SMART SENSOR®

MODEL：AS218

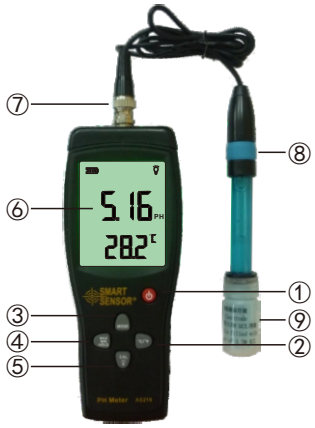
PH Meter

Instruction manual

As this device is an intellectual precise measurement apparatus, it is very important that you read through these instructions before using this device.

1.Explanation of the appearance

① ⏻ :ON/OFF
② CAC button:
③ MODE button:
④ MAX/MIN button:
⑤ HOLD button:
⑥ LCD Display
⑦ electrode plug
⑧ Electrode assembly
⑨ Electrode liquid storage bottle



2. Technical parameters:

Instrument Level:	Grade 0.01
PH Measuring range:	PH 0.00~14.00pH
PH basic measurement error:	± 0.05pH
the measurement stability:	±0.03pH
Solution temperature compensation range:	0 ~ 60 ℃
instrument repeatability	0.03pH
The measured solution temperature:	5~60℃
temperature range:	-10 ~ 60 ℃; 0.1℃
Battery:	9V Battery
Display:	Large screen liquid crystal display
Working temperature:	0 ~ 35 ℃
Working humidity:	0-80%RH (Non Gel)

3. Instrument normal conditions of use

(1) the environment temperature (0 ~ 35) ℃;

(2) the relative humidity is not more than 80%;

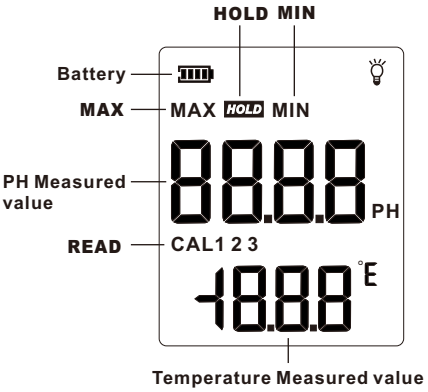
(3) measured solution temperature: (5 ~ 60 ℃);

(4) power supply: four 5 alkaline battery;

(5) no significant vibration;

(6) in addition to the earth's magnetic field without external magnetic field outside interference.

4. LCD display



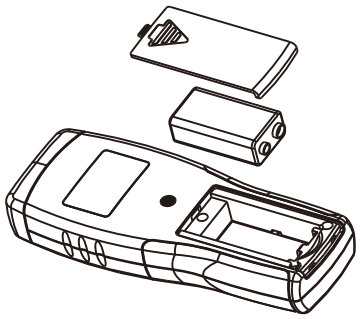
5. Instrument accessories

(1) AS218 type electronic unit 1 PCS;

(2) composite electrode 1 PCS;

(3) PH4.00, PH6.86, PH9.18, powder 3 packets;

Annex 1 PCS, see detailed packing list



6. Instrument using method

Instrument power supply for 9V alkaline batteries, open the instrument at the back of the battery cover, into the batteries. Instrument before use, namely measuring solution pH value, before to correction. But not before each use will correction, general when measuring interval time is short, weekly correction only once. Instrument using threecorrection way, specific steps are as follows:
(1) press the "switch" button, switch on the power, the instrument into the normal state of measurement;
(2) according to the "mode" button instrument into the correction state, respectively into "C4.0" "C6.86" "C9.18" three states cycle scintillation indicating symbol.
(3) correction steps are as follows: (please at 25 ℃ ± 1 ℃ environment do the correction work)
A: PH4.0 solution correction: press the "mode" button instrument into the "C4.0" scintillation status, electrode with distilled water cleaning, will electrode in the PH4.0 solution, for 20 seconds, the purpose is for electrode is stable and at this time, hold "CAL" button 3 seconds don't put," C4.00 "scintillation disappear, at this time PH4.0 solution after correction. Then click "model" key exit.
B: PH6.86 solution correction: press the "mode" button instrument into the "C6.86" scintillation status, electrode with distilled water cleaning, will electrode into PH6.86 solution, for 20 seconds, the purpose is for electrode is stable and at this time, hold "CAL" button 3 seconds don't put," C6.86 "scintillation disappear, at this time PH4.0 solution after correction. Then click "model" key exit.
C: PH9.18 solution correction: press the "mode" button instrument into the "C9.18" scintillation status, electrode with distilled water cleaning, will electrode in the PH9.18 solution, for 20 seconds, the purpose is for electrode is stable and at this time, hold "CAL" button 3 seconds don't put," C9.18 "scintillation disappear, at this time PH9.18 solution after correction. Then click "model" key exit.
(4) normal measurement mode:
Boot the default in normal measurement model. Normal measurement model can simultaneously measure the PH value and environmental temperature. PH value measurement model shows "P" + numerical. temperature display degrees celsius.
(5) when the instrument screen display left blank battery symbol, please replace the battery. Instrument long-term don't please take it out.

7. In the following circumstances, the instrument must be to correction

(1) solution temperature and correction of temperature have great changes;
(2) leave solution time too long electrode;
(3) change with the new composite electrode;
(4) measurement concentrated acid (pH < 2) or strong alkali (pH > 12) after;
(5) measurement contains fluoride solution and acidity in pH < 7 solution or thicker after organic solution.
(6) correction, please will PH correction fluid in 25 ± 1 ℃ temperature environment.

8. Instrument maintenance

Instrument the performance, in addition to the instrument itself outside structure, and good maintenance is inseparable, PH meter this kind of instrument and use environment often have to contact chemical drugs, therefore, reasonable maintenance more necessary.
(1) instrument input end (i.e. composite electrode jack) must maintain clean, electrode plug don't often dial the next, in order to prevent dust and high humidity immersion.
(2) composite electrode head very thin, therefore, not hard and collision, prevent electrode damage.
(3) composite electrode head do not contact dirt, such as the discovery of contamination available medical cotton graze electrode head, or with 0.1 mol/L dilute hydrochloric acid cleaning.
(4) composite electrode head crack or aging (long put above one year), should be exchange new electrode, or slow response, even cause big measurement error, the new electrode in before you use it you should in 3 mol/L potassium chloride solution soak 24 h.
(5) with buffer solution calibration instrument, to ensure the reliability of the buffer solution, because the buffer solution precision low, will lead to the result of the measurement error, buffer solution may make the preparation, preparation method is attached below.

Appendix : the preparation of the buffer solution

1. PH4 buffer solution with accessories distribution of powder in 250 ml distilled water, fully dissolved dilution 30 minutes.
2. PH6.86 buffer solution with accessories distribution of powder in 250 ml distilled water, fully dissolved dilution 30 minutes.
3. PH9.18 buffer solution with accessories distribution of powder in 250 ml distilled water, fully dissolved dilution 30 minutes.

IntelliSafe CE