OAKTON®

pH/mV/Relative mV/°C

pH 1000 Meter

This precise laboratory benchtop meter collects, stores and manages data automatically! It's ideal when documentation is critical.

ISO 9001 vendor CERTIFIED

3 year warranty meter only

CE

Features RS-232/printer output
meter manually or automatically downloads data to a printer, or to a computer in a form ready to import into spreadsheet software!

Sends readings on programmed time intervals
select intervals from 1 min to 23 hrs, 59 min

Select up to five customizable calibration points
choose your own calibration points, or use the built-in auto buffer recognition of five common pH buffers for faster calibration

Calculates slope and offset of electrode automatically
check electrode quality and conform to standard test method quality checks

Displays last calibration date and time
ideal for GLP compliance

High/low set point alarms
signal readings outside your preset limits or when your timed reaction has ended

Stores up to 16 sets of readings with date and time
store readings either manually or on programmable real-time intervals from 1 min to 23 hrs, 59 min—download them later

Built-in real time clock

Analog recorder output
create hard copies of your readings—send data either on regular timed intervals or manually

Selectable 0.01/0.1 pH resolution
0.01 for more precise readings and 0.1 for faster readings

Manual or automatic temperature compensation
for high accuracy with or without a temperature sensor

Selectable "Ready" indicator, Hold function







Top: The pH 1000 meter is designed for laboratory benchtop use. It is less sensitive to electronic noise, which gives you stable, repeatable readings.

Lower left: Use the pH 1000 meter with an optional portable printer to provide you with a printed record of your readings and calibration data.

Lower right: Connect this meter to your PC and download data in a format ideal for importing into spreadsheet software.

Download data to a computer or printer on timed intervals. The pH 1000 benchtop meter makes collecting large volumes of measurements easy. Simply hook the meter to a computer or printer, and let the meter perform the data entry for you! Each data set includes the pH or mV reading with temperature, date and time. This meter comes with free software that lets you download data to your computer in a format that is easy to import into spreadsheet programs.

The pH 1000 meter features up to five customizable calibration points, memory, a built-in real-time clock, a large dual display that shows pH (or mV) and temperature readings, and a water-resistant membrane keypad. It includes a slide-out instruction card that stores underneath the meter for quick reference.

The pH 1000 meter is supported by a full selection of OAKTON calibration buffers, electrodes and accessories. See the back of this sheet for ordering information and complete specifications.

Large dual display shows pH, temperature and clear indicators which signal mode and meter status.



Back panel has quick connections for pH, temperature, computer and recorder output.



Slide-out instruction card with quick keypad functions stores neatly below meter.



Optional printer generates a permanent record of your measurement values.



Calibration solutions are available in economical bottles or convenient pouches with a tear-off top (order separately).



pH 1000 Benchtop Meter

• Applications •

Timed Applications: determine titration curves—use the meter's RS-232 output with a computer or printer to automatically record data on timed intervals. You can program the meter to store readings internally or on a PC, or to print readings to a printer, manually, automatically, or whenever the reading is stable.

Industrial Laboratory Applications: Ideal for testing the pH of fluids from water conditioning plants, cooling towers, plating and finishing operations, food processing (for HACCP compliance), and the printing and chemical industries. Also use in quality assurance testings, especially where GLP data management is required. Meter is suitable for most ASTM and EPA test procedures.

ORP Applications: Use with ORP electrode (model WD-35805-13; order below) to monitor plating operations, ozonation system efficiency, and other redox measurements.

• Specifications •

Type	pH	mV	Temperature
Range	–2.00 to 15.99 pH	±2000 mV or relative mV	0 to 100°C
Resolution	0.01 pH/0.1 pH (selectable)	0.1 mV from ±399.9 mV, 1 mV beyond ±399.9 mV	0.1°C
Accuracy	±0.01 pH	±0.2 mV from ±399.9 mV,±2 mV beyond ±399.9 mV	±0.5°C
Calibration	Up to five customizable calibration points. Or, use auto buffer recognition at 1.68, 4.01, 7.00, 10.00, 12.45	Offset up to ±2000 mV	Offset up to ±5°C
Connectors	BNC	BNC	mini phono plug

Power: 9 VDC, 500 mA; using AC adapter (included); choose from 110 VAC, 60 Hz or 220 VAC, 50 Hz models. AC adapter is CSA and UL listed.

Input impedance: $>10^{12}\ \Omega$

Temperature compensation: selectable manual or automatic from 0 to 100°C

pH slope adjustment range: 80 to 120%

Recorder output: ±2000 mV (directly proportional to input)

RS-232 specifications:
Baud rate: 2.4; 4.8; 9.6 and 19.2 kbps selectable.
Stop bit: 1 or 2 selectable.
Parity: odd (1); even (2); or none (0) selectable.

Computer requirements: 386 and above that can run Microsoft Windows® 95 or higher, hard disk with approx. 500 KB free disk space, EGA monitor or above, 9-pin serial port connecting cable, mouse.

Printer requirements: Set up to receive 8 data bits, select baud rate, parity and stop bits to match meter, or make meter match printer's set up. Select the printer to accept serial data.

Output connectors:
Recorder: mini-pin (submini phono plug)
RS-232/printer: 9 pin female

Display: Dual display of measurement (pH, mV or relative mV) plus temperature and mode annunciators

Error messages: Diagnose operator error, electrode error, and meter error. Pull-out instruction card decodes message.

Operating temperature: 0 to 50°C, non condensing humidity

Dimensions:
Meter: 9" x 7" x 2.375" (23 x 18 x 6 cm)
Boxed: 15.5" x 10" x 3.5" (39 x 25 x 9 cm)

Weight: Meter only: 1.25 lbs (0.6 kg); Boxed: 3 lbs (1.4 kg)

• Ordering Information •

pH 1000 Meter
Each meter includes AC adapter, software and instructions.

Meter only
WD-35616-02 pH 1000 meter, 110 VAC, 60 Hz
WD-35616-07 pH 1000 meter, 220 VAC, 50 Hz

Meter with temperature probe (WD-35615-05) only
WD-35616-01 pH 1000 meter, 110 VAC, 60 Hz
WD-35616-06 pH 1000 meter, 220 VAC, 50 Hz

Meter with single-junction pH electrode (WD-35801-00) and separate temperature probe (WD-35615-05)
WD-35616-00 pH 1000 meter, 110 VAC, 60 Hz
WD-35616-05 pH 1000 meter, 220 VAC, 50 Hz

Meter with "All in One" combination temperature sensor/ single-junction pH electrode (WD-35801-71)
WD-35616-03 pH 1000 meter, 110 VAC, 60 Hz
WD-35616-08 pH 1000 meter, 220 VAC, 50 Hz

pH "Singles" Calibration Buffer Pouches
Each single-use pouch contains 20 ml of fresh calibration solution (see picture below left). ±0.01 pH accuracy at 25°C. Certified to NIST traceable standards. Shpg wt 1 lb (0.5 kg). Box of 20.

WD-35653-01 pH "Singles", 4.01
WD-35653-02 pH "Singles", 7.00
WD-35653-03 pH "Singles", 10.00
WD-35653-00 pH "Singles", rinse water
WD-35653-04 pH "Singles", assortment pack, 5 each of pH 4.01; 7.00; 10.00 and rinse water

pH Calibration Buffer Solution Bottles
1 pint of calibration solution each. ±0.01 pH accuracy at 25°C. Certified to NIST traceable standards. Shpg wt 1.3 lbs (0.6 kg).

WD-00654-01 pH 1.68 calibration buffer
WD-00654-00 pH 4.01 calibration buffer
WD-00654-04 pH 7.01 calibration buffer
WD-00654-08 pH 10.01 calibration buffer
WD-00654-12 pH 12.45 calibration buffer

Portable Printer
Create permanent records of your data. This printer's compact size and rechargeable battery pack make it the perfect printer for both field use and crowded benchtop space.

WD-35622-00 Rechargeable printer, 110 VAC
WD-35622-05 Rechargeable printer, 220 VAC

Electrodes
WD-35805-04 Laboratory pH electrode, double junction, glass body, refillable. 110 mm x 12 mm dia
WD-35801-00 pH electrode, single junction, epoxy body, 146 mm L x 12 mm dia
WD-35615-05 Temperature (ATC) probe, 304 SS, 114 mm L
WD-35801-71 "All-in-One" combination pH/temperature probe, single junction, epoxy body. 147 x 12 mm dia
WD-35805-13 ORP electrode, single junction, epoxy body, 146 mm L x 12 mm dia
WD-35617-50 Benchtop electrode holder, 360° pivot, holds four electrodes (up to 12 mm dia) and temperature probe. Box dimensions: 9"L x 15"W x 10"H. Shpg wt 4 lbs

OAKTON offers many other pH and ORP electrodes—contact your OAKTON distributor for more information.

• ORDER FROM •

Printed in the U.S.A. 8/01 OAKTON TM Reg. #1,692,543. Patent Des. 371,748. We reserve the right to make changes, improvements and modifications to products shown. All prices subject to change without notice. OAKTON Instruments are available only through authorized OAKTON distributors.