



Large graphic display
Simultaneous display
of all the parameters



Carrying case
with all necessary accessories

Features and benefits

Ergonomic and robust multiparameter instrument, IP 67 waterproof; resistant in harsh working conditions.
MM110 is recommended for galvanic industry, waste water plants, swimming pool maintenance, etc.

MM110 simultaneously displays pH, ORP and temperature.
pH, Redox and temperature: flexible and well-priced instrument for the control of the three parameters.

The multisensor 50 45 ensures precise and reliable measurements.
The pH and the Redox electrode and the temperature sensor are placed in one unique body.

The carrying case includes all necessary accessories to ensure accurate measurement.
Instrument can be seated at an angle for convenient viewing of the display; sensor and the calibration flasks are held on upright position for easy calibration and measurement.



LANGE 

Specifications

Measuring range

pH	mV	Temperature
-2.00...19.99	± 1400	-20...150 °C (-4... 302 °F)

Measuring error (± 1 digit)	Reproducibility (± 1 digit)
pH <= 0.01	pH ± 0.01
mV <= 1	mV ± 1
Temperature <= 0.2 °C (0.4 °F)	Temperature ± 0.1 °C (0.1 °F)

Temperature compensation
With built-in Pt1000 temperature sensor.

pH calibration
With 1, 2 or 3 buffers selectable between: 2.00, 4.01, 7.00, 9.21 and 10.01 (at 25 °C).
Automatic recognition of pH values of buffers at different temperatures.
Manual calibration at any pH value.
Theoretical calibration (factory settings).

mV calibration
With 1 standard, 220 mV (at 25 °C).
Automatic recognition of mV values of standard at different temperatures.
Manual calibration at any mV value.
Theoretical calibration (factory settings).

Temperature readjustment
Correction of the temperature probe deviation (A.T.C.) at 25°C and 85°C.
Can be used as thermometer of precision.

Measuring mode
Stability and continuous.

Display
Liquid crystal, backlit, with pictograms.

Physical parameters
Material ABS. Degree of protection IP 67.
Weight 300 g. Size 186 x 73 x 38 mm.

Connector
MP-8, 8 contacts multipin.

Ambient conditions
Operating temperature: 0 °C to 50 °C.
Storage temperature: -15 °C to 65 °C.
80% relative humidity (non-condensing).

Directives low voltage and EMC
According to CE, UNE-EN 61010-1 and UNE-EN 61326-1.

Power supply
3 x 1.5V, type AA batteries. Over 400 hours operation.
Automatic power off after 5 minutes of inactivity (this option can be disabled by the user).

Recommended sensor

Multisensor 5045

With only a 12 mm diameter it has a built-in pH electrode, a redox (platinum) electrode and a temperature sensor.
pH 0 ... 14, ± 2000 mV, 0 ... 80 °C.



5045
Code: LZW5045.97.0002

How to order

Product number	Sample type	Description	Included accessories
LPV2600.98.0002		MM110, with accessories, without cell	
LPV2645.98.0002	Kit for general use	MM110, with accessories and sensor 5045	<ul style="list-style-type: none"> • Carrying case • Solutions: pH 4, pH 7, pH 9, KCl and Redox 220 mV • Calibration tubes • Flasks for sample and sensor cleaning • User manual

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