



# Automated pipetting and titration system for up to 100 samples

MATi 08

Automated system for the performance of potentiometric titrations on acids and bases. Up to 100 samples can be placed on the sample rack. The sample is pipetted out of the beaker into the external titration vessel, after which a completely automatic determination is carried out. The volume to be pipetted can vary between 0.5 and 9.0 mL. After the titration, the external vessel is cleaned thoroughly using the membrane pumps built into the Sample Processor. The control of this completely automatic analysis system takes place using the proven OMNIS software.

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 08

| Qt. | Order no. | Description |
|-----|-----------|-------------|
|-----|-----------|-------------|

1 PCS

2.786.0040

786 Swing Head

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



2 PCS

2.800.0010

800 Dosino

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

2.804.0010

804 Ti Stand without stand rod

Titration stand and controller for 802 Stirrer. The 804 Ti Stand together with the optional 802 Stirrer provides an alternative to the magnetic stirrer. Without stand.



Robotic USB Sample Processor XL with one workstation and two built-in membrane pumps for the automatic processing of routine samples in series with large quantities and for complex sample preparation or parallel runs. Up to 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: tiemo™ titration software, MagIC Net chromatography software, viva voltammetry software, or OMNIS.



The 854 iConnect – Electrode cable and measuring amplifier for intelligent "iTrodes" electrodes (cable length 150 cm).



High-end titrator for potentiometric titration with one measuring interface for use with Dosino dosing systems.

- up to four dosing systems of the 800 Dosino type
- dynamic (DET), monotonic (MET), and endpoint titration (SET)
- Measurement with ion-selective electrodes (MEAS CONC)
- Dosing functions with monitoring, Liquid Handling
- four MSB connectors for additional stirrers or dosing systems
- "iTrode" intelligent electrodes
- USB connector
- 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



Intelligent, combined pH electrode with integrated memory chip for storing of sensor data. This electrode is suitable for aqueous acid/base titrations.

The fixed ground-joint diaphragm is insensitive to contamination.  
Reference electrolyte:  $c(\text{KCl}) = 3 \text{ mol/L}$ , storage in storage solution.  
iTrodes can be connected to Titrande, Ti-Touch or 913/914 meters.



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

OMNIS  
THE NEW LEVEL OF PERFORMANCE

1 PCS

6.06003.012

OMNIS stand-alone license with 2 instrument licenses

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.
- Not transferable to another computer.



1 PCS

6.1414.080

Titration vessel lid automation

Titration vessel lid for external use with the 6.1415.250 titration vessel base in automation.



1 PCS

6.1415.250

Titration vessel / 50-150 mL



100 PCS

6.1432.210

Sample beaker, clear glass, 75 mL, 1 piece

Sample beaker, clear glass, 75 mL, suitable for sample racks: 6.2041.340, 6.2041.350, 6.2041.800 and 6.2041.900, 1 piece



1 PCS

6.1462.040

Robotic arm with transfer head for 786 Swing Head,  
right swinging

Transfer robotic arm for liquid handling purposes



1 PCS

6.1543.210

3-way stopper with antidiffusion valve

Stopper with three buret tips for connecting 3 x M6 tubing



1 PCS

6.1562.120

Pipetting tubing / 10 mL with holder for sample  
processors

Pipetting tubing for liquid transfer.



2 PCS

6.1608.023

Amber glass bottle / 1000 mL / GL 45

For Exchange Units. Bottle for auxiliary solutions.



1 PCS

6.1823.010

Guide shaft to pipetting tubing

For assembly in the transfer robotic arm on the Robotic Sample Processors



1 PCS

6.2001.070

Support stand for Sample Processors

Support stand for Sample Processors, for external titrations and dilutions (IC)



1 PCS

6.2041.800

Sample rack, 100 x 75 mL, (PVC)

Sample rack for 815 Robotic USB Sample Processor XL, 855 Robotic Titrosampler "Basic" suitable for 100 sample beakers. The following sample beakers can be used: 6.1432.210, 6.1459.400.

Plastic: Polyvinyl chloride (PVC)



1 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



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1 PCS

6.2307.110

Buffer solution pH 7 (500 mL)

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



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1 PCS

6.2307.120

Buffer solution pH 9 (500 mL)

Ready-to-use buffer solution pH = 9 (25 °C), colorless, with closure seal



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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

6.2730.080

Screw nipple

PCTFE. Used with 6.5613.000 ECO titration equipment with 722 Stirrer



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1 PCS

6.2739.000

Wrench

For tightening connectors



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1 PCS

6.2751.120

Safety shield Transfer set to 789/815

Safety shield for Sample Processors with 786 Swing Head and transfer set.



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2 PCS

6.3032.210

807 Dosing Unit 10 mL

807 Dosing Unit with integrated data chip with 10 mL glass cylinder and light protection, mountable to a reagent bottle with ISO/DIN GL 45 glass thread. FEP tubing connection, antidiffusion tip.



## Optional accessories

| Order no.  | Description  |
|------------|--|
| 6.0277.300 | <p>iAquatrode Plus with Pt1000</p> <p>Intelligent, combined pH electrode with integrated memory chip for storing sensor data and with 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.</p> <p>The fixed ground-joint diaphragm is insensitive to contamination. When <math>c(\text{KCl}) = 3 \text{ mol/L}</math> is used as bridge electrolyte, storage in storage solution is recommended.</p> <p>The bridge electrolyte can be easily replaced with a chloride-free electrolyte (e.g., potassium nitrate <math>c(\text{KNO}_3) = 1 \text{ mol/L}</math> (6.2310.010)).</p> <p>Storage in the used bridge electrolyte.</p> <p>iTrodes can be connected to Titrando, Ti-Touch, or 913/914 meters.</p> |
| 6.0278.300 | <p>iUnitrode with Pt1000</p> <p>Intelligent, combined pH electrode with integrated memory chip for storing sensor data and Pt1000 temperature sensor. This electrode is particularly suitable:</p> <ul style="list-style-type: none"><li>• for pH measurements and titrations in difficult, viscous, or alkaline samples</li><li>• at elevated temperatures</li><li>• for long-term measurements</li></ul> <p>The fixed ground-joint diaphragm is insensitive to contamination.</p> <p>Reference electrolyte: <math>c(\text{KCl}) = 3 \text{ mol/L}</math>, storage in storage solution. Alternatively: reference electrolyte for measurements at <math>T &gt; 80^\circ\text{C}</math>: Idrolyte, storage in Idrolyte.</p> <p>iTrodes can be connected to Titrando, Ti-Touch or 913/914 meters.</p>  |



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