

THE REVOLUTIONARY NEW WAY  
TO MEASURE FREE CHLORINE!

# ULTRAMETER II™ 6PFC<sup>E</sup>

Conductivity  
Resistivity  
TDS  
ORP  
Free Chlorine (FC<sup>E</sup>)  
pH  
Temperature



and 4PII

CONDUCTIVITY  
RESISTIVITY  
TDS  
TEMPERATURE

CE



## MYRON L<sup>®</sup> COMPANY

Water Quality Instrumentation  
*Accuracy • Reliability • Simplicity*

*... Since 1957*

# ULTRAMETER II™

*Advanced Design • Superior Performance*

Choice of KCl, NaCl, and 442™  
Natural Water Standards

ORP mV to ppm free  
chlorine conversion  
(6PFC<sup>E</sup>)

pH/ORP Sensor  
protective cap (6PFC<sup>E</sup>)

Four-digit display for  
full 9999 readings, with  
autoranging capability  
up to 200 mS/200 ppt

Powerful microprocessor  
based surface-mount  
circuitry

Display prompts for simple  
pH calibration

Real Time Clock

Memory for 100 readings  
with Date & Time Stamp

Factory calibrations  
stored in microprocessor



Both Ultrameter IIs  
are capable of  
wireless data  
transfer with  
bluDock™ option  
installed



**ULTRA-FAST**  
**ULTRA-EASY**  
**ULTRA-POWERFUL**

Since 1957, the Myron L<sup>®</sup> Company has designed and manufactured highly reliable analytical instruments for a wide variety of applications. Thousands of professionals around the world rely every day on the performance of our instruments. Demanding 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 in the past. Our product line has evolved to a new level of outstanding performance and value in analytical instruments: the Ultrameter II series. While priced like affordable single-parameter instruments, the Ultrameter II does the job of three, four or even six instruments.

## NEW! FC<sup>E</sup> FAC Function

The Myron L<sup>®</sup> Company FC<sup>E</sup> 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<sup>®</sup> Company FC<sup>E</sup> function measures the real, unaltered chemistry of source water, including moment-to-moment changes in that chemistry.

## Accuracy You Can Trust

Both Ultrameter II models deliver performance of  $\pm 1\%$  of reading (not merely full scale). This high level of accuracy has been achieved through advanced four-electrode conductivity cell technology, a unique pH/ORP sensor and powerful microprocessor-based circuitry. With displayed values of up to 9999, the full four-digit LCD ensures resolution levels never before possible in such affordable instruments. Factory calibrated with NIST traceable solutions, each Ultrameter II may be supplied with both certification of traceability and NIST traceable solutions for definitive calibration.

*Fast and accurate in the laboratory, both Ultrameter II models are rugged enough for daily in-line controller checks in hostile process applications.*

## Innovative Engineering

The Ultrameter II 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, merely:

1. Fill the cell cup
2. Push a parameter key

3. Take the reading

Temperature compensation and range selection are both rapid and automatic. The Ultrameter II is a true one-hand operation instrument.

## Easy to Calibrate

All calibrations are quickly accomplished by pressing the  $\blacktriangle$  or  $\blacktriangledown$  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.

## Advanced Features

- 3 solution standards for greatest accuracy in diverse applications
- Fully automatic temperature compensation
- User adjustable temperature compensation (up to 9.99%/°C) which also allows TC to be disabled for applications requiring non-compensated readings.
- User adjustable conductivity/TDS conversion ratio for greater accuracy when measuring solutions not contained in the microprocessor.
- Auto-shutoff maximizes the life of the single 9V battery to more than 100 hours/5000 tests.
- Non-volatile microprocessor provides data back-up, even when the battery is changed. This assures all calibrations and memory data will be retained.
- Extended life pH/ORP sensor is user replaceable in the field.

## Multiple Applications

- Irrigation Water • Hydroponics
- Laboratories • Wastewater
- Reverse Osmosis
- Deionization
- Cooling Towers
- Environmental
- Desalination
- Fountain Solutions
- Homeland Security

## BENEFITS DESIGNED TO SAVE YOU TIME & MONEY



The 6PFC<sup>E</sup> measures a dynamic range of free chlorine concentrations wider than the range of colorimetric test kits.

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.

The advanced four-electrode cell for conductivity/resistivity/TDS eliminates polarization, allowing greater accuracy and stability with minimal maintenance.

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 IIs are waterproof and buoyant and can be fully immersed to 3 feet/1 meter.





## Features

Ultrameter II™ Models	4PII	6PFC <sup>E</sup>
	Conductivity TDS, Resistivity Temperature	Conductivity TDS, Resistivity, pH ORP, Free Chlorine Temperature
<b>ORP mV and Free Chlorine</b>		•
<b>Autoranging</b>	•	•
<b>Adjustable Temp. Compensation</b>	•	•
<b>Adjustable Cond/TDS ratio</b>	•	•
<b>Memory (100 readings)</b>	•	•
<b>Date &amp; Time Stamp</b>	•	•
<b>pH Calibration Prompts</b>		•
<b>Low battery indicator</b>	•	•
<b>Auto-off</b>	•	•

## Specifications

<b>Display</b>	4 Digit Liquid Crystal Display
<b>Dimensions: LxWxH</b>	196 x 68 x 64 mm/7.7 x 2.7 x 2.5 inches
<b>Weight</b>	352 g/12.4 oz.
<b>Case/conductivity cell material</b>	VALOX*
<b>Cell capacities</b>	pH/ORP: 1,2 ml/0.04 oz. Cond/TDS/Res: 5 ml/0.2 oz.
<b>Power</b>	9V alkaline battery
<b>Battery life</b>	>100 hours (5000 readings)
<b>Operating/storage temperature</b>	0 – 55°C/32 – 132°F
<b>Protection ratings</b>	IP67/NEMA 6 Waterproof to 1 meter/3 feet

\* ® Sabic Innovative Plastics

## Parameters

Ranges	Conductivity	TDS	Resistivity	pH	ORP	Free Chlorine	Temperature
	0–9999µS/cm 10–200mS/cm in 5 autoranges	0–9999ppm 10–200ppt in 5 autoranges	10KΩ–30MΩ	0–14pH	±999mV	0.00–9.99ppm 350≤ORPmV<725 and 0.0≤pH<9.9 725≤ORPmV<825 and 0.0≤pH<8.9	0–71°C 32–160°F
<b>Resolution</b>	0.01(<100µS) 0.1(<1000µS) 1.0(<10mS) 0.01(<100mS) 0.1(<200mS)	0.01(<100ppm) 0.1(<1000ppm) 1.0(<10ppt) 0.01(<100ppt) 0.1(<200ppt)	0.01(<100KΩ) 0.1(<1000KΩ) 0.1(>1MΩ)	±0.01pH	±1mV	0.01ppm	0.1°C/F
<b>Accuracy</b>	±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 —
<b>Auto Temperature Compensation</b>	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	—
<b>Adjustable Temperature Compensation to 25°C</b>	0–9.99%/°C	0–9.99%/°C	0–9.99%/°C	—	—	—	—
<b>Conductivity/TDS Ratios Preprogrammed</b>	KCl, 442™**, NaCl	KCl, 442™**, NaCl	—	—	—	—	—
<b>Adjustable Conductivity/TDS Ratio Factor</b>	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

## Accessories

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

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

**Conductivity Standard Solutions** are necessary to maintain accuracy and for periodic calibration of conductivity/TDS parameters. All Standard Solutions are NIST traceable for your complete confidence. RECOMMENDED VALUES: KCl-7000 (7 mS), 442-3000 (TDS), or NaCl-14.0 (mS) 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.

**pH Sensor Storage Solution** Available in 2 oz/59 ml, 1 qt/1 L, and 1 gal/3.8 L.

MODEL: 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

**Hard protective case (small)**

MODEL: UPP

**Hard protective case (kit)** with three buffers (pH 4, 7, and 10), one pH/ORP storage solution, and two standard solutions, (KCl-7000 and 442-3000). All bottles are 2 oz/59 ml. MODEL: PKUU (Replaces PKU)

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

**Replacement pH/ORP sensor** user-replaceable, features a unique/porous liquid-junction.

MODEL: RPR

**ORP Sensor Conditioner Solution**

MODEL: ORPCOND



## 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.

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

## Limited Warranty

All Myron L Ultrameter II 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 II only, at our discretion. Myron L® Company assumes no other responsibility or liability.

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