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TECHNICAL INFORMATION

Catalog Number: 159482, 159483, 159484, 159485, 159487, 159488, 159489, 159490, 159491, 159492, 159525, 159526, 159527, 159528, 159529, 159530, 159532, 159531, 159545, 159547, 160077, 160078, 160082, 160085, 160086, 160087, 160090, 160097, 160112, 160116, 160118, 160119, 160120, 160121, 160122, 160123, 160124, 160125, 160126, 160127, 160128, 160129, 160130, 160131, 160132, 160133, 160134, 160135, 160136, 160137, 160138, 160139, 160140, 160141, 160142, 160143, 160144, 160145, 160146, 160147, 160148, 160149, 160150, 160151, 160152, 160153, 160154, 160155, 160156, 160157, 160158, 160159, 160160, 160161, 160163, 160164, 160165, 160166

MP - Oakton® Pocket Sized Testers and Accessories Brochure

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pHTestr Series

The MP OAKTON® pHTestrs and pH Wand® are perfect for easy, accurate pH measurements in the lab, plant or field. Choose from five different models for the tester best suited to your application.

All OAKTON® pHTestrs have more useful features than any other pocket-sized pH testers.

All pHTestrs feature:

- Microprocessor-based functions for fast, stable and repeatable readings.
- Easy push-button calibration-no screwdrivers necessary.
- Self-diagnostic error messages alert you to: low battery, over range or incorrect calibration.
- Automatic buffer recognition
- Auto-off function conserves batteries.
- Large, easy-to-read LCD with mode indicator.
- HOLD function freezes readings until you can log them
- Sturdy pocket clip and easily accessible battery compartment

The World's first, and most popular microprocessor-based pocket-sized pH testers.

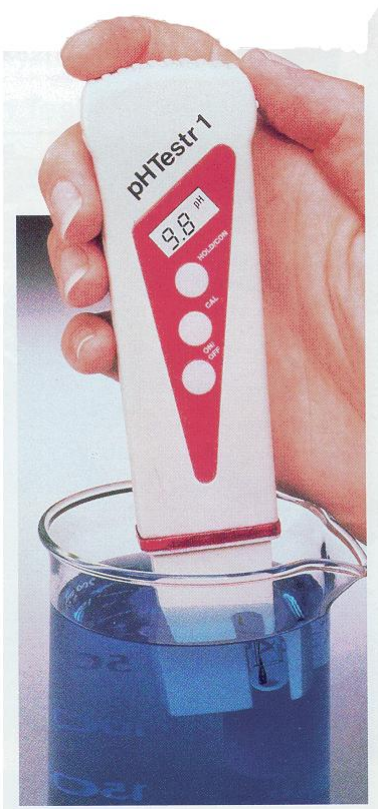
pHTestr 1&2

- **Accuracy:**
 ± 0.2 pH on pHTestr1; ± 0.1 pH on pHTestr 2
- **pHTestr 2 features Automatic Temperature Compensation (ATC) and multipoint calibration.**

The **MP OAKTON® pHTestr 1 and pHTestr 2** are the perfect tools for quick routine pH testing. With fast single point calibration, the pHTestr 1 is remarkably consistent in its ± 0.2 pH accuracy throughout its entire range. The pHTestr 2, with multipoint calibration capability and ATC, delivers fast ± 0.1 pH accuracy even under varying temperature conditions.

Both the pHTestr 1 and pHTestr 2 feature: **Push-button calibration and automatic buffer recognition** at pH 4.0, 7.0 and 10.0 that adjust the reading to your buffer standard more precisely than trimpot adjustment with a screwdriver; **HOLD** freezes your reading until it can be logged; **Auto-Off** turns your tester off after 8.5 minutes to conserve your batteries; and **Self-Diagnostic Error Messages** alert you to low batteries, over/under range conditions, or incorrect calibration input. They even have mode and pH unit indicators on the display.

- 159481** pHTestr 1; ± 0.2 pH accuracy
- 159482** pHTestr 2; ± 0.1 pH accuracy

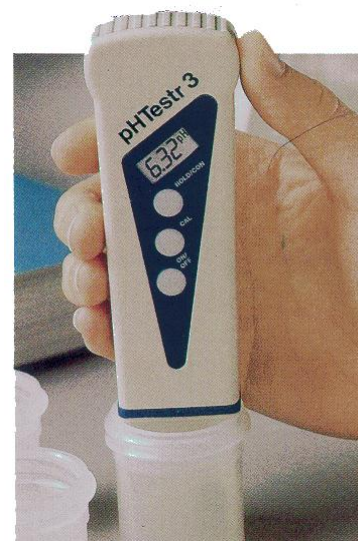


Combine the accuracy and 0.01 pH resolution of a hand held meter with the ease of use and low cost of a pocket-sized tester with the...
pHTestr 3

- ± 0.02 pH accuracy*; ± 0.01 pH resolution
- **Multipoint push-button calibration**
- **Automatic Temperature Compensation (ATC)**
- **Suitable for use in most standardized pH test methods**

The **MP OAKTON® pHTestr 3** is the world's first pocket sized microprocessor-based instrument to provide ± 0.01 pH resolution and ± 0.02 pH accuracy*. It's the best available combination of features, high performance for professional results, and low cost. Its multipoint push-button calibration capability with automatic buffer recognition and ATC deliver maximum accuracy even under varying temperature conditions.

- 159487** pHTestr 3; ± 0.02 pH accuracy
- * ± 0.02 pH accuracy at normal room temperature; ± 0.05 pH accuracy at extremes in temperature and pH range



pHTestr 1, 2, and 3 Specifications

	pHTestr 1	pHTestr 2	pHTestr 3
Model/Catalog No.	159481	159482	159487
Accuracy	± 0.2 pH	± 0.1 pH	± 0.02 pH*
Resolution	± 0.1	pH	± 0.01 pH
Range	-1.0 to 15.0	pH extended range	0.00 to 14.99 pH extended range
Calibration	at either pH 4.0; 7.0; or 10.0	select up to 3 points:	pH 4.0; 7.0; 10.0
Automatic Temperature Compensation	No	Yes	Yes
Operating Temperature		0 to 50°C (32-122°F)	
Special Functions	On/Off or Auto-Off after	8.5 minutes; HOLD;	CALibrate and CONfirm
Power/Battery Life	Three 1.4V batteries 100 hrs. continuous	(included) use	Four 1.4 V batteries (included); 50 hrs. continuous use
Dimensions	8.5"L x 2.75"W x 1.3"H/ 15.0 x 4.1 x 2.4 cm (unit	21.6 x 7.0 x 3.3 cm (boxed); only)	5.9"L x 1.6"W x 0.94"H/ only)
Weight	4.5 oz/125 gms (boxed);	3.25 oz/90 gms (unit	

* In most applications or when calibration and tests are at room temperature (62-81°F)

Everything you need for fast, accurate calibration and safe, convenient storage of your pH testers

pHTestr 1 & 2 Calibration Kits



The pHTestr Calibration Kits include ten each of pH 4 and 7 calibration buffer tablets, three sample jars, and complete pHTestr care and use instructions -- all in a hard shell carrying case that protects and organizes the components. Choose between the pHTestr 1 (accuracy ± 0.2 pH); the pHTestr 2 (accuracy ± 0.1 pH); or the pHTestr BNC with detachable electrodes (accuracy ± 0.1 pH; see following for ordering information). Or choose the low-cost kit supplied without a tester. All calibration kits 7.75"L x 6"W x 2.75"H. Shipping weight 1 lb (0.5 kg) with tester; 0.7 lb (0.3 kg) without tester. We recommend the pH buffer solutions in bottles, or OAKTON® Singles pouches for the pHTestr 3, pH Wand® and the waterproof pHTestr series (see following information).

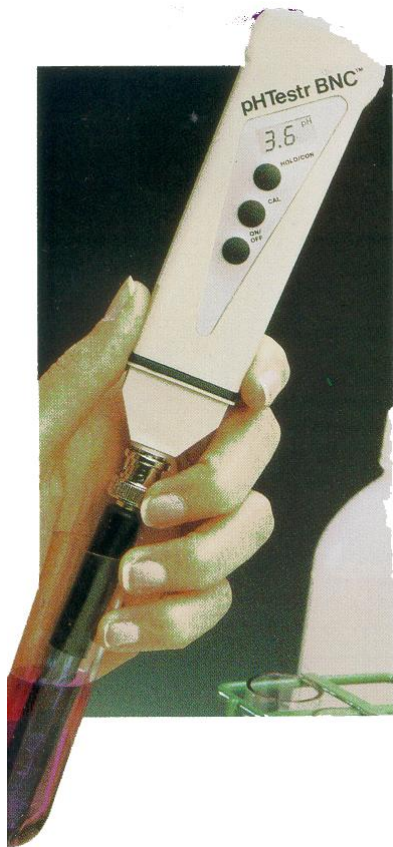
160077 pHTestr 1 w/calibration kit; ± 0.2 pH accuracy

160078 pHTestr 2 w/calibration kit; ± 0.1 pH accuracy

159491 pHTestr calibration kit without tester

The accuracy and convenience of the pHTestr now adaptable to any application...

pHTestr BNC



- ± 0.1 pH accuracy in most applications
- Connects to a wide variety of electrodes, allowing tester to be used in virtually any application.

Use the **MP OAKTON pHTestr BNC** with many different types of electrodes, including ones you are already using. The detachable BNC electrode connection makes this tester suitable for a broad range of applications, even highly specialized ones. Just select the pH electrode best suited to your needs, connect it to the pHTestr BNC, calibrate and read -- it's that easy. Use direct connect electrodes for one-handed use (see picture) or electrodes with cables for hard to reach places.

The pHTestr BNC features **multipoint push-button calibration with automatic buffer recognition**, which ensures accuracy to ± 0.1 pH in most applications at room temperature; ± 0.2 pH accuracy at temperature and pH extremes. Other features include **push-button HOLD** and **self-diagnostic error messages**.

- 159486** pHTestr BNC; ± 0.1 pH accuracy; electrode not included -- order separately.
- pHTestr BNC Calibration Kits** (see **pHTestr 1 & 2 Calibration Kits** for more details)
- 160082** pHTestr BNC w/9 mm electrode and calibration kit; ± 0.1 pH accuracy
- 160085** pHTestr BNC w/12 mm electrode and calibration kit; ± 0.1 pH accuracy

The World's most versatile ± 0.01 pH accuracy pocket-sized pH tester with detachable, replaceable electrodes
pH Wand®

- Offers the ± 0.01 pH resolution you expect only from larger, much more expensive meters.
- **Automatic Temperature Compensation (ATC)** for accurate readings under varying temperature conditions.
- **Detachable electrodes** give you flexibility for use in most any application.

± 0.01 pH accuracy combined with the convenience and flexibility of detachable, replaceable electrodes makes the **MP OAKTON® pH Wand®** perfect for precise readings in most applications.

Choose from a variety of **direct connect electrodes** or **3 foot cabled electrodes**. All pH Wand® electrodes contain a built-in temperature sensor to allow ATC to compensate for temperature variations.

Like all the pHTestr series, the pH Wand® is microprocessor-based, featuring 3 point push-button calibration, Hold and Auto-off functions, and self-diagnostic error messages.

- 160086** pH Wand®; ± 0.01 pH accuracy; electrode not included -- order separately.



pH Wand® -- Reg TM #1,402,637

pHTestr BNC and pH Wand® Specifications

	pHTestr BNC	pH Wand®
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Model/Catalog No.	159486	160086
Accuracy	± 0.1 pH*	± 0.01 pH
Resolution	± 0.1 pH	± 0.01 pH
Range	-1.0 to 15.0 pH extended range	0.00 to 14.99 pH extended range
Calibration	at either pH 4.0; 7.0; or 10.0	select up to 3 points: 4.0; 7.0; 10.0
Automatic Temperature Calibration	No	Yes
Operating Temperature	0 to 50°C	(32 to 122°F)
Special Functions	On/Off or Auto-Off after 8.5 HOLD: CALibrate	minutes; and CONfirm
Power/Battery Life	Three 1.4V batteries (included) 100 hrs. continuous use	Four 1.4 V batteries (included) 50 hrs. continuous use

Dimensions	8.5"L x 2.75"W x 1.3"H/21.6 x 7.0 x 3.3 cm (boxed); 5.9"L x 1.6"W x 0.94"H/15.0 x 4.1 x 2.4 cm (unit only)
Weight	4.5 oz/125 gms (boxed); 3.25 oz/90 gms (unit only)

* In most applications; meter only or when calibration and tests are at room temperature (62-81°F)

Electrodes

pHTestr BNC Electrodes

159545 Direct connect epoxy body pH electrode; sealed, gel filled, single junction, 12 mm dia. (0.5 lbs).

159546 Direct connect epoxy body pH electrode for test tubes; sealed, gel filled, single junction, 9 mm dia. (0.5 lbs).

160087 Direct connect epoxy body pH electrode; sealed, gel filled, double junction, 12 mm dia. (0.5 lbs).

159547 Epoxy body pH electrode with 3 ft. cable, sealed, gel filled, single junction, 12 mm dia. (0.5 lbs)

160090 Epoxy body pH electrode with 3 ft. cable for high pH applications, sealed, gel filled, single junction, 12 mm dia. (0.5 lbs).

160097 Direct connect epoxy body pH electrode for high pH applications, sealed, gel filled, single junction, 9 mm dia. (0.5 lbs).

160112 Calomel (HgCl) Direct connect epoxy body pH electrode, sealed, gel filled, single junction, 12 mm dia. (0.5 lbs).

160116 Direct connect epoxy body pH electrode with flat measuring surface, sealed, gel filled, single junction, 12 mm dia. (0.5 lbs).

160118 Submersible ABS plastic pH electrode with 10 ft. cable, sealed, gel filled, single junction, 25 mm dia. (11 lbs.).

pH Wand® Electrodes

160119 Direct connect epoxy body pH electrode with built-in ATC sensor; sealed, gel filled, single junction, 12.5 mm dia. (0.5 lbs).

160120 Direct connect epoxy body pH electrode with built-in ATC sensor; refillable, liquid filled, double junction, 12 mm dia (0.5 lbs).

160121 Direct connect epoxy body pH electrode with built-in ATC sensor, for high pH applications, sealed, gel filled, single junction, 12 mm dia. (0.5 lbs).

160122 Glass body pH electrode with built-in ATC sensor and 3 ft. cable, refillable, liquid filled, single junction, 12 mm dia. (0.5 lbs).

160123 Calomel (HgCl) glass body pH electrode with built-in ATC sensor and 3 ft. cable, refillable, liquid filled, single junction, 12 mm dia. (0.5 lbs).

160124 Glass body spear tip pH electrode with built-in ATC sensor and 3 ft. cable, sealed, gel filled, single junction, 12 mm dia. (0.5 lbs).

160125 Submersible ABS plastic pH electrode with built-in ATC sensor and 10 ft. cable, sealed, gel filled, single junction, 25 mm dia. (1.0 lbs).

**Below Left to Right:
pH Wand electrode with special
customized BNC connection, and
pHTestr BNC electrode**



New! The World's First waterproof and dustproof pH testers that FLOAT and have Replaceable Electrode.

Microprocessor-based
Waterproof pHTestrs



Waterproof pHTestr 1

- ± 0.2 pH accuracy; 0.1 pH resolution
- Push-button calibration at pH 4, 7, or 10 ... no screwdrivers necessary

Waterproof pHTestr 2

- ± 0.1 pH accuracy and resolution
- Automatic Temperature Compensation (ATC)
- 1, 2, or 3 point push-button calibration at pH 4 and/or 7 and/or 10 ... no screwdrivers necessary

Both Waterproof pHTestrs feature:

- Replaceable Electrode
- Push-button HOLD function
- pH Calibration buffer recognition
- Self-diagnostic error messages that eliminate guesswork when troubleshooting
- Auto shut-off after 8.5 minutes to conserve batteries

Never again lose a pH tester by watching it sink to the bottom of your tank or pond. The MP OAKTON® waterproof pHTestrs 1 and 2 float so you can retrieve them. Never again wonder whether a pH instrument is truly waterproof. The MP OAKTON® Waterproof pHTestrs can be certified to meet IP67 ratings for dustproof and waterproof ingress protection*. As an added bonus, the MP OAKTON® waterproof pHTestrs have replaceable electrodes. With the replacement electrode costing a fraction of the whole unit, the MP OAKTON® waterproof pHTestr 1 and 2 are, in the long run, the most economical testers in their class.

Waterproof pHTestr Specifications

	Waterproof pHTestr 1	Waterproof pHTestr 2
Accuracy	± 0.2 pH	± 0.1 pH
Resolution	± 0.1	pH
Range	-1.0 to 15.0	pH extended range

Calibration	at either pH 4.0; 7.0; or 10.0	select up to 3 points: 4.0, 7.0, 10.0
Automatic Temperature Calibration	No	Yes

Operating Temperature	0 to 50°C (32 to 122°F)
Special Functions	On/Off or Auto-Off after 8.5 minutes; HOLD; CALibrate and CONfirm
Power/Battery Life	Three 1.4 V batteries (included) 100 hrs. continuous use
Dimensions	8.5"L x 2.0"W x 2.5"H (boxed); 6.5"L x 1.5" Dia (unit only)
Weight	5 oz/140 gms (boxed); 3.25 oz/90 gms (unit only)

160126 Waterproof pHTestr 1; ± 0.2 pH accuracy

160127 Waterproof pHTestr 2; ± 0.1 pH accuracy

160128 Replacement electrode for waterproof pHTestr 1

160129 Replacement electrode for waterproof pHTestr 2

*Certification available at additional cost -- call your OAKTON distributor for details.

pH Solutions

MP OAKTON® pH Solutions

MP OAKTON® pH calibration buffer solutions are standardized against NIST certified references to ensure your confidence. Each bottle is labeled with the name and CAS number for all ingredients to conform to "Right-to-Know" requirements, and come supplied with a Material Safety Data Sheet (MSDS). 1 pt (460 ml). Dimensions 7.25" H x 2.5" dia. Shipping weight 18 oz. (510 gms). Recyclable PE.

pH Calibration buffer solutions (± 0.01 pH @ 25°C)

- 160130 pH 1.68
- 160131 pH 4.01
- 160132 pH 7.00
- 160133 pH 10.00
- 160134 pH 12.45

MP OAKTON® electrode solutions

Extend the life of your pH Wand® or pHTestr BNC electrodes and maintain accurate readings with MP OAKTON® electrode cleaning solutions. The general purpose pH and ORP Electrode cleaning solution is a safe way to maintain sensitivity by removing build-up from electrodes. Use the pH Electrode storage solution and pH electrode saver bottle to keep electrode bulb moist for quicker, more accurate pH readings. Bottles are recyclable PE.

160135 General purpose pH/ORP electrode cleaning solution, 1 pt (460 ml). Dimensions 7.75" x 2.25" dia. Shipping weight 18 oz (510 gms).

160136 pH electrode storage solution 1 pt (460 ml). Dimensions 7.75"H x 2.25" dia. Shipping weight 18 oz (510 gms).

160137 pH electrode saver bottle, accepts any pH electrode up to 13 mm dia. Dimensions 4"H x 1.5" dia. Shipping weight 1 oz (27 gms).



MP OAKTON "Singles"

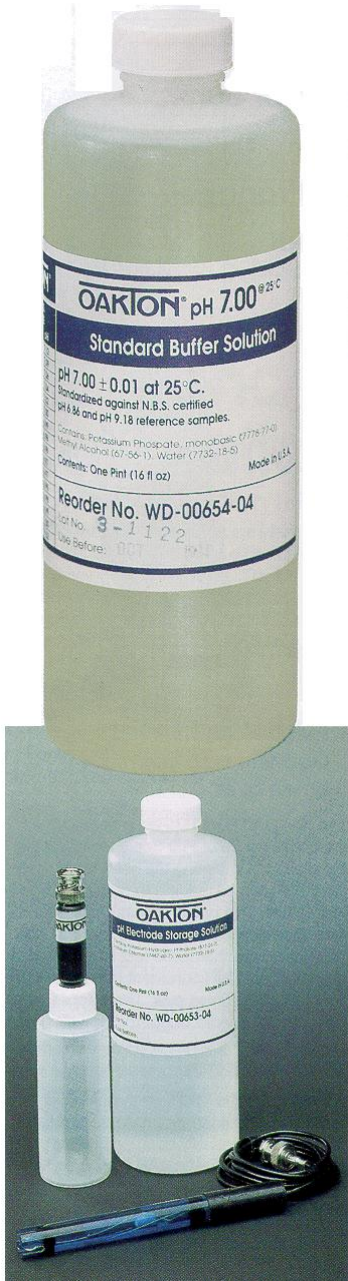
MP OAKTON® pH Singles are calibration solution pouches containing 20 ml of pH calibration solution or deionized water for rinsing. All solutions are certified traceable to NIST Standards for maximum accuracy. Pouches are airtight, guaranteeing freshness for each use. Each pouch is labeled with name and CAS number for all ingredients to conform with "Right-to-Know" requirements. Box dimensions: 5"L x 4.5"W x 4.5"H. Shipping weight 1 lb (454 gms) per box.

pH Singles -- buffer calibration pouches (± 0.01 pH @ 25°C)

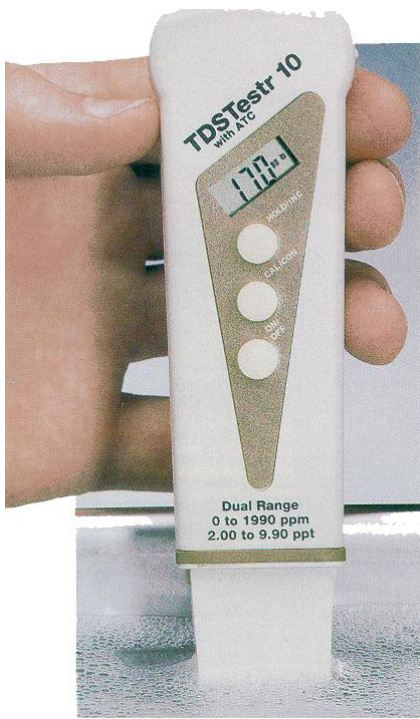
- 159528 pH 4.01; 20/box
- 159529 pH 7.00; 20/box
- 159530 pH 10.00; 20/box
- 159532 Assortment; 5 each of pH 4, 7, 10 calibration solutions and deionized rinse water (20 total)

Rinse water pouch

- 159531 Deionized rinse water; 20/box



TDSTestr Series



Choose from our standard economical TDSTestr series, or our new microprocessor-based TDSTestr 10 and 20 with dual ranges. They're like two testers in one.

All TDSTestrs feature:

- ± 2% Full Scale accuracy
- Automatic Temperature Compensation (ATC)
- Large, easy-to-read LCD with mode indicator



Pocket-sized testers for TDS or Conductivity measurements ... with Direct Readout

TDSTestr 1 - 4

- Full Readout displayed
- Outlasts test kits many times over

The **MP OAKTON® TDSTestr series** offers the convenience of

Full Scale Readout on the display, eliminating the need for multiplying the displayed reading to obtain the actual test values. This practical feature saves time and eliminates error. For little more than the price of a water hardness test kit, you can have a digital test instrument that will outlast a test kit many times over. These four testers read directly in ppm or ppt for total dissolved solids, or in micromhos (uS) or millimhos (mS) for conductivity.

And because the **TDSTestr** has **ATC**, once it is calibrated to an appropriate standard, the ATC will automatically compensate for changes in the conductivity of the solution due to changes in temperature. See chart following for complete specifications.

- 159483** TDSTestr 1; ± 2% FS
- 159525** TDSTestr 2; ± 2% FS
- 159526** TDSTestr 3; ± 2% FS
- 159527** TDSTestr 4; ± 2% FS

Measure clean, treated, used, reused, and wastewater applications with one tester.

TDSTester 10 & 20

- Direct Readout in TWO ranges -
- TDSTestr 10:** 0 - 1990* ppm and 2.00 - 10.00 ppt
- TDSTestr 20:** 0 - 1990 uS and 2.00 - 19.00 mS

- Auto-ranging
- Push-button calibration -- no screwdrivers necessary

The **MP OAKTON® TDSTestrs 10 and 20** are the world's first **microprocessor-based, dual-range testers** for conductivity and TDS measurement. **TDSTestr 10** reads 0 - 1990 ppm (with 10 ppm resolution), and 2.00 - 10.00 ppt (with 0.10 ppt resolution). **TDSTestr 20** reads 0 - 1990 uS (with 10 uS resolution) and 2.00 - 19.00 mS (with 0.10 mS resolution). Because they are microprocessor-based, they offer easy push-button calibration -- no need for trimpot adjustment with screwdrivers. Both TDSTestrs feature **Auto-ranging; Auto-Off**, to conserve batteries; **HOLD function**, which freezes reading until it can be logged, and **self-diagnostic error messages**, alerting you to low batteries or over/under range conditions. See following table for complete specifications.

- 160138** TDSTest 10; ± 2% FS
- 160139** TDSTestr 20; ± 2% FS

* 0 - 1990 ppm range optimized for 442 standard calibrations. Calibrations to other types of standards will lower the value at which the TDSTestr 10's low range ends and the high range in ppt begins.

TDSTestr Specifications

	TDSTestr 1	TDSTestr 2	TDSTestr 3	TDSTestr 4	TDSTestr 10	TDSTestr 20
Model/Catalog No.	159483	159525	159526	159527	160138	160139
Accuracy			± 0.2%	F.S.		
Resolution	10 ppm	0.10 ppt	10 uS	0.1 mS	10 ppm/0.1 ppt	10 uS/0.1 mS
Range	0 to 1990 ppm	0 to 10.00 ppt	0 to 1990 uS	0 to 19.90 mS	0 to 1990 ppm; 0 to 9.99 ppt	0 to 1990 uS; 2.0 to 19.90 mS
Calibration		Single point calibrating	with appropriate solutions		Single point slope gives ± 25% adjustment of range	push-button adjustment (typically) reading in either
Operating Temperature			0 to 50°C	(32 to 122°F)		
Power and Battery Life		Four 1.4V (included) 200	batteries continuous use hrs.		Four 1.4V (included) 50	batteries continuous use hrs.

Dimensions	8.5"L x 2.75"W x 1.3"H/21.6 x 7.0 x 3.3 cm (boxed); 5.9"L x 1.6 "W x 0.94"H/15.0 x 4.1 x 2.4 cm (unit only)
Weight	4.5 oz/125 gms (boxed); 3.25 oz/90 gms (unit only)

TDS and Conductivity Calibration Kits and Solutions

TDSTestr Calibration Kits

Our TDSTestr calibration kits are ideal for both the standard TDSTestr 1, 2, 3 and 4; and the new microprocessor-based dual-range TDSTestrs 10 and 20. Choose from five different kits -- just select the model with calibration values closest to your expected readings. All kits include screwdriver (for calibrating TDSTesters 1-4); detailed instruction card; 100 ml calibration solution; and deionized water in 120 ml squirt bottle. Kit components are secured safely in molded foam with space left for your TDSTestr in a hard shell carrying case. All calibration kits 7.75"L x 6"W x 2.75"H. Shipping weight 1 lb (0.45 kg).

447 uS Kit

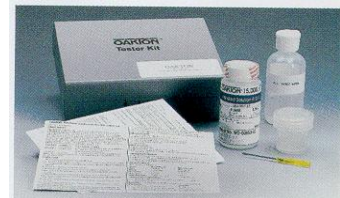
Includes 447 uS (300 ppm 442; 215.5 ppm NaCl; 226 ppm KCl) calibration solution. Use the TDSTestrs 1, 3, 10 or 20.

160140 TDSTestr 447 uS calibration kit

1413 uS Kit

Includes 1413 uS (1000 ppm 442; 702 ppm NaCl; 745 ppm KCl) calibration solution. Use with TDSTestrs 1,3, 10 or 20.

160141 TDSTestr 1413 uS calibration kit



2070 uS Kit (2.07 mS)

Includes 2070 uS (1500 ppm 442; 1041 ppm NaCl; 1045 ppm KCl) calibration solution. Use with TDSTestrs 1, 4, 10 or 20.

160142 TDSTestr 2070 uS calibration kit

8974 uS Kit (8.97 mS)

Includes 8974 uS (7.61 ppt 442; 4.49 ppt NaCl; 5.10 ppt KCl) calibration solution. Use with TDSTestrs 2, 4, 10 or 20.

160143 TDSTestr 8974 uS calibration kit

15,000 uS Kit (15.00 mS)

Includes 15,000 uS (13.45 ppt 442; 8.53 ppt NaCl; 8.76 ppt KCl) calibration solution. Use with TDSTestrs 2, 4, 10 or 20.

160144 TDSTestr 15,000 uS calibration kit

MP OAKTON® Conductivity/TDS calibration buffer solutions are standardized against NIST certified references to ensure confidence in their accuracy. Each bottle is labeled with the name and CAS number for all ingredients to conform to "Right-to-Know" requirements, and comes supplied with a Material Safety Data Sheet (MSDS). All OAKTON® Conductivity/TDS solutions are 1 pt (460 ml). Dimensions 7.25"H x 2.5" dia. 1 pt (460 ml). Shipping weight 18 oz. (510 gms). Recyclable PE.

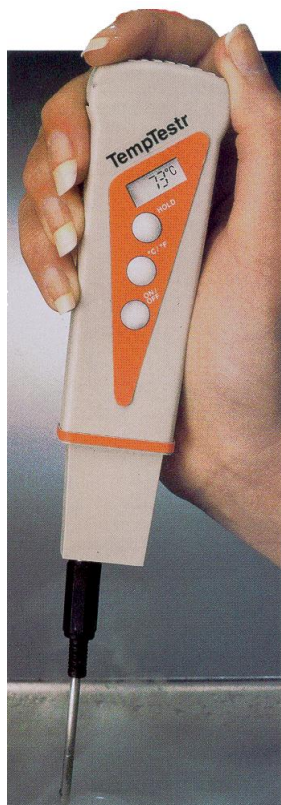
- 160145 23 uS (11.6 ppm KCl; 10.7 ppm NaCl; 14.74 ppm 442).
- 160146 84 uS (40.38 ppm KCl; 38.04 ppm NaCl; 50.50 ppm 442).
- 160147 447 uS (225.6 ppm KCl; 215.5 ppm NaCl; 300.0 ppm 442).
- 160148 1413 uS (744.7 ppm KCl; 702.1 ppm NaCl; 1000 ppm 442).
- 160149 1500 uS (757.1 ppm KCl; 737.1 ppm NaCl; 1050 ppm 442).
- 160150 2070 uS (1045 ppm KCl; 1041 ppm NaCl; 1500 ppm 442).
- 160151 2764 uS (1382 ppm KCl; 1414.8 ppm NaCl; 2062.7 ppm 442).
- 160152 8974 uS (5101 ppm KCl; 4487 ppm NaCl; 7608 ppm 442).
- 160153 12,880 uS (7447 ppm KCl; 7230 ppm NaCl; 11,367 ppm 442).
- 160154 15,000 uS (8759 ppm KCl; 8532 ppm NaCl; 13,455 ppm 442).
- 160155 80 mS (48,384 ppm KCl; 52,168 ppm NaCl; 79,688 ppm 442).

Conductivity/TDS Solution Pouches (±1% @ 25°C)

MP OAKTON® Conductivity/TDS Singles are calibration solution pouches containing 20 ml of calibration solutions or deionized rinse water. All solutions are traceable to NIST Standards for maximum accuracy. Pouches are airtight, guaranteeing you freshness for each use. Each pouch is labeled with name, equivalent TDS values (see solutions listing at left) and CAS number for all ingredients to conform with "Right-to-Know" requirements. 20 pouches per box. Box dimensions: 5"L x 4.5"W x 4.5"H. Shipping weight 1 lb (454 gms) per box.

- 160156 447 uS
- 160157 1500 uS
- 160158 2764 uS
- 160159 15,000 uS
- 160160 Rinse water pouches

TempTestr®



– °F or °C selectable scale

– Highly accurate:

± 1°C throughout range; ± 1°F from 20° to 160°F;
1% Full Scale above 160°F and below 20°F

– Fast plug-in probe attachment

– Push-button calibration -- no screwdrivers necessary

Measure temperatures from -20 to 220°F (-29 to 105°C) quickly and accurately with the **MP OAKTON® TempTestr®**. Factory calibrated, use the **push-button keypad** for fine adjustment -- no screwdriver necessary. Includes detachable plug-in 304 SS temperature probe.

Because it is microprocessor-based, the TempTestr® offers such useful features as **°C or °F selectable scale**, defaulting to °F when turned on; **HOLD function**, to retain a reading taken in hard to reach or poorly lit locations; **self-diagnostic error messages**, alerting you to low batteries or over/under range conditions, and **Auto-Off**, which turns your tester off after 8.5 minutes to conserve batteries.

159485 TempTestr; ±1° accuracy

Accuracy	± 1°C throughout the range; ± 1°F from 20° to 160°F; ± 1% Full Scale above 160°F and below 20°F
Resolution	1°F; 1°C
Range	-20 to 220°F (-29 to 105°C)
Operating Temperature	32 to 122°F (0 to 50°C)
Power/Battery Life	Three 1.4V batteries (included) 100 hrs. continuous use
Dimensions	Boxed: 8.5"L x 2.75"W x 1.3"H (21.6 x 7.0 x 3.3 cm) Unit only: 5.9"L x 1.6"W x 0.94"H (15.0 x 4.1 x 2.4 cm) Probe: stem 4.5"L (150 mm); overall 6.6"L (168 mm); stem dia. 0.125" (3.1 mm)
Materials	Case: glass reinforced thermoplastic polyester; Probe: 304 SS
Weight	4.25 ounces/199 gms (boxed); 3 ounces/84 gms (meter and probe only)

TempTestr® -- Reg TM #1,757,576.

Testr Carrying Pouches

Use these soft-vinyl carrying pouches to take your tester with you in the field. Choose between one, two, and three tester pouches. All feature Velcro® loop to fasten pouch around your belt, and Velcro flap to secure the tester.

159488 Holds one tester. Dimensions 0.24"L x 3.25"W x 7"H. Shipping weight 0.09 lb/41 gms.

159489 Holds two testers. Dimensions 0.24"L x 6.25"W x 7"H. Shipping weight 0.18 lb/82 gms.

159490 Holds three testers. Dimensions 0.24"L x 9.25"W x 7"H. Shipping weight 0.27 lb/123 gms.



Velcro -- Reg. TM VELCRO USA, Inc.

ORPTestr

- ± 5mV accuracy
- Offset of ± 150 mV for keypad adjustment to work standard without a screwdriver

Because the **MP OAKTON® ORPTestr** is microprocessor-based, and has a large surface area platinum band sensor, its readings are exceptionally fast, stable and repeatable. Ideal for quick and easy ORP checks in chromate reduction, drinking water, cyanide oxidation, swimming pool water, pulp bleaching, and other ORP applications. The ORPTestr also features: **push-button calibration** for keypad adjustment of reading ± 150 mV to standardize the tester or to make it agree with an established work standard; **HOLD**, to freeze your reading until it can be logged; **Auto-Off**, which turns your tester off after 8.5 minutes; and self diagnostic error messages which alert you to low batteries and over/under range conditions.

159484 ORPTestr; ± 5 mV accuracy



ORPTestr Specifications

Accuracy	± 5 mV
Range	-50 to +1050 mV
Resolution	5 mV
Offset Adjustment	± 150 mV -- brings ORPTestr into agreement with your work standard
Operating Temp.	0 to 50°C (32 to 122°F)
Power/Battery Life	Three 1.4 V batteries (included); 100 hrs. continuous use
Dimensions	Boxed: 8.5"L x 2.75"W x 1.3"H (21.6 x 7.0 x 3.3 cm) Unit Only: 5.9"L x 1.6"W x 0.94"H (15.0 x 4.1 x 2.4 cm)
Weight	1 lb/0.5 kg
Wetted Parts	Platinum, glass, Kynar® and glass reinforced thermoplastic polyester

KYNAR -- Registered TM Pennwalt Corp.

Battery Powered Stirrer

Take this compact stirrer anywhere you need consistent sample stirring -- ideal for field analysis on fresh samples. Or use it in the lab and easily move it to where you need it without the use of cumbersome extension cords.

Stirrer features stepless speed control knob, corrosion-resistant, epoxy coated metal case, non-skid rubber top plate, and four rubber feet. Comes supplied with two 1.5 V C batteries and Teflon®-coated stir bar (1" L x 0.375" dia).

160161 Battery-powered magnetic stirrer. Dimensions 3.75"L x 3.75"W x 2.25"H. Shipping weight 2 lbs (0.9 kg)
159492 Replacement batteries -- 1.5V C; 4/pack



Teflon -- Reg TM E.I. du Pont de Nemours & Co.

Read Fluoride measurements directly in ppm with the easy-to-use, low cost
Fluoride Ion Testr



- Simple push-button calibration and operation
- Direct readings -- no multiplication or tables necessary
- ± 0.05 ppm accuracy in and out of the lab
- Dual range: 0.20 to 3.99 ppm and 4.0 to 20.0 ppm

The new **MP OAKTON® Fluoride Ion Testr** is small enough to go anywhere and capable of directly measuring fluoride ion concentration. It uses fluoride standards and test methods in accordance with ASTM recommendations for measuring fluoride in drinking, surface, saline, and domestic and industrial waste. It's even useful for fluoride gas trap testing and water treatment in metal finishing operations. Calibrate with 0.50 ppm, 1.00 ppm, 2.00 ppm standards. Fluoride electrode sold separately below must be used with the MP OAKTON® Fluoride Ion Testr. Do not substitute.

160162 Fluoride Ion Testr, ± 0.05 ppm accuracy from 0.20 to 3.99 ppm; $\pm 2\%$ of measured value from 4.0 to 20.0 ppm. Weight 4.5 oz/125 gms.

160163 Fluoride electrode; direct connect style. Weight 0.5 lbs/0.23 kg

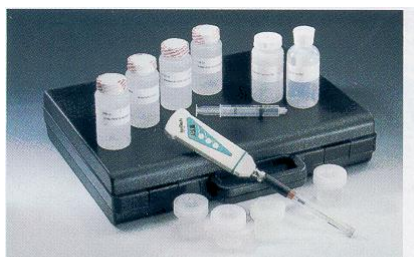
Calibration Kit

Kit includes one 250 ml bottle each of 0.50, 1.00 and 2.00 ppm standards, Total Ionic Strength Adjustment Buffer (TISAB), and distilled water for rinsing electrode. All accessories are packaged in a hard plastic carrying case. Fluoride Testr and electrode not included.

160164 Calibration Kit. Dimensions 15.75"L x 13.5"H. Weight 4.5 lbs/2.1 kg

160165 Replacement calibration solution. One 250 ml bottle each of 0.50, 1.00, 2.00 ppm standards. Weight 2 lbs/0.92 kg

160166 Replacement TISAB solution, 250 ml bottle. Weight 0.5 lbs/0.23 kg



Fluoride Ion Testr calibration kit does not include tester or electrode (order separately).



Fluoride Ion Testr Specifications

Model/Catalog No.	160162
Accuracy	0.20 to 3.99 ppm: ± 0.05 ppm; 4.0 to 20.0 ppm: $\pm 2\%$ of measured value
Resolution	0.20 to 3.99 ppm: 0.01 ppm; 4.0 to 20.0 ppm: 0.1 ppm
Range	0.20 to 20.0
Operating Temperature	0 to 50°C (32 to 122°F)
Power/Battery Life	Four 1.4V batteries (included) 50 hrs. continuous use
Dimensions	5.9"L x 1.6"W x 0.94"H (unit only)
Weight	4.5 oz/125 gms (unit only); 4.5 lbs/2.0 kg (with kit)