

Checker1 pH Tester



The Modern Replacement for Litmus Paper

A unique pocket pH meter with a replaceable pH electrode and 0.01 pH resolution the Checker1 offers portable low cost pH measurement. Calibration is simple and can be carried out at 1 or 2 points using a choice of 3 buffers (4.01, 7.01 and 10.01). The meter includes the electrode and a replacement/spare electrode can be ordered separately when required, using the order code P258.

Technical Specification;

Range,pH 0.0 to 14.0
 Resolution, pH 0.01
 Accuracy, pH ± 0.2
 Batteries/life 2 x 1.4v./3000 hours approx.
 Dimensions (w x d x h), mm 66 x 50 x 25 –meter body
 76 x 8mm – electrode.
 Weight of meter complete with electrode 63 grams.

P257	Hanna Checker1 pH tester	each
P258	Spare electrode Checker1	each
B362	Spare pack of 6 x 1.4v batteries	each

Piccolo pH Testers



The Piccolo is a revolutionary pH meter with a 4 in 1 “Electrode & Amplifier” design. Conventional pH meters are susceptible to the weak high impedance signal, which makes the electrode, connector, cable and meter delicate and vulnerable, to noise, humidity and dirty environments. Calibration is simple and can be carried out at 2 points using a choice of 3 buffers (4.01, 7.01 and 10.01). Readings are automatically compensated for temperature from 0 to 70°C.

The Piccolo has overcome these problems with a pre-amplified electrode, which delivers a strong signal to the meter. The 4 in 1 interchangeable electrode is inexpensive and rugged and houses the pH sensor, reference system, temperature sensor and the amplifier module.

The Piccolo measures pH wherever necessary. Just switch it on, immerse in the solution and read. Dual point calibration is performed easily through trimmers on the meter’s casing.

There are three different piccolo meters in the range:-

Piccolo	has a replaceable electrode of length 90mm
Piccolo2	has a replaceable electrode of length 160mm
Piccolo+	also displays temperature as well as pH readings and has a replaceable electrode of length 160mm

TIPS

Do not be alarmed if white crystals have formed around the electrode. This is quite normal and the crystals are simply removed by rinsing with water or when conditioning the electrode.

When the electrode is not in use it is **vital** to keep it moist. Store in **S046** storage solution with sufficient solution to cover the junction. If this is not available Buffer pH4.01 is a good alternative.

NEVER store the electrode in Distilled Water

Technical Specification;

Range, pH 0.0 to 13.0
 Resolution, pH/°C 0.01 (piccolo+; temperature resolution 0.1)
 Accuracy, pH/°C ± 0.01 (piccolo+; temperature accuracy ± 1)
 Compensation Automatic from 0 to 70°C
 Batteries/life 3 x 1.4v./100 hours approx.
 Body Dimensions (w x d x h), mm 194 x 29 x 15

P252	Hanna Piccolo pH tester	each
P254	Spare electrode Piccolo (90mm)	each
P253	Hanna Piccolo2 pH tester	each
P255	Spare electrode Piccolo2 (160mm)	each
P493	Hanna Piccolo+ pH tester	each
P494	Spare electrode Piccolo+ (160mm)	each
B362	Spare pack of 6 x 1.4v batteries	each

Hanna pHep pH Testers

Use for on-the spot pH readings with an accuracy of ± 0.1 pH.

A series of fully immersible (waterproof to IP67) pocket pH testers called pHep meters (pronounced FEP)

pHep 1 pocket pH tester with the benefits of a large LCD display which can be read from any angle, and rugged fully immersible waterproof, ergonomic casing which fits comfortably in the hand. Calibration is two point (2 buffer values 4.01 & 7.01 or 7.01 & 10.01) with metal trimmers easily accessible for quick calibration. Batteries are accessible via a slide off cover, the batteries have an approx. 350 hours life.

pHep 2 has automatic temperature compensation and manual calibration at 2 buffer values.

pHep 3 has features you would normally expect to see on a bench pH meter. Microprocessor control gives automatic temperature compensation, automatic calibration with 3 buffer values recognised and a pH stability indicator to ensure accurate readings.

Technical Specification;

Range, pH 0.0 to 14.0
 Resolution, pH 0.1
 Accuracy, pH ± 0.1
 Temperature Compensation pHep 2 and 3 only: auto from 0 to 50°C
 Batteries/life 4 x 1.4v/300/350 hours approx.
 Dimensions (w x d x h), mm 150 x 30x 24, weight: 85grams.



P256 Hanna pHep1 pH tester	each
P256/2 Hanna pHep 2 pH tester	each
P256/3 Hanna pHep 3 pH tester	each
B362 Spare pack of 6 x 1.4v batteries	each

Bench pH Meters

Two bench meters with automatic recognition of 3 buffer solutions and microprocessor controlled calibration for the same price as a portable instrument. Understandably they are two very popular bench pH meters used in a wide range of applications.

Temperature effects are automatically compensated (or manual if preferred) and LCD error codes prompt the user to check the electrode, replace exhausted buffer solutions and so on. Three memorised pH buffer values make calibration quick and easy, (pH 4.01, 7.01 & 10.01) and automatic buffer recognition avoids errors during calibration.

Use P263 for pH, temperature and mV for ISE for Redox work or P263/1 if you only wish to read pH and temperature. Meters are supplied complete with a temperature sensor, a plastic bodied, refillable, double junction pH electrode and 12vDC adapter.

Technical Specification;

Range, pH/°C/mV 0.0 to 13.0/ 0 to 100°C / & for P263 only ± 399.9 mV(ISE)
 ± 1999 mV(ORP)
 Resolution, pH/°C/mV 0.01/0.1°C/ & for P263 only 0.1mV(ISE) 1mV(ORP)
 Accuracy, pH/°C/mV $\pm 0.01/\pm 0.4^\circ\text{C}$ / & for P263 only ± 0.2 mV(ISE) ± 1 mV(ORP)
 Compensation Automatic from 0 to 100°C
 Power supply; 240v mains adapter supplied to give meter requirement of 12v DC.
 Body Dimensions (w x d x h), mm 230 x 170 x 70 weight: 1.4Kg



P492 Electrode Holder
 Holds up to 3 electrodes

P263 Bench pH/mV/°C meter	each
P263/1 Bench pH/°C meter	each
P264 Spare electrode	each
P265 Spare temp. probe with 1m cable	each
P492 Cantilever electrode holder	each

Bench Dual-Reading pH/Temp Meter



The 2 LCD display allows the bench meter to show pH (or mV) alongside the temperature reading to allow continuous monitoring of both parameters. Temperature compensation is selectable, either manual or automatic and calibration is simple with the meter automatically recognising 5 pH buffer values 4.01, 6.86, 7.01, 9.18 and 10.1. A mV output is standard to allow connection to a plotter or chart recorder if required. To help the user, the LCD will display error codes should an incorrect buffer be used or electrode need replacing. Supplied complete with temperature sensor, glass bodied refillable pH electrode and 12vDC adapter.

Technical Specification;

Range, pH/°C/mV 0.0 to 14.0/ -10 to 125°C / & ±399.9mV(ISE) ±1999mV(ORP)
 Resolution, pH/°C/mV 0.01/0.1°C/ & 0.1mV(ISE) 1mV(ORP)
 Accuracy, pH/°C/mV ±0.01/ ±0.5°C / & ±0.2mV(ISE) ±1mV(ORP)
 Compensation Automatic from -10 to 125°C or manual from 0 to 100°C
 Power supply; 240v mains adapter supplied to give meter requirement of 12v DC.
 Body Dimensions (w x d x h), mm 230 x 170 x 70 weight: 1.5Kg

P350	Bench dual-reading pH/Temp meter	each
P351	Spare electrode	each
P265	Spare temp. probe with 1m cable	each
P362	Cantilever electrode holder	each

Calibration, Storage & Cleaning Chemicals - pH Electrodes

Buffers Solutions

NIST traceable buffer solutions

B400	Buffer soln. pH 4.01	460ml
B400/L	Buffer soln. pH 4.01	1ltr
B400/G	Buffer soln. pH 4.01	1gallon
B400/S	Buffer soln. pH 4.01 sachets	25 x 20ml
B401	Buffer soln. pH 6.86	460ml
B402	Buffer soln. pH 7.01	460ml
B402/L	Buffer soln. pH 7.01	1ltr
B402/G	Buffer soln. pH 7.01	1gallon
B402/S	Buffer soln. pH 7.01 sachets	25 x 20ml
B403	Buffer soln. pH 9.18	460ml
B404	Buffer soln. pH 10.01	460ml
B404	Buffer soln. pH 10.01	1ltr
B404/G	Buffer soln. pH 10.01	1gallon
B404/S	Buffer soln. pH 10.01 sachets	25 x 20ml



Storage Solutions

S046	Storage soln. for pH electrodes	230ml
S047	Storage soln. for pH electrodes	460ml

Electrolyte Solutions

E045	Electrolyte soln. 3.5M KCl/AgCl	4 x 30ml
E046	Electrolyte soln. 3.5M KCl	4 x 30ml

Cleaning Solutions

C038	General cleaning	230ml
C038/1	General cleaning	460ml
C039	Protein contaminant cleaner	230ml
C039/1	Protein contaminant cleaner	460ml
C040	Inorganic cleaner	230ml
C040/1	Inorganic cleaner	460ml
C041	Oil/Grease cleaner	230ml
C041/1	Oil/Grease cleaner	460ml

Checktemp Thermometers

Two models are available the Checktemp 2 and 3 meters which are pocket thermometers with the unique built-in calibration check device and a folding 110mm long probe – designed to fold at different angles for measurement in difficult places.

The calibration check is achieved by simply clicking a switch, which is housed within the battery compartment – if the unit is in calibration the LCD will display 0.0°C.

Highly accurate, these meters display temperature in °C from -20.0 to +120.0°C with an accuracy of 0.3°C (-20 to 90°C).

Checktemp 2 has a Teflon coated, round tip probe suitable for use in stronger acids and alkalis where stainless steel probes could be damaged. **Checktemp 3** has a stainless steel pointed tip probe and is ideal for temperature checking of semi-solid materials.

Technical Specification;

Range °C	-20.0 to 120.0	
Resolution °C	0.1	
Accuracy °C	± 0.3 (-20 to 90), ± 0.5 outside these temperatures	
Batteries/life	1 x 1.4v./3000 hours approx.	
Probe	folding 110mm x 3mm diameter	
Body Dimensions (w x d x h), mm	150 x 30 x 20	weight; 60gm

T371	Checktemp 2 thermometer	each
T369	Checktemp 3 thermometer	each
B362	Spare pack of 6 x 1.4v batteries	each



Hand Held Thermometer

A robust thermistor thermometer with strong On/Off switch and supplied with a professional stainless steel general purpose probe (alternative probes for measurements in liquids and air are also available as accessories – supplied with 1m of cable). In the laboratory the requirement for an accurate digital thermometer at a value for money price has meant that this instrument is exceedingly popular, probes can be interchanged without recalibration, a large LCD provides clear, easy-to-read digits that can be read from any angle.

Technical Specification;

Range °C	-40.0 to 150.0	
Resolution °C	0.1	
Accuracy °C	± 0.5 full range	
Batteries/life	1 x 9v./300 hours approx.	
Body Dimensions (w x d x h), mm	180 x 83 x 40	weight; 240gm

T372	Hand held thermometer, complete	each
T373	Air/Gas probe type HI 765A	each
T374	Air wire probe type HI 765W	each
T200/B	Battery PP9 – 9 volt, pack of 5	each

