



Fully automatic measurement of waters with low conductivity in accordance with USP 645

MATi 14

Automated system for the determination of conductivity in sterile waters in accordance with USP 645. Up to 28 samples can be placed on the rack and processed within one series. The sample is transferred from the sample beaker into the external titration cell and analyzed completely automatically in accordance with the 3-stage USP Standard procedure. The system is controlled by the OMNIS software.

The thermostat for controlling the temperature of the external titration vessel must be ordered separately.

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 MATi 14

Qt.	Order no.	Description
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Robotic USB Sample Processor XL for the automatic processing of routine samples in series with large quantities and for complex sample preparation or parallel runs. Up to four pumps (membrane or peristaltic) and three dosing devices for Liquid Handling tasks can be connected.

Because of the multitude of application variants, rack, stirrer, titration head, robotic arm, Swing Head, and sample vessels must be tailored to the application and ordered separately.

The control is "stand alone" using Touch Control. The following software products can be selected for the PC control: tiamo™ titration software, MagIC Net chromatography software, viva voltammetry software, or OMNIS.



Additional equipment for Robotic Sample Processors XL without titration or transfer heads.



The 800 Dosino is a drive with write/read hardware for intelligent Dosing Units. With fixed cable (length 150 cm).



1 PCS

2.802.0040

802 Stirrer for 804 Ti Stand

Rod stirrer including 6.1909.010 stirring propeller.



1 PCS

2.823.0020

823 Membrane Pump Unit «aspirate»

Membrane pump for direct connection to Sample Processors. The «Aspiration» version contains numerous accessories for aspirating off solutions.



1 PCS

2.856.0010

856 Conductivity Module

Conductivity measuring module as supplement to an existing Titrand system or "stand-alone" in combination with a 900 Touch Control. With the 856 Conductivity Module, not only conductivity and temperature can be determined, but also TDS and salinity. It supports state-of-the-art conductivity measuring cells, i.e. 5-ring measuring cells.

The Conductivity Module is equipped with two USB interfaces for connecting printers, barcode readers, or sample changers and four MSB interfaces for stirrers or Dosinos.

For use with OMNIS Software, tiemo software, or Touch Control unit. Compliance with GMP/GLP and FDA regulations such as 21 CFR Part 11, if required.



Module for pH/ion measurement as supplement to a Titrando or "stand-alone" in combination with a 900 Touch Control.

In addition to measurements of pH, temperature, mV, I_{pol}, U_{pol} and concentration, the pH Module can perform standard additions (manual, dos, autos) and Liquid Handling (add, prep, empty). It enables the use of both conventional and intelligent sensors for measuring. Also integrated in the software is an automatic GLP-compliant pH electrode test.

The pH Module has two USB interfaces for connecting printers, barcode readers or sample changers and four MSB interfaces for stirrers or Dosinos (for the addition of auxiliary solutions or for standard addition). For use with OMNIS Software, tiamo software, or Touch Control unit. Compliance with GMP/GLP and FDA regulations such as 21 CFR Part 11, if required.



Combined pH electrode with integrated Pt1000 temperature sensor for pH measurements/titrations in ion-deficient aqueous media (e.g., drinking water, process water). This electrode shows a very short response time in these samples.

The fixed ground-joint diaphragm is insensitive to contamination. When $c(\text{KCl}) = 3 \text{ mol/L}$ is used as bridge electrolyte, storage in storage solution is recommended.

The bridge electrolyte can be easily replaced with a chloride-free electrolyte (e.g., potassium nitrate $c(\text{KNO}_3) = 1 \text{ mol/L}$ (6.2310.010)), storage in the used bridge electrolyte.



Conductivity measuring cell made of stainless steel with cell constant $c = 0.1 \text{ cm}^{-1}$ (guide value), with integrated Pt1000 temperature sensor and fixed cable (1.2 m) for connecting to an 856 Conductivity Module.

This sensor is suitable for measurements of low conductivities ($0 \text{ } \mu\text{S/cm}$ to $300 \text{ } \mu\text{S/cm}$) in e.g., deion. water or for measurements in accordance with USP 645>.



1 PCS

6.1418.250

Titration vessel with thermostat jacket / 50-150 mL



28 PCS

6.1432.320

Sample beaker, clear glass, 250 mL, 1 piece

Sample beaker, clear glass, 250 mL, suitable for sample racks:
6.2041.310, 6.2041.400, 6.2041.430, 6.2041.510, 6.2041.820,
6.2068.020 and 6.2068.030, 1 piece



1 PCS

6.1458.040

Titration Head, 3 x SGJ 14

Titration head for 120 mL beakers. With 3 openings SGJ 14 and 4 openings 6.4 mm, 2 dosing tips included. Suitable for rinsing and aspiration equipment.



1 PCS

6.1462.070

Robotic arm with holder for titration head, right swinging

Titration head holder to 786 Swing Head



1 PCS

6.1462.260

Robotic arm with holder for titration head, left
swinging, external

Titration head holder for 786 Swing Head with possibility of swinging to
external positions



2 PCS

6.1805.120

FEP tubing / M6 / 100 cm

With light and kink protection



1 PCS

6.1909.010

Stirring propeller / 87 mm

Propeller stirrer, length from lower edge of SGJ: 96 mm. For use with
beakers with 722, 802 Rod Stirrer



28 PCS

6.2037.060

Lid for 250 mL sample beaker

Lid for 250 mL sample vessels in use with the Dis-Cover robotic arm on
the Sample Processor.



1 PCS

6.2041.820

Sample rack, 28 x 250 mL, (PVC)

Sample rack for 815 Robotic USB Sample Processor XL, 855 Robotic Titrosampler "Basic" suitable for 28 sample beakers. The following sample beakers can be used: 6.14332.320, 6.1432.323, 6.1453.220, 6.1453.250.

Plastic: Polyvinyl chloride (PVC)



1 PCS

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).



2 PCS

6.2151.000

Cable USB A – mini-DIN 8-pin

Controller cable



1 PCS

6.2307.100

Buffer solution pH 4 (500 mL)

Ready-to-use buffer solution pH = 4 (25 °C), colored, with closure seal



1 PCS

6.2307.110

Buffer solution pH 7 (500 mL)

Ready-to-use buffer solution pH = 7 (25 °C), colored, with closure seal



1 PCS

6.2324.010

Conductivity standard 100 μ S/cm 250 mL

Conductivity standard for calibration of conductivity measuring cells with cell constant = 0.1/cm.



1 PCS

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



1 PCS

6.3032.120

807 Dosing Unit 2 mL

807 Dosing Unit with integrated data chip with 2 mL glass cylinder and light protection, mountable to a reagent bottle with ISO/DIN GL 45 glass thread. FEP tubing connection, antidiffusion tip.



1 PCS

6.3032.250

807 Dosing Unit 50 mL

807 Dosing Unit with integrated data chip with 50 mL glass cylinder and light protection, mountable to a reagent bottle with ISO/DIN GL 45 glass thread. FEP tubing connection, antidiffusion tip.



1 PCS

6.9914.158

Dis-Cover titration head

Titration head to 814 USB Sample Processor or for use in robotic arms with holder for titration head.

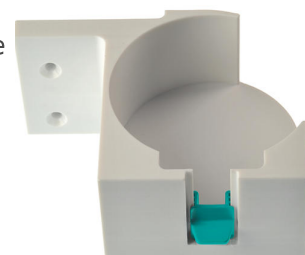


1 PCS

6.9920.261

Holder for thermostatable titration vessel

Holder for mounting a thermostatable titration vessel in the vicinity of the tower



1 PCS

6.2058.050

Fastening plate for deflector and holder for collection container

The fastening plate is mounted at the side of the Sample Processor tower and allows the mounting of a deflector for the automatic pulling off the used tools.



License-based PC program for controlling complex OMNIS analysis systems.

- Sample-oriented operating procedures with numerous templates
- Graphical method editor with numerous templates
- Clearly organized and professional sample lists
- Management of instruments, work systems, sensors, solutions
- Dialog languages: German, English, Chinese



Enables stand-alone operation of the OMNIS Software on a Windows™ computer.

Features:

- The license already includes two OMNIS instrument licenses.
- Must be activated via the Metrohm licensing portal.



1 instrument license for operating one additional OMNIS instrument in OMNIS Stand-Alone.

The following instruments are supported:

- OMNIS instruments
- Metrohm USB devices
- RS-232 instruments (e.g., balance)



Optional accessories

Order no.	Description
6.06003.010	OMNIS Stand-Alone license Enables stand-alone operation of the OMNIS software on a Windows™ computer. Features: • The license already includes one OMNIS instrument license. • Must be activated via the Metrohm licensing portal.

