

# pH Measurement

**What is pH measurement?** The most commonly measured chemical parameter in aqueous solutions, pH is a measure of a liquid's acidity and alkalinity. It is a critical parameter in water and wastewater treatment in municipal and industrial applications, chemical production, agriculture research, and production. It is also critical in environmental monitoring, chemical and life sciences research, biochemical and pharmaceutical research, electronics production, and many more applications.

**Meter Selection.** Oakton offers a large selection of pH measurement instruments and kits. From pocket-sized pHTestrs®, to rugged handheld portable meters, to laboratory benchtop meters, Oakton has an instrument for practically any pH application.

**Electrodes.** Proper pH electrode selection is important to maximize electrode life and ensure the best possible accuracy for your application. Oakton offers a complete selection guide with applications and specifications for pH range, temperature, and diameter for each electrode (see pages 23–29).

**Calibration Buffers.** All pH measurement requires calibration solutions to ensure that the readings are traceable to a standard. Oakton calibration buffers do this—and more—since they are standardized against NIST-traceable references. Always choose a pH 7 buffer plus at least one other pH value close to your expected measurement range. Storage and cleaning solutions should also be used to ensure fast, reliable results from your electrodes.

**Expert Advice to Ensure the Best Results.** Feel free to contact your Oakton distributor to help you choose your Oakton pH measurement products. Oakton distributors are dedicated to helping you purchase the Oakton instrument that will give you the best results.



## Waterproof Testrs™ Selection Guide

Use this chart to find the best Testr for your application

Meter	EcoTestr™ pH 2	pHTestrs® 10, 20, 30	pHTestr® 10 BNC	pH Spear	ORPTestr® 10 and 10 BNC	Multiparameter 35-Series Testrs™
See page	4	5	7	6	8	9
Parameters	pH	pH and temperature	pH	pH	ORP	pH, conductivity, TDS, salt
Electrode	Permanently fixed, single junction	Replaceable double-junction module	Not included—use any electrode with BNC connector	Replaceable double-junction spear tip probe	Choose from replaceable module or BNC model	Combined replaceable pH and conductivity module
Resolution	0.1	Up to 0.01	Up to 0.01	Up to 0.01	1 mV	Up to 0.01 pH
Accuracy	±0.1	Up to ±0.01	Up to ±0.01	Up to ±0.01	±2 mV	Up to ±0.01 pH
Display	One-line LCD	Two-line LCD	Two-line LCD	Two-line LCD	Two-line LCD	Two-line LCD
Calibration	3 points; US buffers	3 points; US or NIST buffers	3 points; US or NIST buffers	3 points; US or NIST buffers	±150 mV offset	Up to 5 points pH; up to 3 points EC/TDS

# This is what makes our pocket meters better

## Main Features

- User-replaceable sensor
- Valox® durable plastic casing
- IP67 waterproof
- Easy to use
- Quick, stable, and accurate results
- 1-year meter warranty;  
6-month electrode warranty



### Battery Compartment

- Waterproof by silicone O-ring
- Uses common button cells
- Encloses calibration buttons (for EC/TDS models)



### Customized LCD

- Large and easy to read
- Clear display with unit of measurement
- Self-diagnostic messages
- Temperature readout (select models)



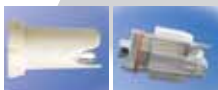
### Waterproof to IP67 Rating

- Rugged, waterproof, and so light, it floats!
- Unique antiroll ribbed design ensures firm grip



### User-Replaceable Sensor Module

- Use tester body over and over again
- Easy plug-in/plug-out connection
- Electrode modules for pH, EC/TDS, ORP, and pH/EC/TDS



### pH/ORP Sensor Module

- Glass bulb of special material; tough with fast response
- PVDF reference junction minimizes contamination
- Double-junction design prolongs sensor life
- Valox® plastic for improved chemical and physical durability



### EC/TDS Sensor Module

- Two-pin stainless steel
- Minimal bubble entrapment
- Easy to clean



### EC/TDS+ Series Sensor Module

- Cup-type design for scooping samples
- Requires minimal sample volume



### pH/EC/TDS Sensor Module

- Combines pH and conductivity
- For Multiparameter 35-Series Testers™



### Top Battery Cover

- Easy to remove (no wires attached)
- Eyelet for lanyard attachment

### Strong Plastic Housing

- Chemical resistant
- Physical durability

### ASIC Microprocessor

- Precise and accurate calibrations
- Fast and reliable readings
- Sophisticated features

### Push-Button Operations

- Simple, quick, and accurate
- Hassle-free calibration procedures

### Double Silicone O-Ring

- Waterproof by silicone O-ring
- Allows easy replacement of electrode module

### Protective Cap

- Reduces contamination
- Protects sensor