

Quality Electrochemical Analysis  
Professional Meters | Basic Meters | Sensors



## Sartorius Electrochemistry: pH | Conductivity | DO Meters

Quality and Convenience – Sartorius' approach is to offer a complete range of benchtop meters and sensors that excel at greater precision and accuracy while offering convenience to daily application workflows through design and functionality. Each family series offers advanced algorithm technologies allowing for fast and reliable measurements.



## Reliable Quality and Functionality

Sartorius products offer features such as stability control, automatic buffer recognition and temperature compensation to achieve accurate results. Real time indicators are needed to ensure precision and accuracy when working with variable environmental conditions of the sample, sensor and meter systems.

Meter features such as: Auto Cal and ElectCheck allow for this real time iconic feedback on the entire system, giving users the ability to determine when to calibrate, when to use fresh buffers, perform electrode maintenance or when the replacement of a sensor is necessary.

## Complete Analysis and Documentation

Our high standards of quality on meter and sensors don't stop there – Sartorius offers multi-parameter measurements on pH/Conductivity/Dissolved Oxygen, premium communication and documentation benefits for regulated labs which include RFID technologies.

Electrochemistry analysis depends on both meter and electrode performance. These two components need to be equal in quality and performance to produce optimal measurements. The GoldLINE electrode raises the bar in pH analysis.

## Superior Sensors – Superior Systems

GoldLINE electrodes have a patented three-chamber system and superior junction technologies. The highest quality construction and materials are used for all the sensing glass, body styles, and reference junctions that are unique and unrivaled in performance in the market.

Quality meters + plus quality sensors – Quality Measurements

And paired with user conveniences make for an ultimate electrochemistry experience.





Automatic wireless sensor recognition



User recognition with electronic ID card



Multi-parameter readings

## Premium Pro Benchtop Meters (PR Series) Pro Performance with Complete Compliance

Pro Series is the most advanced meter to excel at your professional pH, conductivity, ISE and DO analyses. Be reassured, measurements have never been so accurate with German technology, including wider ranges, auto cal and 5-point calibrations. Feel confident with data transfer, data storage and ElectCheck features that meet all your GLP regulatory requirements. Pro Series offers multi-parameter analysis options and is the whole package: quality, multi-functionality, documentation, & convenience – a true professional at work for you.

### Features

- ▶ Exact measurements with wider measuring ranges and better accuracy specifications
- ▶ Advance GLP Documentation with time and date stamps
- ▶ Direct data transmission with RS232 and USB interfaces
- ▶ Automated calibration with up to 5 points Automatic buffer recognition out of 22 buffer sets

### Benefits

- ▶ **Multi-functionality in One**  
Need advanced pH measurements, select Pro15. For conductivity, select Pro20. For an all-in-one meter, select Pro50 and have it all: pH, ISE, DO, Conductivity and up to three parameters displayed simultaneously.
- ▶ **Complete Documentation**  
Feel confident and rely on wireless sensor recognition & user identification. User name can be assigned to each measured value. Pro series also complies with GLP requirements with administrator rights or user identification via an electronic ID card.
- ▶ **User Convenience**  
Large LCD display, Intuitive menu navigation, ElectCheck and Stability Control to know the conditions of your sensor, the integrity of your calibration and stability of your reading at a single glance.

Technical specifications page 10



**PR-15A**

Sophisticated pH, ISE analysis. Achieving the highest precision with widest ranges and readability. Reproducible measurement with 5pt calibration and 22 buffer sets. Reliable results with automatic and wireless sensor and user ID recognition. Offers the highest level of complete compliance in GLP documentation with direct data transmission 1500 data and conforms to 21 CFR part 11.



**PR-20A**

Ideal for conductivity, Salinity and TDS factor analysis. Meets simple GLP time date compliance through RS232 or USB (slave) communications to computer or printer. Data storage up to 5,000 points.



**PR-50A**

pH meter, ion-selective meter and conductivity meter all in one unit also does dissolved oxygen or DO.

The most versatile Multi-parameters: pH, ISE, DO conductivity meter. With calibration security due to automatic user id, and wireless sensor recognition. Offers the highest level GLP documentation with direct data sets transmission 1500 data and conforms to 21 CFR part 11.

	pH	mV	ISE	Cond.	DO	Temp.	Sensor   User ID
Pro15	•	•	•			•	•
Pro20				•		•	
Pro50	•	•	•	•	•	•	•



Simple keypad and user friendly navigation screen



Streamlined profile with data export options



Variety of kits designed with unique electrodes that fit your sample applications needs

## Benchtop Meter - pHBasic+ Series Experience Complete Functionality

The Sartorius benchtop meters offer fast and accurate results, easy operation, and capacity to have direct data recall and transfer. The large LCD display, intuitive menu navigation and easy to understand indicators make your pH routines more efficient. The 5-point calibration gives a broader range in slope accuracy. The benchtop meters are a complete pack for your entire pH requirements.

### Features

- ▶ Superior Accuracy
- ▶ Full functionality with USB data transmission
- ▶ Recall and output of 5,000 data set memory
- ▶ Easy-to-use menus and intuitive operation sets
- ▶ Sensor efficiency & calibration integrity
- ▶ Clear status icons and indicators
- ▶ Large LCD display
- ▶ Automatic temperature compensation
- ▶ Automatic buffer recognition
- ▶ Programmable data collection

▶ Technical specifications page 12

## Entry Level Benchtop Meters - pHBasic Series

### Superior Results with Classic Functionality

Exceptional quality and reliable pH results are now within your reach. The pHBasic is a perfect benchtop meter for your basic everyday pH routines. Simple-to-use with classic interface design and intuitive icons, but it is faster due to optimized algorithms with harmonized measuring system of sensor with meter. The pHBasic is extremely reliable with real time indicators like ElectCheck, and Stability Control making this the classic go-to meter for any basic lab.

#### Features

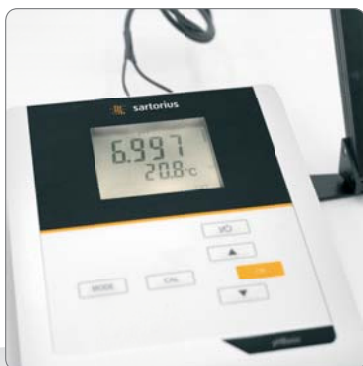
- ▶ Classic no-fuss menus and intuitive operation
- ▶ Large LCD displays with simultaneous pH/mV & temperature
- ▶ Understandable status icons and indicators like Stability Control
- ▶ Automatic temperature compensation
- ▶ Automatic buffer recognition- up to 16 buffer sets
- ▶ Easy 1-2-3 point Calibration
- ▶ Quick access to electrode calibration data
- ▶ At a glance know that your sensor efficiency & calibration integrity are intact | expired with ElectCheck

#### Benefits

- ▶ **Get superior results that are not complex**  
German quality that saves you time, provides faster reliable results but still maintains its user friendly and classic functionality for your basic everyday pH requirements.
- ▶ **Improve your pH workflows**  
With features such as ElectCheck and Stability Control, you do not have worry about the condition of your sensor, the integrity of your calibration or second guess when to take your reading. Know all of these at a simple glance.

#### ElectCheck

ElectCheck is a sensor evaluation and calibration reminder. The sensor evaluation shows the electrode quality in increments. The integrity criteria are slope, zero point and reaction time. When the time interval has elapsed, an optical and an acoustical signal is activated.



Feel reassured your results are accurate all the time



Ensure the basics are covered and that meter, electrode and user are in sync together in one simple system

▶ Technical specifications page 13



Easy to use interface



Better results with auto reading stability control indicators



Keep it simple with the core essentials

## Core Benchtop Meters - pHCore Series

### Performing pH has never been easier

Achieve rapid results with ease. pHCore offers fast and reliable pH measurements thanks to advanced algorithm technology. With features like stability control, automatic buffer recognition, automatic temperature compensation, AutoCal ensures accurate measurements quickly.

#### Features

- ▶ Easy Key Operation: Mode, Cal, Stability control, OK, Scroll Navigation
- ▶ Large, Easy-To-Read LCD Display
- ▶ Clear Status Icons and Indicators
- ▶ Simultaneous pH and Temp °C or °F
- ▶ Quick Display of Electrode Calibration
- ▶ Recognizes 16 Standard Buffers

#### Benefits

- ▶ **Ease your way through your daily pH routines**  
German quality – saves you time and puts you at ease knowing you will have reliably accurate results every time.
- ▶ **Seamless 2-point calibration routine**  
Set Autocal for easy recognition of daily buffer set and get to reading your pH sample faster.
- ▶ **Straight forward functions**  
You don't have to interpret the display anymore - Large display with easy to understand icons tell you instantly what your samples and system are doing.

▶ Technical specifications page 14



## Electrodes & Accessories for Meters

### Superior Sensors – Precise Results

Electrochemical analysis is one of the most frequent and demanding tasks in daily lab routines. Sartorius understands that measurements will differ based on compositions, temperatures, conductivities and viscosities of samples and it is these different conditions that set our electrodes apart from the rest. Whether for ultrapure water, jam, wine, TRIS Buffers, or drinking water, Sartorius has the superior and dependable electrode for your sample types and application workflows.

#### Features

- ▶ Unique platinum junction and refill port slider for easier refilling and less evaporation of the electrolyte. Air flush cap system prevents clogs from forming.
- ▶ Integrated and Non-integrated temperature sensor ATC or with ATC with universal BNC connectors.
- ▶ TRIS Compatible and Impervious models available for Biological applications.

#### Benefits

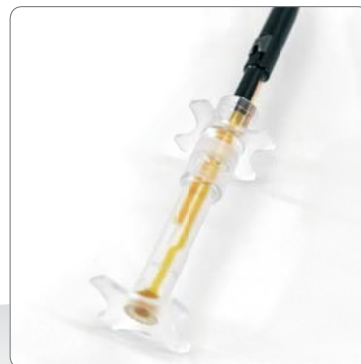
- ▶ The widest selection available. Now with the GoldLINE and PlatinumLINE electrodes Sartorius will meet any and all of your unique sample types and application requirements.
- ▶ Patented junction and three chamber systems set sensors apart from the rest. Reduce and/or eliminate metal ion contamination and chelation. Ultimately minimizes damage to sensors, elongating the life of the electrodes, saving time and money. Increase productivity and mitigate faulty measurements.
- ▶ The highest quality materials result in better precision and accuracy. The low resistance type A glass membranes are a perfect example of where quality materials interact with samples with less interference, yielding both speed and accuracy.



Superior construction, materials and design when it comes to body style, sensor shape and reference systems. Diverse selections to meet your unique sample types.



Innovative evaporation gate. Insert, press and refill internal chamber. Gate mitigates constant need to refill electrolyte and protects from secondary contamination.



Ready to go storage vessel. Reduces refilling when storing overnight or longer periods. Keeps electrode sensor membrane hydrated at all times.

## Specifications: Premium Pro Benchtop Meters (PR Series)

Pro Meter	PR-15	PR-20	PR-50
<b>pH Measurements</b>			
Range	-2.0 to +20.0   -2.00 to +20.00   -2.000 to +20.000		-2.0 to +20.0   -2.00 to +20.00   -2.000 to +20.000
Readability	0.1   0.01   0.001		0.1   0.01   0.001
Accuracy	±0.1   ±0.01   ±0.003		±0.1   ±0.01   ±0.003
Calibration Points max.	5		5
Channels	1		1
Connector Type	BNC		BNC
<b>mV Measurements</b>			
Range	-1999.9 to +1999.9   -2000 to +2000		-1999.9 to +1999.9   -2000 to +2000
Readability	0.1   1		0.1   1
Accuracy	±0.2   ±1		±0.2   ±1
Channels	1		1
<b>Temperature</b>			
Range	-10.0 to +120.0	0.0 to 100.0 °C	-10.0 to +120.0
Readability	0.1	0.1	0.1
Accuracy	±0.1°C	±0.1°C	±0.1°C
Accuracy	± 1 digit	± 1 digit	± 1 digit
Channels	1	1	1
Selectable °C   °F (Fahrenheit)			
ATC Connector type	2.5 mm phone jack connector for 10KΩ	2.5 mm phone jack connector for 10KΩ	2.5 mm phone jack connector for 10KΩ
<b>ISE Measurements</b>			
Range	0.000 to 999,999 mg/L		0.000 to 999,999 mg/L
Readability	0.001		0.001
Display	%, ppm, mg/kg, mol/L		NA in %, ppm, mg/kg, mol/L

Pro Meter	PR-15	PR-20	PR-50
<b>Conductivity Measurements</b>			
Conductivity Range		0.000 µS/cm to 1000 mS/cm	0.000 µS/cm to 2000 mS/cm
Salinity Range		0.0 to 70.0 (acc. to IOT) 0.00 to 20 MOhm cm	0.0 to 70.0 (acc. to IOT) 0.00 to 20 MOhm cm
TDS Range		0 to 1999 mg/L	0 to 9999 mg/L
Readability		0,01	0,001
Accuracy		± 0.5% of value, (dependent upon probe)	± 0.5% of value, (dependent upon probe)
<b>TDS factor 0.4 to 1.0</b>			
Accuracy in % from measuring Value (+   - 1 dig)		0.5	0.5
D.O. measurement (O2 dissolved)			
Range   Accuracy			
O <sub>2</sub> concentration			0 to 20.00 mg/L   0.01 mg/L 0 to 90.0 mg/L   0.1
O <sub>2</sub> saturation			0 to 200.0%   0.1% 0 to 600%   1%
O <sub>2</sub> partial pressure			0 to 200.0 mbar   0.1 mbar 0 to 1250 mbar   1 mbar
Accuracy in % from measuring value (± 1 digit) at ambient 5 to 30 °C			0.5
Calibration in calibration vessel with water vapor-saturated air			
<b>Design &amp; Quality</b>			
Display Type	B&W Graphic w Lighting	LCD	B&W Graphic w Lighting
Display Size	120×90 mm	75×60 mm	120×90 mm
Dimensions (W×H×D mm)	280×80×240	190×80×240	280×80×240
Weight	~2.5 kg	~1.0 kg	~2.5 kg
Shipping Weight	~3.0 kg	~1.5 kg	~3.0 kg
Compliance	CE, cETLus	CE, cETLus	CE, cETLus
Safety	protection class III, EG guidelines 73   23, EN 61010-1: 2001	protection class III, EG guidelines 73   23, EN 61010-1: 2001	protection class III, EG guidelines 73   23, EN 61010-1: 2001
Data Output	RS232   USB	USB	RS232   USB
Warranty	2 years	2 years	2 years

## Specifications: Benchtop Meters

<b>pH Measurements</b>	<b>pHBasic+</b>
Range	-2.0 to +20.0   -2.00 to +20.00   -2.000 to +19.999
Readability	0.1   0.01   0.001
Accuracy	±0.1   ±0.01   ±0.005
Calibration Points max.	5
Channels	1
Connector Type	BNC
<b>mV Measurements</b>	
	•
Range	-1200.0 to +1200.0   -2000 to +2000
Readability	0.1   1
Accuracy	±0.3   ±1
Channels	1
<b>Temperature</b>	
	•
Range	-5.0 to +105.0
Readability	0.1
Accuracy	±0.1°C
Accuracy (± 1 digit)	
Channels	1
Selectable °C   °F (Fahrenheit)	•
<b>Design &amp; Quality</b>	
Display Type	LCD
Dimensions (W × H × D mm)	190 × 80 × 240
Weight	~1.0 kg
Shipping Weight	~1.5 kg
Compliance	CE, cETLus
Data Output	USB
Warranty	2 years

## Specifications: Entry-level Benchtop Meters

<b>pH Measurements</b>	<b>pHBasic</b>
Range	-2.0 to +20.0   -2.00 to +20.00   -2.000 to +19.999
Readability	0.1   0.01   0.001
Accuracy	$\pm 0.1$   $\pm 0.01$   $\pm 0.005$
Calibration Points max.	3
Channels	1
Connector Type	BNC

<b>mV Measurements</b>	•
Range	-1200.0 to +1200.0   -2000 to +2000
Readability	0.1   1
Accuracy	$\pm 0.3$   $\pm 1$
Channels	1

<b>Temperature</b>	•
Range	-5.0 to +105.0
Readability	0.1
Accuracy	$\pm 0.1^{\circ}\text{C}$
Accuracy ( $\pm 1$ digit)	
Channels	1
Selectable $^{\circ}\text{C}$   $^{\circ}\text{F}$ (Fahrenheit)	•

## Specifications: Core Benchtop Meters

<b>pH Measurements</b>	<b>pHCore</b>
Range	-2.0 to +20.0   -2.00 to +20.00
Readability	0.1   0.01
Accuracy	±0.1   ±0.01
Calibration Points max.	2
Channels	1
Connector Type	BNC

<b>mV Measurements</b>	•
Range	-1200.0 to +1200.0 -2000 to +2000
Readability	0.1   1
Accuracy	±0.3   ±1
Channels	1

<b>Temperature</b>	•
Range	-5.0 to +105.0
Readability	0.1
Accuracy	±0.1°C
Accuracy (± 1 digit)	
Channels	1
Selectable °C   °F (Fahrenheit)	•



**USA**

Sartorius Corporation  
5 Orville Drive, Suite 200  
Bohemia, NY 11716

Phone +1.631.254.4249  
Toll-free +1.800.635.2906  
Fax +1.631.254.4253



◀ [www.sartorius.us](http://www.sartorius.us)