

PHM210 Standard pH Meter



- ✓ Automatic buffer recognition
- ✓ Choice of 3 types of buffers:
 - IUPAC standards
 - Technical Series
 - 4-7-10 Series
- ✓ AUTOREAD facility
- ✓ Large alphanumeric LCD
- ✓ RS232C port for printer/PC
- ✓ Analogue recorder outputs

PHM210

The PHM210 Standard pH Meter is a microprocessor-controlled instrument which combines accuracy and convenience making it ideal for simple routine measurements of pH and mV both in the classroom and in the lab.

The PHM210 is part of MeterLab®, Radiometer Analytical's complete range of measuring equipment for accurate and reliable pH, ion and conductivity measurements. In addition to instruments, it provides a full range of electrodes, certified buffer solutions and compatible accessories.

User-friendly

The PHM210 is extremely simple to operate. Its large 2 x 16-character LCD displays clear information to prompt the user through each stage of the straightforward calibration and measurement procedures.

Comprehensive warning and error messages, automatic buffer recognition and the AUTOREAD facility all help eliminate the risk of operator error.

AUTOCAL

The PHM210 automatically recognises the buffers used for calibration. You only need to select the buffer type required for your particular analysis once. Choose one of three buffer types: IUPAC standards, Technical buffers according to DIN 19267 or 4-7-10 Series.

With the PHM210 you can choose to perform either a one or two-point calibration. The last calibration result is stored in the memory for the pH measurements which follow.

Temperature measurement is automatic when a temperature sensor is connected.

AUTOREAD

Using **AUTOREAD**, the pH result is locked on the display as soon as the stability criterion is reached ensuring excellent reproducibility.

Alternatively, you can perform measurements by reading the pH or mV result directly from the live display using the convenient sliding **stability indicator**.

Easy connections

In addition to inputs for single or combined pH electrode plus reference electrode, the PHM210 has an input for the T201 Temperature Sensor.

For easy communication, the PHM210 comes fully equipped with a serial port for printer or PC and direct and calibrated analogue output for recorders. The SAM7 Sample Stand, a combined electrode holder and magnetic stirrer, can be connected to the meter directly via the POWER OUT socket.

Specifications

Measurement procedures

pH and mV reading with sliding **stability indicator**

AUTOREAD of pH: result is locked on display when stability criterion (3 mV/min. ~ 0.05 pH/min.) is reached or within 3 minutes

Calibration

One or two-point calibration

AUTO recognition of buffers:

IUPAC standards (DIN 19266):
pH 1.679, 4.005, 7.000, 10.012 and 12.45 *or*

Technical buffers (DIN 19267):
pH 1.09, 4.65 and 9.23 *or*
4-7-10 Series: pH 4.00, 7.00 and 10.00

Electrode requirements

(Autocal)

Sensitivity: 95 to 102%

Zero pH: 5.80 to 7.50 pH

Measuring ranges

pH: -9.00 to +23.00

mV: -1999 to +1999

°C: 0.0 to +99.9

Resolution

pH: 0.01

mV: 1

°C: 0.1

Input accuracy

pH: ±0.01 pH

mV: max. (±0.1%, ±1 LSD)

°C: ±0.5°C

Electrode inputs

Combined or glass electrode (BNC plug)

Reference electrode (banana plug)

Temperature sensor (CINCH plug)

Electrode input resistance

> 2 x 10¹² Ω

Input/Outputs

RS232C port for connection of printer or PC

POWER OUT for SAM7 Sample Stand

Analogue output for recorder.
Direct electrode signal and calibrated signal: 1 pH unit = 100 mV, resolution 0.01 pH

Display

2 x 16-character, alpha-numeric LCD display

Languages

English, German and French

Finish

Chemical resistant, splash-proof cabinet

Power requirements

12 Vdc power adapter

Electromagnetic compatibility

EMC qualified

Ambient temperature

5 to 40°C

Relative humidity

20 to 80%

Dimensions (H x W x D)

8 x 28.5 x 20 cm

Weight

1.5 kg

Order Information

PHM210 Standard pH Meter

230 V version

R21M002

115 V version

R21M010

- when you need to be sure... -

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