913 pH/DO Meter, laboratory version

2.913.0220

Portable two-channel measuring instrument for measuring pH/mV and for measuring the amount of dissolved oxygen in water. You will be optimally equipped for measurements in the field and in the laboratory with this battery-operated measuring instrument with a stand plate.

- Measuring instrument with built-in battery pack and two galvanically isolated measuring inputs.
- Analog pH measuring input for standard pH electrodes
- Digital pH measuring input for the intelligent pH electrodes or O2 Lumitrode
- Robust, water-tight, and dust-tight housing (IP67) for tough outdoor and laboratory use
- LCD color display with background illumination making results easy to read
- USB interface for simple data export to PC or printer
- Large internal memory (10,000 data sets)
- Pin-protected User mode and Expert mode, prevents unwanted parameter changes
- GLP-compliant printout and data export with User ID and timestamp
- With stand plate and electrode holder

Below, the accessories are grouped into Scope of delivery and Optional accessories.
Please keep this printout at hand for ordering replacement material.
These lists may be subject to change.

Scope of delivery 2.913.0220

Qt.	Order no.	Description
1 PCS	1.913.0020	pH/DO Meter

The 913 pH/DO Meter offers two measuring inputs for determining the pH value and dissolved oxygen in water.

- Portable meter with built-in battery pack and two galvanically isolated measuring inputs.
- Analog pH measuring input for standard pH electrodes
- Digital measuring input for O2 measurement using O_2 Lumitrode or intelligent pH electrodes
- Robust, water-tight, and dust-tight housing (IP67) for tough outdoor and laboratory use
- LCD color display with background illumination making results easy to read
- USB interface for simple data export to PC or printer
- Large internal memory (10,000 data sets)
- Pin-protected User mode and Expert mode, prevents unwanted parameter changes
- GLP-compliant printout and data export with User ID and timestamp

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1 PCS	6.2001.130	Stand plate for 912/913/914

Stand plate for converting a mobile 912/913/914 pH/Conductometer into a laboratory meter.

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1 PCS	6.2008.060	Holder for electrode storage vessel

Practical holder for fastening the electrode storage vessels to the 912, 913 or 914 pH/Conductometers.

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1 PCS 6.2050.010 Carrying strap for 912/913/914

Carrying strap for 912/913/914 meters

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1 PCS 6.2151.100 Adapter USB MINI (OTG) - USB A

For connecting USB instruments.

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1 PCS 6.2151.110 Metrohm USB Mini B cable (OTG) - USB A, 1.8 m

For connecting USB instruments.

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1 PCS 6.2166.100 USB power supply unit 5.25 V / 1.53 A

USB power supply unit for 912 / 913 / 914

Efficiency Level VI

Optional accessories

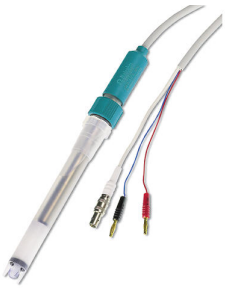
Order no.	Description
2.142.0100	Custom Q3X thermal printer Compact printer with USB interface for • 900 Touch Control • 915 KF Ti-Touch • 916 Ti-Touch • 917 Coulometer • 877 / 848 Titrino plus • 865 / 876 Dosimat plus • 91X Meter (cable 6.2151.140) • Eco Dosimat / Titrator • 862 Compact Titrosampler • 870 KF Titrino plus • 899 Coulometer Paper width 60 mm (40 characters). Including 6.2151.120 USB cable.
2.854.0010	854 iConnect The 854 iConnect – Electrode cable and measuring amplifier for intelligent "iTrodes" electrodes (cable length 150 cm).
6.00226.600	Spearhead electrode with Pt1000 Maintenance-free combined pH electrode (gel electrolyte) for piercing measurements of all types (e.g., with cheese, meat, dough) with integrated Pt1000 temperature sensor. The electrode is stored in saturated potassium chloride solution c(KCl) = sat. (6.2308.000) and is not suitable for low-ion solutions. The ageing indicator gives early indication of when the electrode needs to be replaced.

6.0224.100 Biotrode

Combined pH electrode for measurements in very small sample volumes (>50 uL) and biological samples.

Idrolyte (6.2308.040) is used as reference electrolyte and storage solution.

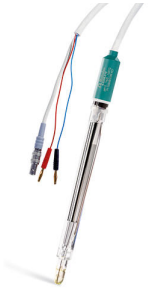
6.0228.000 Solitrode with Pt1000 (fixed cable 1.2 m)



Combined pH electrode with integrated Pt1000 temperature sensor and fixed cable (1.2 m). This electrode is suitable for routine pH measurements in solutions that do not contain precipitates, proteins, or sulfides. This electrode is mechanically resistant thanks to the robust /unbreakable plastic shaft made of polypropylene and impact protection for the glass membrane.

Reference electrolyte: c(KCl) = 3 mol/L, storage in storage solution.

6.0258.010 Unitrode with Pt1000 (fixed cable 1.2 m, 2 mm)



Combined pH electrode with integrated Pt1000 temperature sensor and fixed cable (1.2 m, diameter banana plug 2 mm). This electrode is particularly suitable

- for pH measurements and titrations in difficult, viscous, or alkaline samples
- at elevated temperatures
- for long-term measurements

The fixed ground-joint diaphragm is insensitive to contamination.

Reference electrolyte: c(KCl) = 3 mol/L, storage in storage solution.
Alternatively: reference electrolyte for measurements at T>80°C: Idrolyte, storage in Idrolyte.

6.0278.300 iUnitrode with Pt1000

Intelligent, combined pH electrode with integrated memory chip for storing sensor data and Pt1000 temperature sensor. This electrode is particularly suitable:

- for pH measurements and titrations in difficult, viscous, or alkaline samples
- at elevated temperatures
- for long-term measurements

The fixed ground-joint diaphragm is insensitive to contamination.

Reference electrolyte: c(KCl) = 3 mol/L, storage in storage solution.
Alternatively: reference electrolyte for measurements at T>80°C: Idrolyte, storage in Idrolyte.
iTrodes can be connected to Titrando, Ti-Touch or 913/914 meters.

6.1116.000 O2 Lumitrode

The optical sensor for measuring dissolved oxygen (DO) can be used with a 913 pH/DO meter or with a 914 pH/DO conductometer. The measuring principle of the sensor is based on luminescence quenching. The space-saving and maintenance-free sensor is suitable for DO measurement, for example in:

- Water quality control
- Wastewater industry
- Beverage production
- Fish farming

This sensor is supplied with a calibration vessel.

Where necessary, it is easy to replace the measurement cap (O_2 cap) that contains the oxygen-intensive luminophore.

6.2104.600 Electrode cable for plug in head U/plug F, 2x2 mm B, 1m

For connecting electrodes with Metrohm plug-in head U to Metrohm instruments (socket F).

6.2151.140 Y cable USB A St - USB B St - Mini B St

Y cable for connection of a USB printer to the pH/Conductometers 912 / 913 / 914. This cable allows a printer and the power supply unit to be connected to the measuring instrument at the same time.

6.2166.500 12 V USB adapter for 912 / 913 / 914 pH/Conductometer

12 V USB adapter for 912 / 913 / 914 pH/Conductometer.

6.2307.230 Buffer solutions pH 4, 7 and 9

Mixed buffer solutions pH 4.00/7.00/9.00 (25 °C) in single use sachets, colourless, box of 3 x 10 x 30 mL

6.2313.000 Electrolyte 3 mol/L KCl (1000 mL)

Electrolyte solution c(KCl) = 3 mol/L (for Ag/AgCl reference systems)

6.2325.000 pHit kit

Maintenance kit for pH electrodes

The kit contains:

- 50 mL cleaning solution
- 50 mL 3M KCl solution
- 50 mL storage solution
- 2 Storage vessels
- Instructions for use

6.2329.000 Oxygen standard 0%

Oxygen standard for 0% calibration of the O_2-Lumitrode. Contains 5 sachets of 30 mL each.

6.5623.000 O2 Lumitrode replacement set

Replacement set for the O_2 Lumitrode. The set contains a certified O_2 cap as replacement, a calibration vessel, and 5 x 30 mL oxygen standard, 0%.