



Sension+ MM378 GLP Laboratory pH, Conductivity and Dissolved Oxygen Meter with Electrode Stand, Magnetic Stirrer, Accessories with pH Electrode for Beverage, Dairy, Soils, DO sensor and Conductivity Cell

Product #:

LPV4160.97.0002

OBSOLETE ITEM

This item is no longer available.

Hach Sension+: Fast and simple measurements

Hach Sension+ family:

Fast results: Provided by the right choice of quickly responding electrodes for your application, integrated laboratory systems or unique multi probes with up to 4 parameters by 1 click for field applications.

Maximum simplicity: Sension+ systems come complete with everything you need to start testing.

Ease of use operation, either with superior field usability or fully integrated laboratory set up:

Sension+ simplifies your measurement tasks!

Fast measurements with dual channel instruments.

Fast performing probe set:

Combined pH electrode for beverage, dairy, soils. For samples containing sulphides, reducing sugars or other substances which react with silver. Samples with pH > 12.

Platinum cell for conductivity measurements in general aqueous applications with integrated PT1000 temperature sensor.

Polarographic probe for dissolved oxygen measurements.

Maximum simplicity by integrated lab systems eliminating complex testing steps.

A guided navigation menu allows you to follow simple prompts to set up your measurements thus reducing the time necessary to start testing, and improving the accuracy of measurements. The Sension+ MM378 has two measurement channels. Channel 1: Two parameters (pH, ORP, conductivity, ISE) individually or simultaneously. Channel 2 measures DO.

Maximum simplicity: Sension+ kits come complete with everything you need to start testing.

Sension+ laboratory kits include meter, probe, integrated probe holder, integrated stirrer, buffers and all required accessories.

Fast measurements for high sample volumes by lab automation option.

PC control option (LabCom Software) and sample changer option.

GLP features

GLP features, 400 result memory capacity, reports can be directly printed, complete bi-directional control via the optional LabCom PC.

Specifications

AC Power Adapter and USB/DC Adapter: Yes

Accuracy:	±1 digit
Automatic Buffer Recognition:	IUPAC standards (DIN 19266) or Technical buffer (DIN 19267)
Backlight:	Yes
Calibration Intervals/Alerts/Reminder:	Reminder 1 hour to 7 days
Compliance Certifications:	CE.WEEE
Conductivity Accuracy:	≤ 0.5 % of measurement range
Conductivity measurement: Temperature correction:	Linear Coefficient: 0.00 - 9.99 %/°C; Non-linear for Natural waters (UNE EN 27888); Reference Temperature: 20°C, 25°C, or from 0 - 99°C
Conductivity Range:	0.001 µS/cm - 1000 mS/cm
Conductivity resolution:	0.001 µS/cm - 1 mS/cm depending on the measurement range
Data Export:	Yes
Data storage:	Date and time, instrument ID, sample ID
Dimensions (H x W x D):	110 mm x 350 mm x 201 mm
Display:	128 x 64 pixel
Display Type:	Backlit Graphical LCD
DO Measurement Range:	0.00 - 19.99 mg/L and 20.0 - 60.0 mg/L (25 °C)
DO Resolution:	0.01 mg/L or 0.1 mg/L depending on measurement range
DO sensor calibration:	1 to 2 point, saturated air, 0% DO calibration chamber delivered with kit
Electrode stand:	Yes
Environmental Conditions: Relative Humidity:	< 80 % relative humidity (non-condensing)
Environmental Conditions: Temperature:	0 - 40 °C (41 - 104 °F)
GLP Features:	Yes
Inputs:	1 pH/ORP/ISE; 1 Ref; 1 DO; 1 EC; 2 Temp. Pt1000/NTC30; 2 Magnetic stirrer (1 Integrated + 1 Optional); Printer or PC; External Keyboard
Interface Languages:	English, German, French, Spanish, Italian, Portuguese
Internal Data Storage:	330 per Channel
Kit?:	Yes
Length:	-
Measuring Range ORP:	±2000 mV
Model:	MM378
mV Measurement Range:	±2000 mV
mV Resolution:	0.1/1 mV
Operating Interface:	Keypad
Outputs:	RS232
Parameter:	pH, mV, ISE, ORP/Redox, Conductivity, TDS, Salinity, Resistivity, Dissolved Oxygen, Temperature
PC Data Transfer Software :	Yes, Optional
pH Accuracy:	≤0.002 pH
pH Electrode calibration:	1 to 3 points calibration within selected buffer set or user defined buffer
pH Measurement Range:	-2.00 - 19.99 pH
pH Resolution:	0.001/0.01/0.1 pH
Power:	External power supply 100-240 V, 0.4 A, 47-63 Hz with plug adapters
Printer:	Yes, Optional
Probes included:	DO, pH, Conductivity
Resistivity Accuracy:	≤ 0.5 %

Resistivity Measurement:	0 Ω - 500 MΩ
Resistivity Resolution:	Depending on the measurement range
Resolution:	EC: 0.01 μS/cm - 1 mS/cm depending on range
Result ID:	Yes
Salinity Measurement Range:	5.85 mg/L - 311.1 g/L NaCl
Salinity Resolution:	0.01 mg/L - 0.1 g/L NaCl, depending on the measurement range
Simultaneous measurements:	2 channels
TDS Measurement Range:	0 mg/L - 500 g/L
TDS Resolution:	Depending on the measurement range
Temperature Accuracy:	≤ 0.2 °C
Temperature Compensation:	Manual or Automatic
Temperature Measurement:	-20.0 - 150.0 °C (-4.0 - 302.0 °F)
Temperature resolution:	0.1 °C (0.1 °F)
Warranty:	36 months
Weight:	1100 g
What's included?:	Includes: Sension+ MM378 GLP laboratory multi meter with integrated magnetic stirrer and probe holder, power supply with interchangeable plugs, Sension+ 5014 pH combination electrode, Sension+ 5070 conductivity cell with temperature sensor, Sension+ 5131 DO sensor, pH4 and pH7 calibration standard solutions, 125 mL, 1413μS/cm conductivity standard solution, 125 mL, KCl electrolyte solution 50 mL, 3 calibration beakers, DO calibration and protector flask and printed documentation

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