



## pH Portable instruments

The pH-value and Redox potential are standard measurements in laboratories for chemical analysis. Moreover, also in production activities, for example, in the field of water treatment, the measurements are required for fulfilment of environment protection requirements. Our measuring instruments for determination of chemical parameters are precision grade devices with certifiable accuracy and are also well known for meeting high quality requirements and practical performance.

The pH and Redox electrodes are interchangeable and hence can be adapted as per the application. Additionally, temperature of the medium is also measured and displayed for the purpose of compensation. Buffer solutions, with repeatability of national standards are also available as accessories for calibration and this round off the overall assortment.



**Precision pH/Redox/Temperature instrument HM530**, measuring range 0.00 ... 14.00 pH, Redox -1999 ... 2000 mV, temperature -100 ... +250 °C, manual or automatic temperature compensation, calibration enabled function with automatic buffer recognition, stability recognition, evaluation of probe quality, calculation of Redox potential, PC-interface

**HM530**

**130.80 €**



**Complete, ready-to-use pH-instrument set**, with extensive accessories, consisting of handy measuring instrument HM530 with pH standard electrode PH-E100, temperature probe TF 35, each with 5 buffer caps pH 4/7/10, 3 wide-necked bottles, KCl electrolyte, pepsin cleaning solution and carry case KK3500

**HM530-SET**

**248.70 €**

Do you have any specific requirements? You can get many other instruments and accessories from us for professional applications. Please let us know your job requirements, we would be pleased to provide you a solution - free of charge without any obligation!


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## pH – Electrodes and Redox – Electrodes

The Hygrosens pH handy measuring instruments of HM5xx-series can be used in combination with a wide variety of pH and Redox electrodes and hence the instrument can be used in many different applications. The range of products is right from low cost entry-level electrode to pressure resistant pH electrodes with integrated Gel-electrolyte and Redox electrodes. Special models like electrodes with solid screw thread, special lengths or for special applications are also possible on request!




**Low priced pH-electrode PH-E014**, measuring range of 2...12 pH, application temperature 0... 60 °C, conductance > 200µS/cm, not pressure resistant, electrolyte 3mol/l KCL, refillable, connection lead 1 m with Chinch plug, possible application areas are environmental study, swimming pool engineering, aquatics and water treatment.

**PH-E014** **33.70 €**



**Standard - pH-Electrode PH-E100**, measuring range of 0 ... 14 pH, application temperature 0 ... 80 °C, conductance > 200 µS/cm not pressure resistant, electrolyte 3mol/l KCL, refillable, connection lead 1 m with Chinch-plug, possible application areas are environmental study, swimming pool engineering, aquatics and water treatment

**PH-E100** **49.70 €**

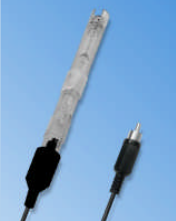


**Insert type - pH-Electrode PH-E101**, measuring range of 2 ... 11 pH, application temperature 0 ... 60 °C, conductance > 200 µS/cm, Electrode for plugging in e.g. suspensions, not pressure resistant, Electrolyte 3mol/l KCL, refillable, connection lead 1 m with Chinch-plug, possible application areas are food and medicine technology, soil examination

**PH-E101** **63.45 €**


**Piercing pin for Insert type-Electrode PH-E101**

**VD120** **13.10 €**




**Twin chamber - pH-Electrode PH-E103**, wide measuring range of 0 ... 14 pH at 0 ... 80 °C, conductance > 200 µS/cm, Electrolyte 3 mol/l KCL, 1 mol/l KNO<sub>3</sub>, refillable, not pressure resistant, connection lead 1 m with Chinch-plug, applications are in photochemistry

**PH E103** **95.85 €**



**Redox - Electrode PH-E105**, measuring range ± 2000 mV at 0 ... 80 °C, conductance > 25 µS/cm, Electrolyte 3 mol/l KCL, refillable, scope of supply inclusive of 100 ml testing solution, applications are in aquatics, soil examination, laboratory analysis

**PH E105** **63.45 €**






**VE-water – pH-Electrode PHE106**, measuring range of 2 ... 11 pH at 10 ... 80 °C, conductance > 25 µS/cm, not pressure resistant, Electrolyte 3 mol/l KCL, refillable, connection lead 1 m with Chinch-plug, application areas in ionised media, VE-water and in aquatics (specially for decorative fish)

**PH E106** **69.40 €**

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	<p><b>Pressure resistant pH-Electrode PH-E108</b>, pressure resistant up to 6 bar, measuring range of 0 ... 14 pH at 0 ... 80 °C, conductance &gt; 200 µS/cm, non refillable Gel Electrolyte, connection lead 2 m with Chinch-plug, adaptable to thread PG 13.5, possible applications are in environment study, aquatics and water treatment</p> <p><b>PHE108</b> <span style="float: right;"><b>69.40 €</b></span></p>
	<p><b>Pressure resistant pH-Electrode with integrated Pt100 Sensor PH-E109</b>, pressure resistant up to 6 bar, measuring range of 0 ... 14 pH at 0 ... 80 °C, conductance &gt; 200 µS/cm, non refillable Gel Electrolyte, connection lead 2 m with BNC / Mini DIN plug, adaptable without thread, possible applications are in environment study, aquatics and water treatment</p> <p><b>PHE109</b> <span style="float: right;"><b>95.85 €</b></span></p>
	<p><b>Pressure resistant pH-Electrode with integrated Pt100 Sensor PH-E117</b>, pressure resistant up to 6 bar, measuring range of 0 ... 14 pH at 0 ... 80 °C, conductance &gt; 200 µS/cm, non-refillable gel Electrolyte, connection lead with BNC / Banana plug, adaptable to thread PG13.5, possible applications are in environment study, aquatics and water treatment</p> <p><b>PHE117</b> <span style="float: right;"><b>95.85 €</b></span></p>
<p>The models covered in this price list are preferred types and available ex-stock at a short notice. In addition, we can also supply you a variety of further designs. Do you have any special requirements? Please refer to us, we would be pleased to give you an offer - free of charge and without any obligation!</p>	

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### Accessories ph measuring instruments

Accessories for pH measuring instruments of the HM5xx-series. Products such as temperature sensors, adapters for BNC sockets and different electrolytes and solutions for the keeping and cleaning of the electrodes. The work and calibration set AK1400 are particularly recommendable, with which you can calibrate your portable measuring instrument, clean the electrodes and keep it protected.

	<p><b>Adapter Chinch plug on BNC plugs</b>, is needed for the connection of the electrodes to the input socket of the portable measuring instrument HM 530</p> <p><b>ADA-BNC-CHINCH</b> <span style="float: right;"><b>2.55 €</b></span></p>
	<p><b>Temperature probe TF35</b>, PT100 DIN class B in 4-wire bridge, measuring range -50 ... +400 °C, with 1m PVC connecting cable and mini-DIN-plug, compatible to the HM 530</p> <p><b>TF35</b> <span style="float: right;"><b>29.85 €</b></span></p>
	<p><b>Work and calibration set for the ph measuring instruments</b>, each case 5 buffer caps pH4/7/10, 3 wide-necked bottles, KCl-elektrolyt, pepsin cleaning solution</p> <p><b>AK1400</b> <span style="float: right;"><b>21.00 €</b></span></p>
	<p><b>KCl elektrolyt 3 mol</b> for refilling and keeping the probes , 100 ml washing bottle</p> <p><b>KCL-3MOL</b> <span style="float: right;"><b>4.10 €</b></span></p> <p><b>KNO<sub>3</sub> elektrolyt 1 mol</b>, for refilling of the two-chamber elektrode PHE103, 100 ml washing bottle</p> <p><b>KNO-1MOL</b> <span style="float: right;"><b>3.90 €</b></span></p>
	<p><b>Pepsin cleaning solution 100 ml</b>, in plastic bottle</p> <p><b>RL-100</b> <span style="float: right;"><b>3.90 €</b></span></p> <p><b>Redox testing solution 100 ml</b>, in plastic bottle</p> <p><b>RP-100</b> <span style="float: right;"><b>3.90 €</b></span></p> <p><b>Wide-necked bottle 100 ml</b>, empty, for preparing the buffer solution</p> <p><b>PF-100</b> <span style="float: right;"><b>1.85 €</b></span></p>
	<p><b>Buffer caps for the calibration</b> of the pH measuring instruments, 4 different versions with pH 4.0/ pH 7.0/ pH 10.0 and pH 12.0 available. The buffer caps are restorable on NIST standards and have with 25 °C a deviation from ±0,02 pH, supply in each case 5 pieces of a value</p> <p><b>PK-PH4</b> <span style="float: right;"><b>6.75 €</b></span></p> <p><b>PK-PH7</b> <span style="float: right;"><b>6.75 €</b></span></p> <p><b>PK-PH10</b> <span style="float: right;"><b>6.75 €</b></span></p> <p><b>PK-PH12</b> <span style="float: right;"><b>6.75 €</b></span></p>

Have you found everything that you need? This price list does not cover all the articles. Please contact us for your requirements of specific components; we can certainly help you further!



Port converter and software

A remarkable feature of the HYGROSENS portable measuring instrument is the integrated interface: With the help of a PC and our software PCLOG, the results of measurement are automatically documented in graphical form. The evaluation of data is done through various other tools, for example EXCEL™ or Mathlab™.



**RS 232 port converter** for galvanically isolated connection of HYGROSENS Handy measuring instrument of HM-series to the serial interface of a PC, the converter is supplied over the interface, connection 9-pin Sub-D-socket

**HM-SERINT 41.00 €**



**RS 232 port converter (5-way)** for galvanically isolated connection of 5 Handy measuring instruments of HM-series to the serial interface of a PC, voltage supply through included plug-in type power supply unit, scope of supply: 9-pin SubD-connection cable, 5 measuring instrument connection cable of 1 m length, power supply unit

**HM-SERINT5 87.25 €**



**USB port converter** for connection of HYGROSENS Handy measuring instrument of HM-series to the USB interface of a PC, the converter is supplied through the USB port, connection USB-plug type B, scope of supply inclusive of driver CD for different operating systems

**HM-USBINT 41.00 €**



**Adapter** for connection of RS 232 devices to a USB-interface, 9-pin plug on USB-plug type B

**ADA-RS232-USB 22.00 €**

Connection-Adapter (25-pin Dsub-plug on 9-pin Dsub-socket)

**ADA-25S-9B 1.55 €**

Connection adapter (9-pin Dsub-plug on 25-pin Dsub-socket)

**ADA-9S-25B 1.55 €**

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**Software**

With the help of software PCLOG, the measured results can be automatically documented in graphical form. Together with the software Profilab, complex device control and automation projects can be produced through a simple graphical programming environment. Automate your laboratory projects in no time without writing a line of program code!

	<p><b>Windows-Software PCLOG</b>, Easy-to-use online screen writer for data recording, visualising and archiving of measuring data, integrated Hx-calculator for thermodynamics humidity calculation, efficient print functions for documentation of curves, user friendly export functions over the clipboard for other window based software (OLE), limit value monitoring, acoustic warning signals. Control and switching functions over relay cards, virtual channels, formula editor for calculation and many more features. System requirements: Windows 98 or XP</p> <p><b>PCLOG-HM</b> <b>33.62 €</b></p>
	<p><b>Windows-Software PROFILAB</b>, universal measuring system and control software for professional applications, graphical programming with virtual instruments, extensive library of arithmetic and logical components, modules and virtual instruments. Operation through self-designed front end. Integration of measurements from external instrument in the regulation process, expert full version with compiler. System requirements: Windows 98 or XP</p> <p><b>PROFILAB</b> <b>86.16 €</b></p>
	<p><b>Driver-DLL for the Handy instrument</b>, Windows-function library for port communication between instrument of HM-series and user's own Windows based application software</p> <p><b>HM-DLL</b> <b>53.90 €</b></p>
	<p><b>Universal USB Relay/Input card</b>, two separate relay groups, each with 4 high rating relays 230V / 8A, eight potentially isolated inputs over opto-coupler for processing with "PROFILAB", Watchdog for protective tripping on communication failure, handy circuit, suitable for mounting in switchgear cabinet, 12V operating voltage, a power supply unit (Ordering No. NG-12V-HQ) and a USB-cable (Ordering No. KAB-USB) are required for operation.</p> <p><b>USB-REL8-IN8-12V</b> <b>85.34 €</b></p>

Many other I/O-cards are also available for Profilab. Please ask for our detailed data sheet!

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### Accessories – Handy measuring instrument

From us, you get the complete measuring system from a single source: In addition to the ready-to-connect precise measuring probes, we also offer an extensive range of accessories starting from matching protection bags to switching and regulation module.

	<p><b>Spare battery 9V</b>, Type IEC 6F22, high quality alkali Manganese cell, Mercury and Cadmium free, 660 mAh, 3 years shelf life</p>
	<p><b>BATT-9VB</b> <span style="float: right;"><b>1.90 €</b></span></p>
	<p><b>Accumulator 9V</b>, as an alternative to battery for continuous operation, high quality NiMH-model without memory-effect, high energy density, quick charging type, 500 cycles, capacity 200 mAh</p>
	<p><b>AKKU-9V-NIMH</b> <span style="float: right;"><b>10.55 €</b></span></p>
	<p><b>Charging unit for 1.2V and 9V accumulator NiCd and NiMH</b>, Simultaneous quick charging of up to 4 cells, micro-controller based, auto diagnostics, refresh cycle, world wide compatible for input voltage range of 100... 240 V and included mains adapter</p>
	<p><b>LADGE-NIMH</b> <span style="float: right;"><b>59.00 €</b></span></p>
	<p><b>Plug-in power supply unit 12 V / 670 mA</b>, high quality model, GS-certified, suitable for handy measuring instrument of HM-series, energy saving switch mode power supply unit with low no-load current, wide input voltage range 100 ... 240 V AC, 1.7m connection cable with DC plug 5.5 / 2.1 mm, compact design 86 x 62 x 30 mm, RoHS conformance</p>
	<p><b>NG-12V-HQ</b> <span style="float: right;"><b>17.20 €</b></span></p>
	<p><b>Switching module for handy measuring instrument</b>, suitable for all instruments of the series HM with alarm functionality, adjustment of trigger levels is done on the instrument with the MIN/MAX value, the control of switching module is done through the serial interface, alternative alarm or regulation output, switching mode Normally open (NO) or Normally closed (NC), voltage supply 230 V, switched output plug point 230 V</p>
	<p><b>HM-AM3000</b> <span style="float: right;"><b>91.00 €</b></span></p>
	<p><b>Instrument protection bag of foam leather</b>, robustly built, with window cut-out for display and keyboard, one round punched hole and another rectangular punched hole for sensor connections, suitable for HM610, HM630, HM691</p>
	<p><b>HM-ST-R1</b> <span style="float: right;"><b>19.50 €</b></span></p>
	<p><b>System carry case</b>, for optimum protection of the measuring instrument, matching as per size for one or two instrument of HM-series and accessories, with foam material packing in the base with moulded pockets, supplied with bubble packing cover</p>
	<p><b>ZUB-KOF-HM1 (275 x 229 x 83 mm)</b> <span style="float: right;"><b>12.55 €</b></span></p>
	<p><b>ZUB-KOF-HM2 (394 x 294 x 106 mm)</b> <span style="float: right;"><b>26.75 €</b></span></p>
	<p><b>ZUB-KOF-HM3 (450 x 360 x 123 mm)</b> <span style="float: right;"><b>33.10 €</b></span></p>

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