 rows
Hold function	yes
Low battery indication	yes
Stability indicator	yes
Auto shutt-off	20 min. (can be disabled)
Power supply	4 x 1.5V AA batteries
Battery life	500 hours approx

Supplied with: A1230B pH electrode with Epoxy body, BNC connector and 1m cable, A7662 stainless steel temperature probe, calibration solutions in satchets (pH4 and pH7, 20 ml each), 1.5V AA alkaline battery (4 pcs), and user manual.



AD131 - AD132

Professional Waterproof pH-ORP-TEMP Portable Meter with RS232 interface & GLP

AD131 and AD132 are heavy-duty portable waterproof meters for pH, ORP (Oxidation Reduction Potential) and temperature measurements, designed to provide laboratory results and accuracy even under harsh industrial conditions.

Main features include:

- 7 memorized buffers for pH calibration (pH 1.68, 4.01, 6.86, 7.01, 9.18, 10.01 and 12.45)
- Messages on the LCD to make the calibration easy and accurate
- pH readings with manual or automatic temperature compensation
- Calibration time-out alarm
- Log-on-demand
- HOLD feature to freeze stable reading on the LCD
- GLP feature to view last calibration data for pH and relative mV
- PC interface (only for AD132)
- Connection to an external serial printer with the following specification (only for AD132): at least 16 characters/line, baud rate 9600 and RS232 input

AD131, AD132		
Range	pH ORP Temp	-2.00 to 16.00 -2000 to +2000 mV 20.0 to 120.0°C (-4.0 to 248.0°F)
Resolution	pH ORP Temp	0.01 0.1 up to ±999.9 mV / 1 outside 0.1°C (0.1°F)
Accuracy	pH ORP Temp	± 0.01 pH ±0.2 up to ±699.9 ±0.5 up to ±999.9 mV / ±2 outside ±0.4°C (±0.8°F)
Calibration		pH up to 5-points
Buffers		pH 1.68, 4.01, 6.86, 7.01, 9.18, 10.01, 12.45
Temperature compensation		ATC/MTC (-20 to 120°C)
Calibration ORP		factory
UNIT		°C and °F
Memory		500 samples on demand, with time GLP yes, with time
Hold function		yes (Auto End Point)
Low battery indication		yes
Stability indicator		yes
Auto shutt-off		20 min. (can be disabled)
PC interface		RS232 for PC software and External Printer (AD132 only)
Power supply		4 x 1.5V AA batteries
Battery life		300 hours approx



Supplied with: A1230B pH electrode with Epoxy body, A7662 stainless steel temperature probe, calibration solutions in satchets (pH4 and pH7, 20 ml each), 1.5V AA alkaline battery (4 pcs) and user manual and only for AD132: AD9551 serial communication cable.

AD331

Professional Waterproof Conductivity-TEMP Portable Meter with GLP

AD331 is a waterproof portable meter that reads Conductivity in 5 ranges and temperature.

The autoranging feature of the EC range automatically sets the instrument to the scale with the highest resolution. Measurements are compensated for temperature effect automatically (ATC) or manually (MTC). It is also possible to disable the temperature compensation feature to measure the actual conductivity. The temperature coefficient is user selectable. This instrument also features a measurement stability indicator, GLP capability, and a user selectable ID code to uniquely identify the instrument.

AD331	
Range	0.00 to 199.99 μS 0.0 to 199.9 μS 0 to 1999 μS 0.00 to 19.99 mS 0.0 to 199.9 mS -9.9 to 120.0 $^{\circ}\text{C}$
Resolution	0.01 / 0.1 / 1 μS 0.01 / 0.1 mS 0.1 $^{\circ}\text{C}$
Accuracy	$\pm 1\%$ f.s. ± 0.5 $^{\circ}\text{C}$
EC Calibration	Offset 0.0 $\mu\text{S}/\text{cm}$; Slope: 1 point with 6 memorized standards (84.0, 1413 $\mu\text{S}/\text{cm}$; 5.00, 12.88, 80.0, 111.8 mS/cm) or one custom value
Temperature calibration	User offset adjustment $\pm 1^{\circ}\text{C}$
Temperature	ATC / MTC from -9.9 to 120 $^{\circ}\text{C}$ Compensation
Temperature coefficient	0.0 to 10.0 $\%/^{\circ}\text{C}$
Reference temperature	Selectable from 15.0 to 30.0 $^{\circ}\text{C}$
Probe	1 4-ring EC probe (K=1) with built-in NTC10K temperature sensor, Conmet-like
Memory	250 samples on demand with time stamp
GLP	Yes with time stamp
Hold function	yes (auto)
Low battery indication	yes
Auto shutt-off	yes
Power supply	4 x 1.5V AA batteries



Supplied with: A76309 conductivity probe with built-in temperature sensor, calibration solutions in satchets (1413 $\mu\text{S}/\text{cm}$ and 12,88 mS/cm, 20 ml each), 1.5V AA alkaline battery (4 pcs) and user manual.

AD330 - AD332

Professional Waterproof Conductivity-TDS-TEMP Portable Meter with RS232 interface & GLP

AD330 and AD332 are waterproof portable meters that read TDS and Conductivity in 5 ranges and temperature.

The autoranging feature of the EC and TDS ranges automatically sets the instrument to the scale with the highest resolution. Measurements are compensated for temperature effect automatically (ATC) or manually (MTC). It is also possible to disable the temperature compensation feature to measure the actual conductivity.

The temperature coefficient is user selectable. These instruments also features a measurement stability indicator, GLP capability, and a user selectable ID code to uniquely identify the instrument.

Moreover, AD332 includes PC interface and printing function. Connect the meter to an external serial printer with the following printer specifications:

- at least 16 characters / line
- baud rate 9600
- 9-pin RS232 input

AD330, AD332	
Range	0.00 to 19.99 μS / 0.00 to 10.00 ppm 0.0 to 199.9 μS / 0.0 to 100.0 ppm 0 to 1999 μS / 0 to 1000 ppm 0.00 to 19.99 mS / 0.00 to 10.00 ppt 0.0 to 199.9 mS / 0.0 to 100.0 ppt -9.9 to 120.0 $^{\circ}\text{C}$
Resolution	0.01 / 0.1 / 1 $\mu\text{S}/\text{ppm}$ 0.01 / 0.1 mS/ppt 0.1 $^{\circ}\text{C}$
Accuracy	$\pm 1\%$ f.s. ± 0.5 $^{\circ}\text{C}$
EC calibration	Offset: 0.0 $\mu\text{S}/\text{cm}$; Slope: 1 point with 6 memorized standards (84.0, 1413 $\mu\text{S}/\text{cm}$; 5.00, 12.88, 80.0, 111.8 mS/cm)
Temperature calibration	User offset adjustment $\pm 1^{\circ}\text{C}$
Temperature compensation	ATC / MTC from -9.9 to 120 $^{\circ}\text{C}$
Temperature coefficient	0.0 to 10.0 $\%/^{\circ}\text{C}$
Reference temperature	Selectable from 15.0 to 30.0 $^{\circ}\text{C}$
TDS factor	0.4 to 1.0
Probe	1 4-ring EC probe (K=1) with built-in NTC10K temperature sensor, Conmet-like
Memory	250 samples on demand with time stamp (only AD332)
GLP	Yes with time stamp
Printer	External through RS232 (only AD332)
Hold function	yes (auto)
Low battery indication	yes
Auto shutt-off	yes
PC Interface	RS232 for PC software and External Printer (only AD332)
Power supply	4 x 1.5V AA batteries



Supplied with: A76309 conductivity probe with built-in temperature sensor, calibration solutions in satchets (1413 $\mu\text{S}/\text{cm}$ and 12,88 mS/cm, 20 ml each), 1.5V AA alkaline battery (4 pcs) and user manual and only for AD332: AD9551 serial communication cable



AD110-AD111

Standard Professional pH-TEMP Portable Meter (AD110) & Standard Professional pH-ORP-TEMP Portable Meter (AD111)

AD110 and **AD111** are compact pH meters featuring automatic pH calibration, HOLD function, low battery indication, temperature measurement and compensation. In addition, AD111 can measure in the mV range.

AD110 and **AD111** offer you the greatest value-for-money for basic pH, ORP and Temperature measurements. 2 points push-button calibration with auto-buffer recognition in 3 points (pH 4.01, pH 7.01 and pH 10.01).

Auto-off after 8 minutes of non-use conserves energy and lengthens battery life-span.

AD110 is supplied complete with A1230B pH electrode with Epoxy body, BNC connector, A7662 stainless steel temperature probe, 1 m cable, calibration solutions in satchets (pH4 and pH7, 20 ml each), and 1 m cable, batteries (4 x 1.5V AA alkaline) and instruction manual.

AD111 is supplied complete with A1230B pH electrode with Epoxy body, BNC connector and 1 m cable, A7662 stainless steel temperature probe, 1 m cable, calibration solutions in satchets (pH4 and pH7, 20 ml each), batteries (4 x 1.5V AA alkaline) and instruction manual.

		AD110
Range	pH Temp	-2.00 to 16.00 pH -5.0 to 105.0°C
Resolution	pH Temp	0.01 pH 0.1°C
Accuracy	pH Temp	±0.02 pH ±0.5°C up to 60°C / ±1°C outside
pH Calibration		automatic, 1 or 2 point, with 3 memorized buffers value
Temp. Calibration		factory
Temp. Compensation		automatic or 25°C fixed

		AD111
Range	pH mV Temp	-2.00 to 16.00 pH ±1000 mV -5.0 to 105.0°C
Resolution	pH mV Temp	0.01 pH 1 mV 0.1°C
Accuracy	pH mV Temp	±0.02 pH ±2 mV ±0.5°C up to 60°C / ±1°C outside
pH Calibration		automatic, 1 or 2 point, with 3 memorized buffers value
mV Calibration		factory
Temp. Calibration		factory
Temp. Compensation		automatic or 25°C fixed

AD310-AD410

Standard Professional Conductivity-TDS-TEMPERATURE Portable Meters

AD310 and AD410 are portable microprocessor-based instruments for measuring EC or TDS, and temperature.

The autoranging feature of the EC and TDS readings automatically sets the instrument to the scale with the highest resolution.

Measurements are compensated for temperature effect automatically (ATC) or manually (MTC). The temperature compensation feature can also be disabled to measure actual conductivity or TDS.

The temperature coefficient is user selectable. The instruments also feature a measurement stability indicator.

Both models are supplied complete with A76309 conductivity probe with built-in temperature sensor and 1 m cable, batteries (4 x 1.5V AA alkaline) and instruction manual.

AD310 is supplied with calibration solution in satchets (1413 $\mu\text{S}/\text{cm}$, 20 ml), while AD410 is supplied with calibration solution in satchets (1382 ppm, 20 ml).

		AD310	AD410
Range	EC/TDS	19.99 / 199.9 / 1999 $\mu\text{S}/\text{cm}$ 19.99 / 199.9 mS/c	9.99 / 99.9 / 999 ppm 9.99 / 99.9 ppt
	Temp	-9.9 to 120.0°C	9.9 to 120.0°C
Resolution	EC/TDS	0.01 / 0.1 / 1 $\mu\text{S}/\text{cm}$ 0.01 / 0.1 mS/cm	0.01 / 0.1 / 1 ppm 0.01 / 0.1 ppt
	Temp	0.1°C	0.1°C
Accuracy	EC/TDS	$\pm 1\%$ f.s.	$\pm 1\%$ f.s.
	Temp	$\pm 0.5^\circ\text{C}$	$\pm 0.5^\circ\text{C}$
EC/TDS Calibration		Offset: 0.0 $\mu\text{S}/\text{cm}$; Slope: 1 point with 6 memorized standards (84.0, 1413 $\mu\text{S}/\text{cm}$; 5.00, 12.88, 80.0, 111.8 mS/cm) or one custom value	Offset: 0.0 ppm; Slope: 1 point with 4 memorized standards (800, 1382 ppm; 6.44, 40.0 ppt) or one custom value
Temp. Compensation		automatic or manual -9.9 to 120.0°C	automatic or manual -9.9 to 120.0°C
Temperature		Selectable Coefficient from 0.00 to 6.00%/°C	Selectable Coefficient from 0.00 to 6.00%/°C
Reference Temperature		Selectable at 20.0 or 25.0°C	Selectable at 20.0 or 25.0°C



AD11-AD12-AD14

Professional Waterproof pH-ORP-TEMPERATURE Pocket Testers with replaceable probe



AD11 and **AD12** are the most advanced microprocessor based Waterproof pH/Temp pocket testers in the market. Fast, stable and precise these testers are for users that require the greatest accuracy. Simple user-replaceable pH/Temp probe: just unscrew the plastic ring on the top of the electrode and replace it with a new one! 2 rows display LCD (reads both pH and temperature measurements) and built-in HOLD function that freezes the display for easy and accurate recording. Other features such as stability indicator, automatic calibration and automatic temperature compensation make these waterproof pocket testers a must-have in a variety of industries. The modular design allows to replace the electrode in a fast and simple way.

AD14 is designed for simultaneous pH, ORP and Temperature measurements. The large display also has graphic symbols to guide you through the operations. Calibration is performed automatically in 1 or 2 points.

		AD11	AD12	AD14
Range	pH	-2.0 to 16.0 pH	-2.00 to 16.00 pH	-2.00 to 16.00 pH
	ORP			±1000 mV
	Temp	5.0 to 60.0°C 23.0 to 140.0°F	-5.0 to 60.0°C 23.0 to 140.0°F	5.0 to 60.0°C 23.0 to 140.0°F
	Resolution	±0.1 pH	±0.01 pH	±0.01 pH 1 mV
Accuracy	Temp	0.1°C / 0.1°F	0.1°C / 0.1°F	0.1°C / 0.1°F
	pH	±0.1 pH	±0.01 pH	±0.01 pH
	ORP			±2 mV
	Temp	±0.5°C / ±1°F	±0.5°C / ±1°F	±0.5°C / ±1°F

AD31-AD32

Professional Waterproof Conductivity-TDS-TEMP Pocket Testers with replaceable probe

AD31 and **AD32** are waterproof Conductivity, TDS and temperature testers. The housing has been completely sealed against humidity. All Conductivity and TDS readings are automatically temperature compensated (ATC), and temperature values can be displayed in °C or °F units. The Conductivity/TDS conversion factor (CONV) can be selected by the user, as well as the coefficient β (BETA) for temperature compensation. The instruments can be calibrated at one point. Measurements are highly accurate with a unique stability indicator right on the LCD. The models are also provided with a low battery symbol which warns the user when the batteries need to be replaced.

The **AD32P** probe supplied with the meters, is interchangeable and can be easily replaced by the user. The encapsulated temperature sensor allows fast and accurate temperature measurement and compensation.

		AD31	AD32
Range	EC	0 to 3999 µS/cm	0.00 to 20.00 mS/cm
	TDS	0 to 2000 ppm	0.00 to 10.00 ppt
	Temp	0.0 to 60.0°C / 32.0 to 140.0°F	0.0 to 60.0°C / 32.0 to 140.0°F
	Resolution	1 µS/ppm	0.01 mS/ppt
Accuracy	TDS	1 µS/ppm	0.01 mS/ppt
	Temp	0.1°C / 0.1°F	0.1°C / 0.1°F
	EC/TDS	±2% f.s.	±2% f.s.
	Temp	±0.5°C / ±1°F	±0.5°C / ±1°F



AD33-AD35

Professional Conductivity-TEMPERATURE Pocket Testers with replaceable probe

AD33, and **AD35** are waterproof Conductivity testers, that also measure temperature.

The housing has been completely sealed against humidity. All Conductivity readings are automatically temperature compensated, and temperature values can be displayed in °C or °F units.

Conductivity calibration is automatic at onepoint, while temperature range is factory calibrated and can only be adjusted by the user.

The **AD33P** probe supplied with the meters, is interchangeable and can be easily replaced by the user. The encapsulated temperature sensor allows fast and accurate temperature measurement and compensation.

To prolong battery life, these models are provided with an auto-off feature that turns them off after 5 minutes of non-use. Moreover, when batteries become too weak to ensure reliable readings the meter automatically turns off.

		AD33	AD35
Range	EC	0 to 1999 µS/cm	0 to 199.9 µS/cm
	Temp	0.0 to 60.0°C 32.0 to 140.0°F	0 to 60.0°C 32.0 to 140.0°F
Resolution	EC	1 µS/cm	0.1 µS/cm
	Temp	0.1°C / 0.1°F	0.1°C / 0.1°F
Accuracy	EC/TDS	±2% f.s.	±2% f.s.
	Temp	±0.5°C / ±1°F	±0.5°C / ±1°F



AD100-AD101

Standard pH Pocket Testers

Microprocessor based pH testers, assure to produce fast and stable readings.

It also comes with features such as automatic temperature compensation, large and easy to read LCD screen, low battery indication, automatic shut-off after 8 minutes and others.

They are also incorporated with easy push buttons for automatic calibration and splashproof keypad that prevents water infiltration.

		AD100	AD101
Range	pH	-2.0 to 16.0 pH	-2.00 to 16.00 pH
Resolution	pH	0.1 pH	0.01 pH
Accuracy	pH	±0.1 pH	±0.02 pH
Calibration		automatic at 1 or 2 points	automatic at 1 or 2 point
Temperature Compensation		automatic (0° to 50°C)	automatic (0° to 50°C)



AD203-AD204

Standard Conductivity Pocket Testers

Easy to use, simple maintenance and yet high accuracy Conductivity pocket testers for daily measuring purpose.

With its built-in automatic temperature compensation feature, it ensures accurate readings under any ambient conditions.

Features such as splash-proof keypad prevent water infiltration into the testers, large and easy to read display among others make the testers easy and simple to maintain but yet provide professional measurements.

If calibration is necessary, simply submerge the electrode tip into the calibration solution and adjust the easily accessible trimmer on the side of the tester.

		AD203	AD204
Range	EC	0 to 1999 $\mu\text{S}/\text{cm}$	0.00 to 19.99 mS/cm
Resolution	EC	1 $\mu\text{S}/\text{cm}$	0.01 mS/cm
Accuracy	EC	±2% f.s	±2% f.s
Temperature Compensation		automatic	automatic



AD201-AD202

Standard TDS Pocket Testers

These pocket testers have a large and easy to read display and for better resolution they also show the full scale readout so to obtain the actual test values.

These TDS pocket testers provide a fast and dependable way to measure the Total Dissolved Solids in your water samples.

The built-in automatic temperature compensation feature ensures accurate readings under any ambient conditions.

The splash-proof keypad prevents water infiltrations into the testers.

If calibration is necessary, simply submerge the electrode tip into the calibration solution and adjust the easily accessible trimmer on the side of the tester.

		AD201	AD202
Range	TDS	0 to 1999 ppm	0.00 to 10.00 g/l
Resolution	TDS	1 ppm	0.01 g/l
Accuracy	TDS	±2% f.s	±2% f.s
Conversion factor		0.5 ppm	0.5 ppm
Temperature compensation		automatic	automatic



AD630

Dissolved Oxygen & Temperature Waterproof Meter with Galvanic Probe

AD630 is a heavy-duty portable waterproof meter for DO (Dissolved Oxygen) and temperature measurements, designed to provide laboratory results and accuracy even under harsh industrial conditions.

Main features include:

- DO readings displayed in ppm or % saturation units
- DO calibration at 1 or 2 standard points (0 and 100%), or at 1 custom point (>20%)
- Galvanic DO probe with built-in temperature sensor
- Automatic temperature compensation
- Log-on-demand
- Setup mode for setting altitude & salinity compensation factors, temperature measure unit (°C or °F), serial communication parameters, date & time, auto-off, instrument

ID code

- HOLD feature to freeze stable reading on the LCD
- GLP feature to view last calibration data
- PC interface via RS232 port

Galvanic probe: Unlike polarographic probes, Galvanic DO probes do not require any conditioning time when the unit is switched on, saving time when many measurements are required.

AD630 offers high performance at an affordable price!

	AD630
Range	0.00 to 45.00 ppm O ₂ 0.0 to 300.0 % saturation 0.0 to 50.0°C / 32.0 to 122.0°F
Resolution	0.01 ppm / 0.1% 0.1°C / 0.1°F
Accuracy	±1.5% f.s. (DO) ±0.5°C / ±1.0°F
DO calibration	Automatic, at 1 or 2 standard points (0 and 100%) or 1 custom point (> 20%)
Temperature calibration	User offset adjustment
Temperature compensation	Automatic from 0 to 50°C
Altitude compensation	0 to 4000 m (resolution 100 m)
Salinity Compensation	0.0 to 50.0 g/l (resolution 0.1 g/l)
Log-on-demand	Up to 100 samples
PC Interface	RS232 port
Probe (included) AD8001/3	galvanic DO probe with built-in temperature sensor, DIN connector and 3 m cable
Environment	0 to 50°C (32 to 122°F) RH max. 100% non-condensing
Power Supply	4 x 1.5 V AA, alkaline battery
Battery Life	Approx. 200 hours of continuous use
Auto shutt-off	User selectable: 5 minutes or disabled
Dimensions	188 x 96 x 70 mm
Weight	460 g



Accessories

- AD8001/3** Galvanic DO probe with built-in temperature sensor, DIN connector and 3 m cable
AD8001A/P Spare membrane with O-ring (5 pcs)

Supplied complete with

Supplied with:

- AD8001/3** galvanic DO probe with built-in temperature sensor, spare membrane with O-ring,
A9072S electrolyte solution (30 ml bottle),
AD9551 serial communication cable, 1.5V AA alkaline battery (4 pcs) and user manual.

ECO209

Continuous pH Indicator

ECO209 is a continuous pH monitor suitable for constant monitoring of pH level of a given water or solution sample such as aquarium tank, ponds, hydroponics systems among others. It is an easy to use, with simple maintenance features automatic temperature compensation for accurate readings at any given ambient, 2 calibration points for better accuracy and an easy to read large LCD display. ECO209 is supplied with a 12V DC adapter, an epoxy body pH probe, buffer solution and a screw driver for calibration purpose, and a stainless steel temperature probe. The gel-filled pH electrode is interchangeable and has been specially designed to address the needs of growers.

	ECO209
Range	0.0 to 14.0 pH
Resolution	0.1 pH
Accuracy	±0.2 pH
Calibration	manual, 2 points through trimmer
pH electrode	A1230B
Environment	0 to 50°C, 95% RH max
Power supply	external, 12V DC
Dimensions	120 x 134 x 54 mm
Weight approx.	250 g



ECO406-ECO407

Continuous Conductivity & TDS Indicators

These continuous indicators are designed for easy maintenance, simple to read, accurate readings and cost effective purpose, so to meet the general requirements of all range of users. It comes with features such as automatic temperature compensation and single point manual calibration that makes these monitors even more reliable. The meters are supplied with an epoxy body EC/TDS electrode for a more durable lifespan, stainless steel temperature probe for automatic temperature compensation and with calibration solutions and screwdriver for calibration purposes. The ideal tool to monitor your nutrient solution continuously without having to worry about dead batteries.



	ECO406	ECO407
Range	0 to 9.99 mS/cm	0 to 1990 ppm
Resolution	0.01 mS/cm	10 ppm
Accuracy	±2% f.s	±2% f.s
TDS factor	---	approx. 0.7
Calibration	manual, single point, through trimmer	manual, single point, through trimmer
Temp. compensation	automatic	automatic
Probe	A7632	A7634
Environment	0 to 50°C, 95% RH max	0 to 50°C, 95% RH max
Power supply	external, 12V DC adapter	external, 12V DC adapter
Dimensions	120 x 134 x 54 mm	120 x 134 x 54 mm
Weight approx.	approx. 300 g	approx. 300 g



ACCESSORIES

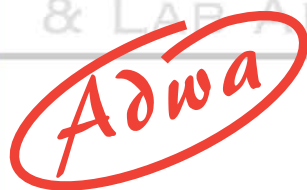
Electrodes and Probes

Adwa manufactures a wide range of pH and ORP electrodes, probes to measure Conductivity and TDS. Adwa's calibration solutions are made from established formulas. The pH calibration solutions are available in 230ml durable plastic bottles and are economical and convenient for laboratory use, or in 20 ml sachets for quick, accurate and convenient calibrations. All of our pH, Conductivity, TDS and ORP calibration solutions have a lot number and expiration date printed on them. Cleaning solutions and storage solutions are also available.



CODE	DESCRIPTION	CODE	DESCRIPTION
A7632	CONDUCTIVITY PROBE WITH 2 MT. CABLE FOR ECO406 (ex AD3001/2)	A70010P	pH 10 BUFFER SOLUTION, 20 ML SACHET IN BOX OF 25 PCS (ex AD6010B)
A7634	TDS PROBE WITH 2 METER CABLE AND WITHOUT CONNECTOR FOR ECO407 (ex AD3002/2)	A70031P	1,413µS/cm CAL. SOLUTION, 20 ML SACHET IN BOX OF 25 PCS (ex AD6020B)
A1286	PLASTIC DOUBLE JUNCTION pH ELECTRODE WITH BNC CONNECTOR AND 2 METER CABLE (ex AD2001B/2)	A70030P	12,88 mS/cm CAL. SOLUTION, 20 ML SACHET IN BOX OF 25 PCS (ex AD6021B)
A1131B	REFILLABLE GLASS pH ELECTRODE, DOUBLE JUNCTION WITH 1 METER CABLE AND BNC CONNECTOR (ex AD2002B/1)	A70032P	1,382 ppm CAL. SOLUTION, 20 ML SACHET IN BOX OF 25 PCS (ex AD6030B)
A1230B	DOUBLE JUNCTION EPOXY pH ELECTRODE WITH 1 METER CABLE AND BNC CONNECTOR (ex AD2005B/1)	A70442P	1,500 ppm CAL. SOLUTION, 20 ML SACHET IN BOX OF 25 PCS (ex AD6040B)
A3230B	SINGLE JUNCTION EPOXY ORP PLATINUM BAND ELECTRODE WITH 1 METER CABLE AND BNC CONNECTOR (ex AD2015B/1)	A70000P	ELECTRODE RINSE SOLUTION, 20 ML SACHET IN BOX OF 25 PCS (ex AD6050B)
A7662	STAINLESS STEEL TEMPERATURE PROBE WITH 1 METER CABLE. SUPPLIED WITH BENCH AND PORTABLE METERS (ex AD5006)	A7004M	PH 4.01 BUFFER SOLUTION IN 230 ML BOTTLE
A76309	4 RING STAINLESS STEEL CONDUCTIVITY/TDS PROBE WITH 1 METER CABLE (ex AD3005D/1)	A7007M	PH 7.01 BUFFER SOLUTION IN 230 ML BOTTLE
AD8001/3	GALVANIC DO PROBE WITH BUILT-IN TEMPERATURE SENSOR, DIN CONNECTOR AND 3 METER CABLE FOR AD630	A7010M	PH 10.01 BUFFER SOLUTION IN 230 ML BOTTLE
AD8001A/P	SPARE MEMBRANES WITH O-RING (5 PCS) FOR AD8001D/3 DO GALVANIC PROBE	A7031M	1413µS/CM BUFFER SOLUTION IN 230 ML BOTTLE
AD11P	REPLACEABLE PH/TEMP ELECTRODE FOR AD11 AND AD12	A7030M	12.88 MS/CM BUFFER SOLUTION IN 230 ML BOTTLE
AD32P	REPLACEABLE EC/TDS/TEMP ELECTRODE FOR AD31 & AD32	A7032M	1382 PPM BUFFER SOLUTION IN 230 ML BOTTLE
AD33P	REPLACEABLE EC/TDS/TEMP ELECTRODE FOR AD33, AD34, AD35 & AD36	A7033M	84 µS/CM CAL. SOLUTION 230ML
AD9315	ELECTRODE HOLDER FOR BENCH METERS	A7034M	80000 µS/CM CAL. SOLUTION 230ML
AD9316	APPLICATION SOFTWARE FOR BENCH METERS	A7035M	111800 µS/CM SOLUTION 230ML
AD9335	220 VAC EUROPEAN ADAPTER FOR BENCH METERS	A7039M	5000 µS/CM SOLUTION 230ML
AD9336	110 VAC US ADAPTER FOR BENCH METERS WITH US PLUG	A7042M	1500 PPM TDS STANDARD SOLUTION IN 230 ML BOTTLE
AD9337	110 VAC AUSTRALIAN ADAPTER FOR BENCH METERS WITH AUSTRALIAN PLUG	A7000M	ELECTRODE RINSE SOLUTION IN 230 ML BOTTLE
AD9338	220 VAC UK ADAPTER FOR BENCH METERS WITH UK PLUG	A70300M	ELECTRODE STORAGE SOLUTION IN 230 ML BOTTLE
AD9345	HARD CARRYING CASE FOR ADWA WATERPROOF PORTABLE METERS (400X300X100)	A7061M	ELECTRODE CLEANING SOLUTION IN 230 ML BOTTLE
AD9350	HARD CARRYING CASE (SMALL) (240X180X80)	A7020M	ORP TEST SOLUTION (200/275 mV) , 230 ML BOTTLE
AD9551	RS232 SERIAL COMMUNICATION CABLE	A7071S	3.5M KCl ELECTROLYTE SOLUTION FOR REFILLABLE ELECTRODES, 30 ML
A70004P	pH 4 BUFFER SOLUTION, 20 ML SACHET IN BOX OF 25 PCS. (ex AD6004B)	A7040M	ZERO OXYGEN SOLUTION, 12G BOTTLE (A7040-1) + 500ML BOTTLE (A7040-2)
A70007P	pH 7 BUFFER SOLUTION, 20 ML SACHET IN BOX OF 25 PCS (ex AD6007B)	A9072S	ELECTROLYTE SOLUTION FOR DO GALVANIC PROBE IN 30 ML BOTTLE

Authorized Distributor



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