EC-PCSTESTR35 FAQ

Can this unit be used for bore water?

Yes, generally this unit will be suitable for bore water applications as it will generally be under 20mS/cm (20,000µS/cm). Any readings above this will come up as over range and should definitely not be used for irrigation or stock watering.

Can this unit be used for seawater?

No, the conductivity range on this unit it not wide enough for seawater. It can measure to 20mS/cm whereas seawater is approximately 50mS/cm

What are the units this unit measures in?

pH is measured from 0-14

Conductivity is measured in µS/cm (microsiemens per centimetre) and mS/cm (millisiemens per centimetre). 1000µS/cm is equivalent to 1mS/cm. i.e. 2.2mS/cm = 2200µS/cm

TDS (Total Dissolved Solids) is measured in parts per million (ppm) and parts per thousand (ppt). 1ppt = 1000ppm

Salinity is measured in ppm and ppt or %

Temperature is measured in °C

What is the difference between USA and NIST buffers?

USA buffer solutions are available at pH values of 1.68, 4.01, 7.00, 10.01 and 12.45

NIST buffer solutions are available at pH values of 1.68, 4.01, 6.86, 9.18 and 12.45

It is important to make sure that your meter is set up to calibrate to the correct solutions. i.e. if you have a pH7 and a pH10 buffer solution you should have your meter set to USA buffers, whereas if you have pH6.86 and pH9.18 solutions then you should have your meter set to NIST.

What is the difference between Salinity vs TDS

TDS, short for Total Dissolved Solids, is an estimate of the mass of dissolved solids (salts) within the solution and is typically expressed as mg/L or parts per million (ppm). It is derived from the conductivity reading using a conversion factor. For accurate TDS readings, the correct TDS factor must be used. For example, a sodium chloride solution has a TDS factor of around 0.49, whereas a sodium bicarbonate solution has a TDS factor of 0.91. If you are unsure of the TDS factor for your water sample, you can send it to a lab for analysis and they can analyse it for you.

Salinity is similar to TDS in that is an estimate of the level of salt in a water sample and it is derived from the conductivity reading using a conversion factor (usually 0.5). It is typically expressed as parts per thousand (ppt) or g/L and is sometimes expressed as a percentage. Salinity readings are typically used by industries such as agriculture, hydroponics, and pool and spa monitoring.

Can I replace the electrode?

Yes, the electrode can be replaced by the end user and it available on this link:

http://www.instrumentchoice.com.au/instrument-choice/environment-meters/ph-meters-2/ph-electrodes/pcsensor-replacement-electrode-for-ec-pcstestr35-amp-ec-pctestr35

Electrodes typically need to be replaced every 1-2 years under standard use. Harsh treatment of the electrode will reduce its lifespan and similarly, looking after the electrode will increase the lifespan of the electrode.