NEW! ULTRAMETER III™ 9PTKA

With innovative new in-cell conductometric titrations that make fast field analysis of alkalinity, hardness and LSI possible!

9P comes in complete kit with all necessary accessories to measure 9 parameters.

CONDUCTIVITY • RESISTIVITY • TDS
ALKALINITY • HARDNESS • SATURATION INDEX • ORP • FREE CHLORINE • pH
TEMPERATURE

BLUETOOTH® WIRELESS DATA TRANSFER AVAILABLE WITH bluDock™

myronl.com

MADE IN USA

MYRON L® COMPANY
Water Quality Instrumentation
Accuracy • Reliability • Simplicity
. . . Since 1957

Waterproof & Buoyant

ULTRAMETER III

Advanced Design • Superior Performance

bluDock™ Enabled bD

The 9P is capable of wireless data transfer with bluDock™ option installed

9 Parameters!

- *Conductivity • Resistivity*
- *TDS • Alkalinity • Hardness*
- *Langelier Saturation Index with Calculator*
- *pH • ORP & Free Chlorine*
- *Temperature*

Features include:

- **FAST one-touch measurements for conductivity, resistivity, TDS, ORP, free chlorine (FC^E), pH and temperature**
- **SIMPLE user-intuitive prompts step you through alkalinity, hardness and LSI titrations**
- **CONVENIENT LSI Calculator accepts both grains and ppm hardness units**
- **EASY keypad calibration**
- **STABLE 4-electrode conductivity cell eliminates polarization, increasing accuracy with minimal maintenance**
- **POWERFUL microprocessor-based surface mount circuitry**
- **UNIQUE pH/ORP glass sensor is user-replaceable**
- **VERSATILE solution modes provide accuracy in diverse water quality applications**
- **EFFICIENT design features auto-off that minimizes power consumption — one 9V battery lasts up to 100 hours/5000 tests**
- **ADVANCED proprietary temperature compensation and TDS conversion algorithms**
- **RELIABLE non-volatile microprocessor provides data back-up, even when the battery is changed; this assures all calibrations and memory data are retained**

FAST READINGS • SIMPLE TO USE

ACCURACY YOU CAN TRUST

Since 1957, the Myron L® Company has designed and manufactured highly accurate and reliable analytical instruments for a wide variety of demanding applications. Thousands of professionals around the world rely on the performance of our instruments every day. Uses range from boiler water testing to ultrapure water control to medical instruments for artificial kidney machines. We are proud of the trust our handheld instruments and monitor/controllers have earned. Some of our instruments have been in continuous use for over 45 years. Our latest digital handheld, the Ultrameter III 9P, is based on the tried and tested design of the Ultrameter II. The 9P adds the ability to perform in-cell alkalinity and hardness titrations either as stand-alone measurements or as part of an LSI calculation. Alkalinity, hardness, pH and temperature values can be manipulated in the LSI calculator to predict the effect of changes on water balance. Measurements are extremely accurate. And the 9P is simple to operate and maintain.

NEW! FC^E FAC Readings

The Myron L® Company FC^E function reports FAC quickly and accurately by measuring ORP, the chemical characteristic of chlorine that directly reflects its effectivity, cross referenced with pH. Both DPD kits and colorimeters may tell the user the FAC value of the sample in the test tube, but since the chemistry of that sample is quite different from the source water being analyzed, the results are imprecisely related to actual disinfection power. The Myron L® Company FC^E function measures the real, unaltered chemistry of source water, including moment-to-moment changes in that chemistry.

In-Cell Titration Functions

The Ultrameter III adds the ability to perform in-cell conductometric titrations that provides a convenient way to determine alkalinity, hardness and LSI in the field. This eliminates the need to collect and transport samples to another location for analysis. User intuitive display prompts guide you through titration procedures from start to finish. All required reagents and equipment are included in the 9P titration kit.

Water Balance Analysis

The Ultrameter III features both an LSI Calculator and an LSI Titration measurement mode. The Calculator allows you to perform what-if scenarios to predict how changes in solution parameters would affect the water balance of a system. The titration measurement function allows you to accurately calculate a saturation index value of a specific solution to determine whether the solution is balanced, scaling or corrosive.

Hardness Unit Conversion

The Hardness titration, LSI Titration and LSI Calculator functions allow you to set the hardness unit preference to either grains of hardness or ppm $CaCO_3$.

Accuracy You Can Trust

Like the Ultrameter II, the Ultrameter III delivers exceptional accuracy of ±1% of reading (±.1% at calibration point). This high level of accuracy is achieved through advanced four-electrode conductivity cell technology, a powerful microprocessor, proprietary circuit design and conversion algorithms for three of the most common solution types, as well as a unique pH/ORP sensor. With displayed values of up to 9999, the full four-digit LCD ensures resolution levels never before possible in such affordable instruments.

For accuracy in diverse applications, Ultrameter III allows you to select from 3 solution modes that model the behavior of the most common solution types: KCl, NaCl and 442™ Natural Water. Additionally, the Ultrameter III features a user adjustable conductivity/TDS conversion ratio for greater accuracy when measuring solutions not contained in the microprocessor.

Factory calibrated with NIST traceable solutions, each Ultrameter III may be supplied with both certification of traceability and NIST traceable solutions for definitive calibration.

Innovative Engineering

The Ultrameter III is a prime example of how high-tech engineering can greatly simplify and streamline a task. Whether in the lab, industrial plant, or in a remote field location, electrometric measurements are accomplished in 3 easy steps:

1. Fill the cell cup
2. Push a parameter key
3. Take the reading

Temperature compensation and range selection are both rapid and automatic. User adjustable temperature compensation (up to 9.99%/°C) can also be disabled for applications requiring non-compensated readings.

Digital results display instantly. Measurement is continuous, displaying real-time readings rather than a static snapshot of the solution.

Easy to Calibrate

All calibrations are quickly accomplished by pressing the ▲ or ▼ keys to agree with our NIST traceable Standard Solution. When calibration is necessary, display prompts simplify pH calibration and make sure the correct buffer is being used. Plus, all parameters (excluding factory-set temperature) have an internal electronic setting that can be used for field calibration and as a check on pH/ORP sensor life.

Wireless Benefits

The optional bluDock™ accessory package is an integrated data solution for your record keeping requirements, eliminating the need for additional hardware, wires and hassle. Because the user never touches the data, there is little opportunity for data tampering and human error. bluDock software has an easy to use interface with user intuitive functions for storing, sorting and exporting data.

More from Myron L

Myron L offers a full line of water quality instrumentation for every application. Call +1-760-438-2021 or visit our website for details: **www.myronl.com**

BENEFITS THAT SAVE YOU TIME & MONEY

Hardness/ Langelier Saturation Index Calculator allows you to determine water balance adjustments on the spot.

Easily transfer stored readings to Macintosh and PC platforms with the optional bluDock™ accessory package.

Ample memory provides increased flexibility to record and store 100 separate readings.

Real Time Clock with Date & Time Stamp allows you to maintain the integrity of each individual reading.

In-Cell titrations are simple to do. Reagent solutions are color-coded for easy recognition during procedure. Cell extender, pipette and replacement tips are included with kit.

The pH/ORP sensor chamber provides protection to a unique porous liquid-junction.

The large capacity KCl reservoir guarantees extended life.

A custom LCD helps simplify calibration and operation by using annunciators and prompts to indicate various conditions.

IP67/NEMA 6 rated Ultrameter III is waterproof and buoyant and can be fully immersed to 3 feet/1 meter.

Features

- **Measures 9 Parameters: Conductivity, Resistivity, TDS, Alkalinity, Hardness, LSI, pH, ORP, Free Chlorine, Temperature**
- **LSI Calculator for hypothetical water balance calculations**
- **Wireless data transfer capability with bluDock™ option**
- **Autoranging delivers increased resolution across diverse applications**
- **Adjustable Temperature Compensation and Cond/TDS conversion ratios for user-defined solutions**
- **Nonvolatile memory of up to 100 readings for stored data protection**
- **Date & time stamp makes record-keeping a snap**
- **pH calibration prompts alert you when maintenance is required**
- **Auto-off minimizes energy consumption**
- **Low battery indicator**

Specifications

Display	4 Digit Liquid Crystal Display
Dimensions: LxWxH	196 x 68 x 64 mm/7.7 x 2.7 x 2.5 in.
Weight	352 g/12.4 oz.
Case/conductivity cell material	VALOX*
Cell capacities (without cell extender)	pH/ORP: 1,2 ml/0.04 oz. Cond/TDS/Res: 5 ml/0.2 oz.
Power	9V alkaline battery
Battery life	>100 hours (5000 readings)
Operating/storage temperature	0 – 55°C/32 – 132°F
Protection ratings	IP67/NEMA6 Waterproof to 1 m/3 ft.

* ® Sabic Innovative Plastics IP BV

Parameters

	Conductivity	TDS	Resistivity	pH	ORP	Free Chlorine FC[E]	Alkalinity Titration	Hardness Titration	LSI Titration	Temperature
Ranges	0–9999 µS/cm 10–200 mS/cm in 5 autoranges	0–9999 ppm 10–200 ppt in 5 autoranges	10 KΩ–30 MΩ	0–14 pH	±999 mV	0.00–9.99 ppm 350≤ORPmV<725 and 0.0≤pH<9.9 725≤ORPmV<825 and 0.0≤pH<8.9	10-800 ppm	0-1710 ppm 0-100 grains	-10 to +10	0–71°C 32–160°F
Resolution	0.01(<100 µS) 0.1(<1000 µS) 1(<10 mS) 0.01(<100 mS) 0.1(<200 mS)	0.01(<100 ppm) 0.1(<1000 ppm) 1(<10 ppt) 0.01(<100 ppt) 0.1(<200 ppt)	0.01(<100 KΩ) 0.1(<1000 KΩ) 0.1(>1 MΩ)	0.01 pH	1 mV	0.01 ppm	0.01(<100 ppm) 0.1(<1000 ppm) 1(<800 ppm)	0.01(<100 ppm) 0.1(<1000 ppm) 1(<1710 ppm)	0.01	0.1°C/F
Accuracy	±1% of reading	±1% of reading	±1% of reading	±0.01 pH*	±1 mV	<1.00ppm ±0.3ppm* ≥1.00ppm ±0.2ppm	—	—	—	±0.1°C
Auto Temperature Compensation	0–71°C 32–160°F	0–71°C 32–160°F	0–71°C 32–160°F	0–71°C 32–160°F	—	0–71°C 32–160°F	—	—	—	—
Adjustable Temperature Compensation to 25ºC	0–9.99%/°C	0–9.99%/°C	0–9.99%/°C	—	—	—	—	—	—	—
Conductivity/TDS Ratios Preprogrammed	KCl, 442**, NaCl	KCl, 442**, NaCl	—	—	—	—	—	—	—	—
Adjustable Conductivity/ TDS Ratio Factor	0.20–7.99	0.20–7.99	—	—	—	—	—	—	—	—

*± .2 pH in presence of RF fields ≥ 3V/m and >300MHz **442 Natural Water Standard ™ Myron L® Company

AHL Titration Kit

with hard protective case includes 9P; cell extender; titration plunger, 100µL pipette; 12 tips; 3 buffers (pH 4, 7, and 10); pH/ORP Sensor Storage Solution; ORP Conditioner Solution; titration reagents H2SO4-1, HCl-3, NAOH, EDTA-LC, EDTA-HC; Alkalinity Standard 100; Hardness Standard 200; standard solutions KCl-7000 and 442-3000. All bottles are 2 oz/59 ml*. MODEL: 9PTKA

Model 9PTK-BDA Shown

9PTK AHL Titration Kit can be ordered with the bluDock Accessory Package, as well.
KIT WITH BLUDOCK: 9PTK-BDA

Accessories, Replacement Parts & Solutions

Soft protective case constructed of padded Nylon features a belt clip for hands-free mobility. MODELS: UCC (Blue); UCCDT (Desert Tan)

Certificates confirming the NIST traceability of an Ultrameter III are available (must be specified when placing instrument order). MODEL: MC9

Standard Solutions are necessary to maintain accuracy and for periodic calibration of conductivity and TDS parameters. All Standard Solutions are NIST traceable for your complete confidence. RECOMMENDED VALUES: KCl-7000 (conductivity), 442-3000 (TDS).

Hardness and Alkalinity Reagents and Calibration Solutions are required for alkalinity, hardness and LSI titrations. MODELS: H2SO4-1, HCL-3, NAOH, EDTA-LC and EDTA-HC available in 2 oz/59 ml and 1 qt/1 L. Alkalinity Standard 100 and Hardness Standard 200 available in 2 oz/59 ml, 1 qt/1 L, and 1 gal/3,8 L.

pH Buffers are necessary to maintain accuracy and for periodic calibration of pH and ORP parameters. Calibration with pH 7 Buffer is especially important. All pH 4, 7, and 10 Buffers are NIST traceable and are available in 2 oz/59 ml, 1 qt/1 L, and 1 gal/3,8 L.

NOW AVAILABLE!
ORP SENSOR CALIBRATION SOLUTION
Call for details ...

pH Sensor Storage Solution available in 2 oz/59 ml, 1 qt/1 L, and 1 gal/3,8 L. MODELS: SS20Z, SSQ and SSG

Certificate of NIST traceability for pH Buffer or Conductivity Standard Solutions are available (must be specified when placing solution order). MODEL: SC

Replacement pH/ORP sensor user-replaceable; features a unique porous liquid-junction. MODEL: RPR

Myron L M'Pet 100µL pipette. MODEL: FVMP-100

Replacement Tips for Myron L M'PET micropipette. Bag of 48. MODEL: PTIP100-48

bluDock™ Accessory Package includes bluDock™, Macintosh/PC application software for downloading data, dongle and printed instructions. MODEL: BLUDOCK

*Per DOT regulations may be 1oz/30ml

Built on Trust

Founded in 1957, Myron L® Company is one of the world's leading manufacturers of water quality instruments. Because of our policy of continuous product improvement, changes in design and the specifications in this brochure are possible. You have our assurance any changes will be guided by our product philosophy: Accuracy, Reliability, Simplicity.

Limited Warranty

All Myron L Ultrameter IIIs have a Two (2) Year Limited Warranty. The pH/ORP sensors have a Six (6) Month Limited Warranty. Warranty is limited to the repair or replacement of the Ultrameter III only, at our discretion. Myron L® Company assumes no other responsibility or liability.

MYRON L® COMPANY
Water Quality Instrumentation
Accuracy • Reliability • Simplicity

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