

pH Meter Buying Tips

Three key aspects to focus on when picking the best pH meter for your lab

by Lab Manager

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WHAT IF THE ANALYSIS REQUIRES BOTH IN-LAB WORK AND FIELD WORK?

Not all research is performed in the laboratory. Many researchers go directly into the field in order to collect samples and perform a variety of tests for applications such as environmental monitoring. As a result, many companies have developed highly advanced portable pH meters, which in some cases can meet the sensitivity and tolerances of their benchtop counterparts. For monitoring purposes inside the laboratory, there are also in-line pH meters, which can be attached directly to a source for real time monitoring of flowing liquids.

WHY IS IT IMPORTANT TO KNOW WHAT $\pm$ TOLERANCES ARE REQUIRED FOR MY PROCESSES?

In some cases, even very small fluctuations in pH can have a detrimental effect on the sample or process. Therefore, selecting the proper resolution and range for your pH meter is important. On benchtop models, resolutions as low as 0.001 can be achieved, and for

MAINTENANCE TIP: PH METERS

Regularly replacing your pH meter electrode is important in maintaining its accuracy and reproducibility.

Depending on how much abuse your unit takes and your specific application, you may need to replace the electrode in three to six months or 12 to 18 months. Some electrodes are not well suited to particular applications and therefore wear out faster in those situations. You'll need to do your research to ensure the right fit.

portable models, typically resolutions of 0.01 can be reached. For laboratories dealing with super acids—such as triflic and fluorosulfonic acid—getting a pH meter with an extended range (from -2 to +20 pH) will be ideal.

WHAT IF THE ANALYSIS REQUIRES MORE THAN JUST PH (I.E., TEMPERATURE, CONDUCTIVITY, TDS?)

For researchers who require a more in-depth analysis of their samples, many vendors have begun creating pH meters which cover a wide variety of other tests. Some models are capable of measuring ORP, conductivity, TDS, salinity, temperature, and pH simultaneously. Adding to this convenience is the ability to purchase both benchtop and portable multi test pH meters.

Start your pH meter search at [LabManager.com/ProductFinder/pH-Meters](https://www.labmanager.com/ProductFinder/pH-Meters)

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