

# OAKTON<sup>®</sup> pH/mV/°C pH 510 Meter

Our most **economical** benchtop meter—a **best buy** in its price range!  
The large dual display shows pH or mV, plus temperature.

## Low cost plus high performance

this meter offers laboratory-quality readings for a very economical cost

## Dual display shows both pH (or mV) and temperature

plus mode indicators and annunciators to signal meter status

## Three-point pH calibration with auto buffer recognition

calibrate at 4.01, 7.00 and 10.01 for high accuracy across the entire measuring range

## Selectable buffer sets

choose from USA or NIST buffer sets

## Switch from pH to mV readings with a button press

## Features 0.1 mV resolution for ORP measurements

## Available with built-in electrode stand

holds electrode firmly in place

## Selectable manual or automatic temperature compensation

for high accuracy with or without a temperature sensor

## Built-in memory function

Stores up to 50 pH, mV or relative mV readings with corresponding temperature

## Analog recorder output

create hard copies of your readings

## Hold function, "Ready" indicator, diagnostic error messages

## Fully diagrammed manual, plus slide-out instruction card for quick reference



**3** year warranty  
meter only

ISO 9001  
CERTIFIED

CE



*Top:* The pH 510 meter is designed for laboratory benchtop use. It is less sensitive to electronic noise, which gives you stable, repeatable readings.

*Bottom left:* Use the recorder output to create hard copy records of your data.

*Bottom right:* Available with built-in electrode stand for convenient benchtop use.



**Laboratory benchtop readings at an economical price!** The pH 510 meter provides stable, accurate measurements in pH, mV and temperature. Built-in memory function stores up to 50 pH, mV or relative mV readings with corresponding temperature. This meter is so easy to use, you'll be ready to take readings in minutes!

The pH 510 meter features a large dual display that shows pH (or mV) and temperature readings, and a water-resistant membrane keypad. Slide-out instruction card (included) stores underneath the meter for quick reference.

The pH 510 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.

**OAKTON** ...setting the standard, again and again™

Large dual display shows pH or mV plus temperature readings, and indicators which signal function and meter status.



Back panel has quick connections for electrode, ATC probe, and recorder output.



Slide-out instruction card with trouble shooting tips and a keypad reference stores neatly at bottom of meter.



Available with built-in electrode holder to keep your probe steady and away from the sides of your container.



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



## pH 510 Benchtop Meter

### • Applications •

**General Applications:** Ideal for all kinds of water quality and chemical testing in the laboratory. Suitable for most ASTM and EPA test procedures. Great for R&D and QC applications in chemical industries and related fields.

**Education Applications:** Perfect for students at all levels; suitable for all types of chemistry labs and ecology studies.

**Industrial Applications:** Boiler water/cooling water testing, food processing/product development and QC testing, process and wastewater testing in metal finishing, printing and chemical industries. Also used in aquarium and hydroponics industries.

### • Specifications •

Type	pH	mV	Temperature
Range	0.00 to 14.00 pH	-1999 to +1999 mV	0 to 100°C
Resolution	0.01 pH	0.1 mV from ±199.9 mV 1 mV beyond ±199.9 mV	0.1°C
Accuracy	±0.01 pH	±0.2 mV from ±199.9 mV ±2 mV beyond ±199.9 mV	0.3°C
Calibration	Up to 3 points (USA: 4.01; 7.00; 10.01 or NIST: 4.01, 6.86; 9.18); auto-buffer recognition	Offset up to ±150 mV	Offset 0.1°C increments up to ±5°C

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<sup>12</sup> Ω

Temperature Compensation: Selectable manual or automatic from 0 to 100°C

Memory: up to 50 sets

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

Recorder output connector: mini pin (subminiature phono plug)

**Display:** Dual display of measurement with 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 510 Meters

All meters include AC adapter and instructions.

##### Meter only

WD-35619-02 pH 510 meter, 110 VAC

WD-35619-07 pH 510 meter, 220 VAC

##### Meter with double-junction pH electrode (WD-35805-04) and separate temperature probe (WD-35613-05)

WD-35619-00 pH 510 meter, 110 VAC

WD-35619-05 pH 510 meter, 220 VAC

##### Meter with "All in One" combination temperature sensor/ single-junction pH electrode (WD-35811-71)

WD-35619-03 pH 510 meter, 110 VAC

WD-35619-08 pH 510 meter, 220 VAC

##### Meter with built-in electrode stand

WD-35619-12 pH 510 meter, 110 VAC

WD-35619-17 pH 510 meter, 220 VAC

##### Meter with built-in electrode stand, double-junction pH electrode (WD-35805-04) and separate temperature probe (WD-35613-05)

WD-35619-10 pH 510 meter, 110 VAC

WD-35619-15 pH 510 meter, 220 VAC

#### pH "Singles" Calibration Buffer Pouches

Each single-use pouch contains 20 ml of fresh calibration solution. ±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-00654-00 pH 4.01 calibration buffer

WD-00654-04 pH 7.01 calibration buffer

WD-00654-08 pH 10.01 calibration buffer

#### Electrodes

WD-35811-71 "All-in-One" combination pH/temperature probe, epoxy body, single junction, 5.2"L x 0.47" OD (12 mm) with 3-ft cable. Shpg wt 0.5 lb

WD-35811-72 "All-in-One" combination pH/temperature probe, epoxy body, double junction, 5.2"L x 0.47" OD (12 mm) with 3-ft cable. Shpg wt 0.5 lb

WD-35613-05 Temperature probe, 304 SS, 3-ft cable, Valox cap. Shpg wt 0.15 lb

WD-35801-00 pH electrode, epoxy body, single junction, 5.2"L x 0.47" OD (12 mm) with 3-ft cable. Shpg wt 0.5 lb

WD-35805-01 pH electrode, epoxy body, double junction, 5.2"L x 0.47" OD (12 mm) with 3-ft cable. Shpg wt 0.5 lb

WD-35805-26 pH electrode, glass body, sleeve design single junction, 5.2"L x 0.47" OD (12 mm) with 3-ft cable. Shpg wt 0.5 lb

WD-35805-04 pH electrode, glass body, double junction, 5.2"L x 0.47" OD (12 mm) with 3-ft cable. Shpg wt 0.5 lb

WD-35805-13 ORP electrode, epoxy body, single junction, 5.75"L x 0.49" OD (12 mm)

WD-35805-15 ORP electrode, epoxy body, double junction, 5.75"L x 0.49" OD (12 mm)

WD-35617-50 Separate 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 a wide selection of pH and ORP electrodes; contact your OAKTON distributor for more information.

### • ORDER FROM •