

# Portable Multi-Parameter Water Quality Meter

**LMPWM-A1 Series** 

## Portable Multi-parameter Water Quality Meter- LMPWM-A1 series

Portable Multi-parameter Water Quality Meter LMPWM-Al series is adapted with different modes for measuring Quality of Water on different parameters such as pH, ORP, Ion, conductivity, TDS, salinity, dissolved oxygen content. Due to its portable design, it is suitable for outdoor measurements i.e. on site water testing, remote area water testing & for research purpose. It is reliable and user friendly.

#### **Common Features**

- >>> Calibration due reminder informs operator to calibrate the meter regularly
- >>> Stability indicator displays the status of current measurement
- >> Auto hold function freezes stable, final readings for better viewing and recording
- Manual temperature calibration to rectify the deviations in temperature
- Automatic temperature compensation for accurate measured value over the entire range
- $\gg$  Selectable temperature units (°C or °F) for different application requirements
- >>> Expanded memory stores and recalls up to 500 readings
- >>> Help message as an operational guide, helps users for quick access to the parameters
- >>> Reset function automatically resumes all the setting back to factory default options
- >> Store data is transferrable into computer via USB communication interface

#### pH mode

- >>> 1-5 points push button calibration to automatically identify pH buffer
- >>> Convenient to select pH buffer standard (USA/NIST/DIN) or custom
- >> Automatic electrode slope display helps operator whether to replace the sensor

#### **ORP** mode

- >>> 1 point offset calibration to adjust the display value to known standard
- Relative & absolute mV measurements for accurate ORP readings

#### \*lon concentration mode

- >> 2-5 points calibration, included with 8 concentration points for selection
- >>> Automatic recognition of ion electrodes, no need to specify type of ion
- >>> mV measurements mode for checking the performance of current ion electrode
- >>> Direct reading of concentration measurements to avoid critical conversation and calculations
- >>> Multiple concentration units to be suitable for various applications

#### Conductivity / TDS / Salinity / Resistivity Mode

- >> 1-5 point for calibration with automatically identification of calibration solutions
- >>> Can select cell constant (0.1/1/10) and normalization temperature (20°C or 25°C)
- >>> TDS conversion factor, seawater, practical salinity measurements mode to meet different water quality measurement requirements
- Linear or pure water compensation improves the measurement accuracy

#### \*Dissolved oxygen mode

- >> 1-2 points calibration using the air-sealed water & zero oxygen solution
- Manual salinity & barometric pressure compensation for accurate readings

#### **Applications**

The portable multi-parameter water quality meter is used for quality testing of water on different parameters in research and development labs, water resources and plants in nearby or remote area.

# **Specifications**

| Model no.                          | LMPWM-A10   | LMPWM-A11 |
|------------------------------------|---|-----------|
| pH measurement range               | -2.000 to 20.000 pH   |           |
| pH accuracy                        | ± 0.002 pH  |           |
| pH calibration points              | 1-5 points  |           |
| pH calibration solutions           | USA, NIST, DIN or user defined                                |           |
|                                    |   |           |
| ORP measurement range              | -1999.9 to 1999.9 mV  |           |
| ORP accuracy                       | ±0.2 mV   |           |
| ORP calibration points             | 1 point   |           |
| ORP calibration solutions          | mV & relative mV  |           |
|                                    |   |           |
| Ion measurement range              | O to 19999 ppm, mg/L, mol/L                                   | -         |
| lon accuracy                       | ±0.5% F.S. (monovalent),<br>± 1% F.S. (divalent)              | -         |
| lon calibration points             | 2-5 points  | -         |
| lon calibration solutions          | 0.001, 0.01, 0.1, 1, 10, 100, 1000,<br>10000 ppm, mol/L, mg/L | -         |
|                                    |   |           |
| Conductivity measurement range     | 0-20.00, 200.0, 2000 μS/cm, 20.00, 200.2 mS/cm                |           |
| Conductivity accuracy              | ±0.5% F.S.  |           |
| Conductivity calibration points    | 1-5 points  |           |
| Conductivity calibration solutions | 10 μS/cm, 84 μS/cm, 1413 μS/cm, 12.88mS/cm, 111.8mS/cm        |           |
| Temperature coefficient            | 0.0 to 10.0%/°C   |           |
| Compensation modes                 | Linear or pre water   |           |
| Cell constant                      | K=0.1, 1, 10 or user-defined                                  |           |
| Normalization temperature          | 20°C or 25°C  |           |

# **Specifications**

| Model no.                | LMPWM-A10  | LMPWM-A11 |
|--------------------------|--|-----------|
| TDS range                | O to 100 ppt. (max. 200 ppt., depending on factor setting) |           |
| TDS accuracy             | ±1% F.S.   |           |
| TDS factor               | 0.1-1.0 (default 0.5)                                      |           |
|                          |  |           |
| Salinity range           | O to 100 ppt. (max. 80 ppt.)                               |           |
| Salinity accuracy        | ±1% F.S  |           |
| Measurement modes        | Seawater or practical salinity                             |           |
|                          |  |           |
| Resistivity range        | O to 100Ω  |           |
| Resistivity accuracy     | ±1% F.S  |           |
| Resistivity resolution   | 0.01, 0.1, 1   |           |
|                          |  |           |
| DO concentration range   | 0.00 to 20.00 mg/L   | -         |
| DO accuracy              | ±0.2 mg/L  | -         |
| Calibration points       | 1-2 points   | -         |
| Pressure correction      | 60.0 to 112.5 kPa,<br>450-850 mmHg                         | -         |
| Salinity correction      | 0 to 50 g/L  | -         |
| % Saturation of Oxygen   | 0.0 to 200.0%  | -         |
| Accuracy                 | ±2.0%  | -         |
|                          |  |           |
| Temperature compensation | O to 100°C, 32 to 212°F, Manual or Automatic               |           |
| Stability conditions     | Low or high  |           |
| Calibration due          | O to 31 days   |           |
| memory                   | Stores up to 500 data sets                                 |           |
| Output                   | USB communication interface                                |           |
| Dimension (L*W*H)        | 185×88×32 mm   |           |
| Weight                   | 300 g  |           |
| Power                    | 3*1.5V "AA batteries or DC5V power adapter                 |           |

Note: \* these measurements modes are only applicable to the model LMPWM-A10

## **Standard accessories**

- pH, conductivity & dissolved oxygen electrodes
- PH and conductivity electrodes
- pH and dissolved oxygen electrodes
- conductivity and dissolved oxygen electrodes

## **Optional accessories**

- Temperature probe
- Calibration solutions
- Batteries
- Carrying case