



AB33PH



AB33EC



AB33M1

Highly Reliable and User-Friendly Benchtop Meter for Standard Laboratory Applications

The next step in the evolution of OHAUS's original Starter Series, the all-new AquaSearcher™ AB33 benchtop meter is designed to be reliable, efficient, and user-friendly. The i-Steward ensures repeatable and consistent measurement accuracy for optimal peace of mind. The 6.5 inch LCD display and touch keypad makes changing the parameters, executing setup, and performing calibration as simple as using a smartphone.

Unique Features:

- With multifunctional touch keypads, AB33 makes measurement simple and fast within 3 steps. The intelligent i-Steward monitors the condition of electrodes, ensuring accuracy of the results.
- Auto endpoint mode and auto buffer recognition makes pH calibration easy. Auto temperature compensation, adjustable TDS factor and two kinds of cell conductivity probe compatibility are all features well suited for universal laboratory applications.
- Able to store up to 1000 items in its internal memory, AB33 allows for efficient data documentation. Standard RS232 and USB interface allows connection to external devices for expanded storage.

AQUASEARCHER™ AB33 Benchtop Meters

i-Steward Indicators include the pH electrode condition, "Electrode Dirty/Broken," and reminder when meter needs recalibration. On-screen text prompts, menu-specific function keys and a multi-language interface shown on a 6.5" large display.

Three capacitive touch keys that change based upon use ensures the buttons are never clogged with sample residue. Most of the operation can be done within 3 steps.

Auto-Stop holds a stable reading. Continuous shows changing readings, perform up to a 3-point pH calibration using automatic buffer recognition of 3 predefined buffer groups, selectable cell constant allows for use with 2- or 4-cell conductivity cells to measure from ultrapure water to sewage.

Adjustable TDS Factor - The factor that relates conductivity to total dissolved solids is based on the type of sample being measured. To have correct temperature compensation when measuring conductivity, the linear compensation coefficient adjusts by automatic temperature compensation.

Selectable reference temperatures of 20 or 25 °C for temperature compensated conductivity readings.

A 1000-item memory for measurements and calibration trail makes for efficient data documentation. Records are associated with date and time for good traceability.

Standard RS232 and USB interface allows for connection to external devices such as a printer or computer for transfer and storage of data.

A standalone adjustable electrode holder provides full flexibility for different types of electrodes.



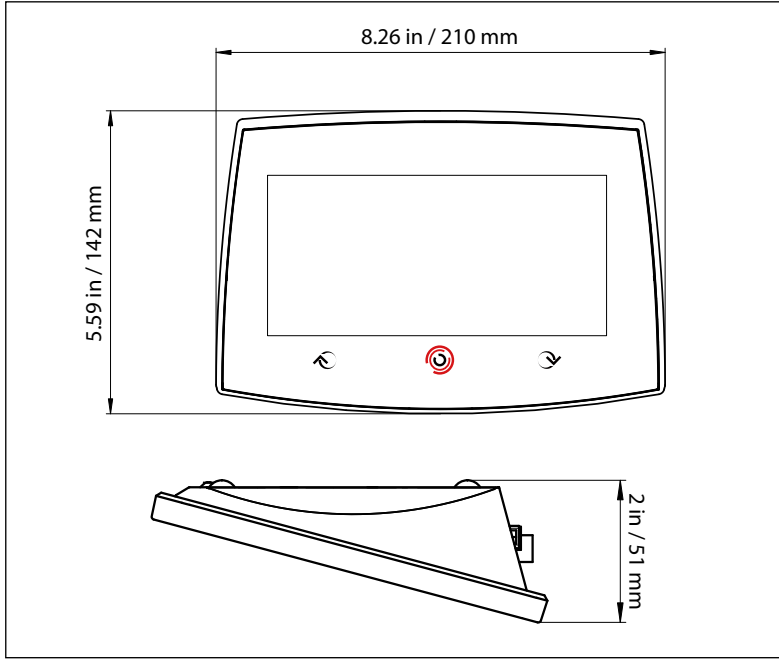
AQUASEARCHER™ AB33 Benchtop Meters

Specifications

Model		a-AB33PH	a-AB33EC	a-AB33M1
pH	Measuring Range	-2.00 to 16.00 pH	n/a	-2.00 to 20.00 pH
	Resolution	0.1/0.01 pH	n/a	0.1/0.01 pH
	Selectable Resolution	Yes	n/a	Yes
	Accuracy	± 0.01 pH	n/a	± 0.01 pH
	Pre-Defined Buffer Groups	3	n/a	5
ORP, Redox	Measuring Range	±2000.0 mV	n/a	±2000.0 mV
	Resolution	1 mV	n/a	0.1mV
	Accuracy	± 1 mV	n/a	±0.5 mV
	Units	mV, RmV	n/a	mV, RmV
Conductivity	Measuring Range	n/a	0.001µS/cm to 19.99 µS/cm 20 µS/cm to 199.9 µS/cm 200 µS/cm to 1999 µS/cm 2.00 mS/cm to 19.99 mS/cm 20.0 mS/cm to 1000 mS/cm	0.01 µS/cm to 19.99 µS/cm 20 µS/cm to 199.9 µS/cm 200 µS/cm to 1999 µS/cm 2.00 mS/cm to 19.99 mS/cm 20.0 mS/cm to 500.0 mS/cm
	Resolution	n/a	0.001 µS/cm minimum; auto-range	0.01 µS/cm minimum; auto-range
	Accuracy	n/a	± 0.5 % Reading ± 2 Least Significant Digit	
	Reference Temperature	n/a	20 °C, 25 °C	
	Cell Constants	n/a	0.01 to 10.00 cm-1	0.001 to 10.00 cm-1
	Temperature Compensation	n/a	Linear (0 to 10.0%/°C), off	
TDS	Measuring Range	n/a	0.1 mg/L to 200 g/L	0.1mg/L to 199.9 g/L
	Resolution	n/a	0.01 mg/L minimum, auto-range	
	Accuracy	n/a	± 0.5 % Reading ± 2 Least Significant Digit	
	TDS Factor Range	n/a	Linear, 0.01 to 10.00, default 0.5	
Resistivity	Measuring Range	n/a	1 to 100 MΩ-cm	2 to 100 MΩ-cm
	Resolution	n/a	0.01 Ω-cm auto-range	
	Accuracy	n/a	± 0.5 % Reading ± 2 Least Significant Digit	
Practical Salinity	Measuring range	n/a	0 to 100 psu	
	Resolution	n/a	0.01 psu minimum, auto-range	
	Accuracy	n/a	± 0.5 % Reading ± 2 Least Significant Digit	
Temperature	Measuring Range	-5.0 to 110.0°C		
		23.0°F to 230.0°F		
	Resolution	0.1 °C, 0.1 °F		
	Accuracy	± 0.5 °C, ±0.5 °F	± 0.3 °C, ±0.3 °F	
Calibration	No			
Calibration	Calibration points	Up to 3 points	1 point cell constant calibration; 6 conductivity standard solutions available (10, 84, 146.5, 500, 1413 µS/cm and 12.88mS/cm)	Up to 5 points for pH; 1 point cell constant calibration; 6 conductivity standard solu- tions available (10, 84, 146.5, 500, 1413 µS/ cm and 12.88mS/cm)
	Calibration Sign	Slope/offset & Face	Cell Constant & Face	Slope/offset & Cell Constant & Face
	Calibration mode	Linear		
Meter Specifications	Display Type	6.5" Segment & Dot matrix LCD with backlight		
	Multilanguage User Interface	English, Spanish, French, Portuguese, Chinese, Russian and Turkish		
	Measurement End-point Modes	Auto-stop, Continuous		
	Datalog for measurement	1000 sets data points with time and date stamp		
	Datalog for calibration	Last calibration		
	Keypad	Capacitive touch		
	Output	Connect to PC via RS232 and USB, Connect to Printer via RS232		
	pH electrode input	BNC		
	Conductivity input	Mini-Din		
	Temperature input	Cinch, NTC 30 kΩ		
	Installation Overvoltage	Category II		
	Pollution	Degree 2		
	Power Supply	Universal, 100-240 VAC, 50-60 Hz		
	Ambient Operating	5 to 40 °C, 5 to 80 %, non-condensing		
Warranty	1 year			

AQUASEARCHER™ AB33 Benchtop Meters

Outline Dimensions



Packages Available in six configurations

a-AB33PH-B	a-AB33PH-F
- a-AB33PH Benchtop Meter - Stand-Alone Electrode Holder	- a-AB33PH-B Content - ST310 pH Electrode
a-AB33EC-B	a-AB33EC-F
- a-AB33EC Benchtop Meter, - Stand-Alone Electrode Holder	- a-AB33EC-B Content - STCON7 Probe
a-AB33M1-B	a-AB33M1-F
- a-AB33M1 Benchtop Meter - Stand-Alone Electrode Holder	- a-AB33M1-B Content - ST310 pH Electrode - STCON3 Probe

Other Features and Equipment

- **Application:**
AB33PH: pH, oxidation-reduction potential (ORP) with Temperature Measurements
AB33EC: Conductivity, Total Dissolved Solids (TDS), Salinity and Resistivity with Temperature Measurements
AB33M1: pH, oxidation-reduction potential (ORP), Conductivity, Total Dissolved Solids (TDS), Salinity and Resistivity with Temperature Measurements
- **Operation:** AC adapter (included)
- **Communication:** RS232, USB Device (included)
- **Construction:** Capacitive touch, ABS housing, standalone electrode holder
- **Design Features:** i-Steward, Two Independent Channels (for AB33M-1), Calibration due alarm, 1,000 measurement memory

Compliance

- **Product Safety:** IEC/EN 61010-1
- **Electromagnetic Safety:** IEC/EN 61326-1 Class B, basic environments; FCC Part 15 Class A; Canada ICES-003 Class A
- **Compliance Marks:** CE, RCM
- **Others:** WEEE, RoHS

Accessories

Electrode holder AB33	30661423
Stirrer Compact AS20	30661425
SF40A Printer	30045641
Tester BNC AB33 AB41	30658042

Item #	Solutions
30100424	Buffer pH 1.68 250 mL
30100425	Buffer pH 4.01 250 mL
30100426	Buffer pH 6.86 250 mL
30100427	Buffer pH 7.00 250 mL
30100428	Buffer pH 9.18 250 mL
30100429	Buffer pH 10.01 250 mL
30100440	Buffer pH 12.45 250 mL
30059255	Reference Electrolyte (3M KCl Solution Saturated AgCl, 30 mL)
30059256	pH Electrode Protection Solution (3M KCl, 125 mL)
30100441	Conductivity Standard Solution 10 µS/cm, 250 mL
30100442	Conductivity Standard Solution 84 µS/cm, 250 mL
30393269	Conductivity Standard Solution 500 µS/cm 250 mL
30100443	Conductivity Standard Solution 1413 µS/cm, 250 mL
30100444	Conductivity Standard Solution 12.88 mS/cm, 250 mL

Item #	Electrodes
30129354	pH electrode ST350
83033967	pH electrode ST320
83033965	pH electrode ST310
30393265	pH electrode ST272
30240974	pH electrode ST270
30129357	pH electrode ST260
83033968	pH electrode ST230
83033966	pH electrode ST210
30087566	pH electrode STMICRO5
30087569	pH electrode STMICRO8
30129470	pH electrode STSURF
83033969	pH electrode STPURE
30038555	ORP electrode STORP1
30038553	ORP electrode STORP2
30059253	Reference Electrode STREF1
83033972	Conductivity probe STCON3
30080693	Conductivity probe STCON7
83033970	Temperature probe STTEMP30

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The management system governing the manufacture of this product is ISO 9001:2015 certified.



ST系列酸鹼度電極規格說明

型號	ST350	ST320	ST310	ST270	ST260
訂貨編號	30129354	83033967	83033965	30240975	30129357
pH 範圍	0 - 14 pH	0 - 13 pH	0 - 14 pH	0 - 14 pH	0 - 14 pH
溫度範圍	0 - 100 °C	0 - 80 °C	0 - 80 °C	0 - 100 °C	0 - 100 °C
電極材質	玻璃	塑膠	塑膠	玻璃	玻璃
參考電極液	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
電極樣式	三合一可填充	三合一不可填充	三合一可填充	二合一不可填充	二合一不可填充
電橋型式	環狀磨砂	纖維管	陶瓷	環狀磨砂	陶瓷
電極填充液	3M KCl	凝膠	3M KCl	凝膠	雙鹽橋3M KCl (AgCl)
電極尺寸	120 x 12 mm	120x12mm	120 x 12 mm	120 x 12 mm	120 x 12 mm
訊號線長度	1 m	1 m	1 m	1 m	1 m
內建溫度感應	有	有	有	無	無
電極接頭	BNC / Cinch (ATC)	BNC / Cinch (ATC)	BNC / Cinch (ATC)	BNC	BNC
應用範圍	適用於一般樣品與輕度混濁樣品	適用於一般樣品	適用於一般樣品	穿刺電極適用於半固體樣品例如水果、肉類或奶酪	雙鹽橋電極適用於能與銀離子反應的樣品例如 TRIS-buffer

型號	ST230	ST210	STMICRO8	STMICRO5	STSURF	STPURE
訂貨編號	83033968	83033966	30087569	30087566	30129470	83033969
pH 範圍	0 - 14 pH	0 - 14 pH	0 - 14 pH	0 - 14 pH	2 - 12 pH	0 - 13 pH
溫度範圍	0 - 100 °C	0 - 80 °C	0 - 100 °C	0 - 100 °C	0 - 80 °C	0 - 100 °C
電極材質	玻璃	塑膠	玻璃	玻璃	塑膠	玻璃
參考電極液	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl	Ag/AgCl
電極樣式	二合一可填充	二合一可填充	二合一可填充	二合一可填充	二合一可填充	二合一可填充
電橋型式	環狀磨砂	陶瓷	環狀磨砂	環狀磨砂	環狀磨砂	環狀磨砂
電極填充液	3M KCl	凝膠	3M KCl	3M KCl	3M KCl	3M KCl
電極尺寸	110 x 12 mm	120 x 12 mm	150 x 8 mm	80 x 5 mm	120 x 12 mm	120 x 12 mm
訊號線長度	1 m	1 m	1 m	1 m	1 m	1 m
內建溫度感應	無	無	無	無	無	無
電極接頭	BNC	BNC	BNC	BNC	BNC	BNC
應用範圍	適用於混濁樣品或沉澱樣品例如果汁、牛奶	適用於一般樣品	適用於微量樣品	適用於微量樣品	表面電極適用於溼潤的物體表面	純水電極適用於蒸餾水、雨水、純水等低離子濃度樣品



ST300系列手持式酸鹼度/電導度/溶氧分析儀



Specifications

型號	ST300	ST300C	ST300D
測量範圍	0.00...14.00 pH -1999...1999 mV 0 °C...100 °C	0.0 μS/cm...199.9 mS/cm 0.1 mg/l...199.9 g/l (TDS) 0 °C...100 °C	0.0 to 199.9%; 200 to 400% 0.00 to 19.99; 20.0 to 45.0 mg/L 0.00 to 19.99; 20.0 to 45.0 ppm 0 to 50 °C
解析度	0.01 pH 1 mV 0.1 °C	Automatic Range 0.1 °C	0.1%; 1% 0.1 mg/L; 1mg/L 0.01 ppm; 0.1 ppm 0.1 °C
精密度	± 0.01 pH ± 1 mV ± 0.5 °C	± 0.5 % of the Measured Value ± 0.3 °C	± 1% ; ± 0.3 °C
校正功能	3 點 3 組標準液	1 點 3 組標準液	1 or 2 點 100% and 0%
記憶功能	30 組測量數值 最後校正數據	30 組測量數值 最後校正數據	30 組測量數值 最後校正數據
電源規格	4 AAA 電池 > 500 Hours	4 AAA 電池 > 250 Hours	4 AAA 電池 > 250 Hours
尺寸 / 重量	90 W x 150 D x 35 H mm 0.18 kg (無安裝電池)	90 W x 150 D x 35 H mm 0.18 kg (無安裝電池)	90 W x 150 D x 35 H mm 0.18 kg (無安裝電池)
螢幕顯示	液晶顯示螢幕	液晶顯示螢幕	液晶顯示螢幕
電極接頭	BNC, Impedance > 10e+12 Ω Cinch, NTC 30 kΩ	Mini-Din	BNC, Cinch, NTC 30 kΩ
溫度補償	ATC & MTC	ATC, Linear: 0.00 %/°C...10.00 %/°C Reference Temperature: 20 & 25 °C	ATC & MTC



型號	STCON3 電導度電極	STCON7 電導度電極	STD011 溶氧電極
訂購編號	83033972	30080693	30031639
電極材質	塑料	ABS	塑料
溫度範圍	0-50 °C	0-60 °C	0-50 °C
電極尺寸	130 x 14 mm	95 x 124 mm	120 x 12 mm
訊號線長度	1 m	1 m	1.1 m
內建溫度感應	有	有	有
接頭	Mini-Din	Mini-Din	BNC
最佳測量範圍	70μs/cm - 200ms/cm (0.5%精度)	0.02μs/cm - 200μs/cm (0.02μs/cm)	0 - 200 % (10 % NaCl 保存液)