

**SPECIFICATIONS:**



RANGE	0.0 to 14.0 pH
RESOLUTION	0.1 pH
ACCURACY (@25°C)	±0.2 pH
CALIBRATION	Manual, 2-point, through trimmers on the meter side
ELECTRODE (included)	<b>MA912B/2</b> pH-electrode with BNC connector & 2m cable
ENVIRONMENT	0 to 50°C, 95% RH not condensing
POWER SUPPLY	external, 12VDC power adapter ( <b>included</b> )
DIMENSIONS	85 x 104 x 39 mm
WEIGHT	130 g (meter only)

**OPTIONAL ACCESSORIES:**

<b>M10004B</b>	pH 4.01 buffer solution, 20mL sachet (25 pcs)
<b>M10007B</b>	pH 7.01 buffer solution, 20mL sachet (25 pcs)
<b>M10010B</b>	pH 10.01 buffer solution, 20mL sachet (25 pcs)
<b>M100058B</b>	Cal-Test solution for SMS115, 20mL sachet (25 pcs)
<b>M10016B</b>	Electrode cleaning solution, 20mL sachet (25 pcs)
<b>M10000B</b>	Electrode rinse solution, 20mL sachet (25 pcs)
<b>MA9015</b>	Electrode storage solution, 220mL bottle
<b>MA9016</b>	Electrode cleaning solution, 220mL bottle
<b>MA912B/2</b>	pH-electrode with BNC connector & 2m cable

**WARRANTY:**

This instrument is warranted from all defects in materials and manufacturing for a period of **two years** from the date of purchase. The electrode is warranted for a period of **6 months**.

If during this period, the repair or replacement of parts is required, where the damage is not due to negligence or erroneous operation by the user, please return the parts to either dealer or our office and the repair will be effected free of charge.

**Note:** We reserve the right to modify the design, construction and appearance of our products without advance notice.

ISM115 11/02



**USER MANUAL**

**pH METER WITH CAL-TEST**

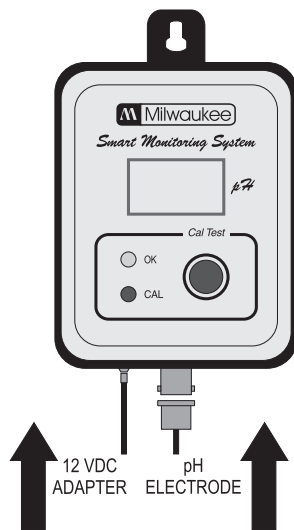
**MODEL: SMS115**

*Smart Monitoring System*



### **OPERATION:**

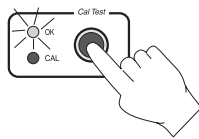
- Connect the supplied 12VDC power adapter to the meter and to the mains line.
- Connect the pH-electrode to the BNC socket on the bottom of the meter.
- Always remove the electrode protective cap before taking any measurement.
- Immerse the tip (2.5 cm) of the pH-electrode into the sample.
- Allow the reading to stabilize and the meter will start continuous monitoring.



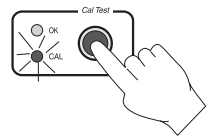
### **CALIBRATION TEST:**

This meter is provided with a check system, which allows to verify the calibration status in a fast and easy way. It is recommended to perform the below operations once a month.

- Rinse thoroughly the pH-electrode with water.
- Immerse the electrode in the **M100058** "Cal-Test" solution.
- Wait for one minute and then push the "Cal-Test" button on the meter front.
- If the GREEN LED lights up, the meter is calibrated.



- If the RED LED lights up, immerse the electrode in **M10016** cleaning solution for 5 minutes, then rinse it with tap water. Immerse again in the "Cal-Test" solution and push the button.
- If the GREEN LED lights up, the meter does not need calibration.
- If the RED LED lights up, calibrate the meter.



### **CALIBRATION PROCEDURE:**

- Remove the protective cap from the electrode.
- Immerse the electrode tip in a new sachet of pH4 buffer solution (**M10004**) and allow the reading to stabilize.
- Using the supplied screwdriver adjust the CAL1 (pH4) calibration trimmer on the meter side, to display "4.0".
- Open a new sachet of pH7 buffer solution (**M10007**) and use a small quantity to rinse the electrode.
- Immerse the electrode tip in the pH7 sachet and allow the reading to stabilize.
- Adjust the CAL2 (pH7) calibration trimmer on the meter side, to display "7.0".
- The calibration is now complete and the meter is ready to take measurements.



If calibration can not be reached, replace the electrode with a new one.

**Note:** Always re-calibrate the meter after replacing the electrode.