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PHH-103

pH/mV/TEMPERATURE METER

INSTRUCTION
SHEET

M4318-0606

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pH/mV/Temperature Meter

The PHH-103 is a Microprocessor based designed. The rugged housing and splash proof keyboard make the PHH-103 ideal for measurements outside of the laboratory. The large LCD displays pH and temperature values simultaneously, or can show millivolts. The PHH-103 has five memorized buffer values for fast, convenient and accurate calibration. User can perform a one-point calibration at any of these values, or a two-point calibration using any of the remaining buffer values, or adjust buffer values as needed under calibration mode and flash status by UP and DOWN key. the LCD display will indicate percentage of slope (PTS) to show the status of electrode after slope calibration. The PHH-103 has low battery consumption indicator and will auto shut off after 10 minutes of non use.

Specifications:

Range: 0.00 to 14.00 pH, +1999 mV, 0 to 100°C

Accuracy: 0.02 pH, 2 mV, 0.3°C

Resolution: 0.01 pH, 1 mV, 0.1°C

ATC: 0 to 100°C

Calibration: pH1.68, 4.00, 7.00, 10.00, 12.45

Battery: 9V

Dimensions: 108 x 75 x 30 mm

Weight: 135 g (with battery)

Accessories:

Upon receiving the shipment, inspect the container and equipment for any signs of damage. Remove the packing list and verify that you have received all equipment: Meter, pH electrode, temperature probe, Buffer solution 4.00 & 7.00, Battery 9V, Operating manual and rubber protective holster

Operating Procedure:

Preparation:

1. Open the battery compartment and connect the 9V battery.
2. Remove the protection cap from the electrode and connect to BNC input.

3. Turn on the power switch.

4. Rinse the electrode with clean water and wipe it dry.

Calibration:

1. Dip and stir the electrode into the buffer solution pH 7.00. Press and hold CAL key 3 second to into calibration mode. The display will appear CAL and flash 7.00. When the display stop flashing then it's end of calibration
2. Dip and stir the electrode into the buffer solution pH 4.00 and same as step 1.
Note: Calibration value can be adjusted as your buffer solution value under CAL mode and flash status by UP and DOWN key. For example, pH 6.86 instead of pH 7.00
3. After slope calibration, the LCD display will indicate percentage of slope (PTS) to show the status of electrode.

Measurement:

1. After calibration, rinse the electrode with clean water and wipe it dry. Dip the electrode into sample solution to be measured. Stir gently and wait until a stable reading can be obtained.
2. Press pH/mV key to change pH or ORP mode as needed.

Others:

1. Degree C and F can be changed by press and hold pH/mV key 3 second.
2. Automatic temperature compensation(ATC) mode by insert temperature probe. Manual temperature compensation mode by up and down key.
3. Auto shut off after 10 minutes of non use.
4. Change a new battery when the battery indicator flashing.

Applications:

Floriculture, Fish farming, Agriculture, Swimming pool & Spa, Waste water, Plating industry Food industry, Pharmaceutical & Medical, Cooling towers and Chemical industry.



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WARNING: These products are not designed for use in, and should not be used for, human applications.



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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