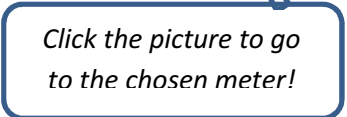







# Benchtop pH meters at a glance

Need to choose a pH meter, but not sure what's available? Try our handy table below (and remember to read the **Golden Rules** on page 2!)

Name	Jenway 3510	TRUEscience	Mettler FiveEasy Plus FP20	Hanna Edge Multiparameter	Hach HQ430d
					
<b>2017 Price (GBP)</b>	<b>£488.00</b>	<b>£499.00</b>	<b>£555.00</b>	<b>£443.30</b>	<b>£897.00</b>
<b>Included items;</b>					
Electrode?	Y	Y	Y	Y	N
pH buffers?	Y – 3x 1 use sachets	Y – 3x 250ml bottles	Y – 4x 1 use sachets	Y – 3x 1 use sachets	N
<b>Specifications;</b>					
Calibration points?	Up to 3	Up to 5	Up to 5	Up to 5	Up to 5
<b>Capabilities;</b>					
Export data off meter?	Y – RS232 to PC (with extra software, Windows XP only) or printer	Y – Email, dropbox and others. Exports as .csv	Y – RS232 or USB	Y – to PC or USB stick as .csv	Y – to PC via USB port
Read multiple samples at once?	N	Y – up to 6 with 1 tablet	N	N	N
Logging readings over time?	Y – with extra software (Windows XP only)	Y	N	Y	N
Store readings?	Y – up to 32	Y – only limit is tablet memory space	Y – up to 200	Y – up to 1,000	Y – up to 500
GPS tag stored readings?	N	Y	N	N	N
Add photo to stored readings?	N	Y	N	N	N
Unique user logins?	N	Y – PIN protected logins	N	N	N
Colour screen?	N	Y	N	N	
Access help / manuals on device?	N	Y	N	N	
Wireless?	N	Y	N	N	N
Also measure other parameters?	N	Coming soon – DO, ISE, Redox and conductivity	N	Y – conductivity and DO	Y – conductivity, DO, ISE
Standard electrode connector?	Y – BNC	Y – S7	Y – BNC	N – 3.5mm jack	N – Hach Intellical 5 pin

## 4 Golden Rules – apply to ALL pH meters

The table above shows the features our most popular meters offer, but remember that with *any* pH meter these **Golden Rules** apply

### 1. Choose an electrode to suit your sample

Testing jam is very different to testing water, or beer, or blood, or fruit, or soil, or cosmetics...

For each sample make sure you use an electrode that's right for the job. Use our electrode quick guide to help with this

If your meter has a standard electrode connector you will be able to shop around more to find the best electrode for you.



### 2. Calibrate regularly

All pH electrodes should be calibrated regularly with pH buffers.

We recommend calibrating at least once a day, and each calibration will need around 10-20ml of each buffer solution.

Keep a stock of pH buffers handy so you don't run out – an uncalibrated electrode will give inaccurate results.

### 3. Store the electrode carefully

Most pH electrodes should be kept immersed in electrode storage solution – but do check the manual for your particular electrode.

Some meters have a stand to hold the electrode in storage solution, or an arm to hold the electrode and you can place a beaker of solution underneath.

Again think about keeping extra storage solution just in case – if the electrode dries out it will need to be replaced.

### 4. Take care of the electrode, and replace it when necessary

Store the electrode correctly, and use it with care;

- Only use in appropriate sample types
- Clean off after use in clean water
- Never rub the electrode tip to clean it
- Never knock the electrode tip against the sample container as this may break it.

Electrodes are usually not covered by the warranty as they can be easily damaged by misuse, so be sure to take extra care in maintaining them.

Remember that electrodes are considered consumable – we usually expect around a 12 month life with good care, though this varies a lot.

If your meter has a standard electrode connector you will be able to shop around a wider range when it is time to replace the electrode.