



Automated TAN/TBN analysis

MATi 02

PC-controlled, fully automatic analysis system for the direct determination of TAN or TBN values in mineral oil products in series of up to 59 samples. The analysis is carried out in accordance with ASTM standards D664 and D2896. The system is noteworthy for its special resistance to the solvents used in this application. The data acquisition and the complete control of the system takes place via 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 02

Qt.	Order no.	Description
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1 PCS

6.9921.223

854 iConnect / 3 m

The 854 iConnect - Electrode cable and measuring amplifier for intelligent "iTrodes" electrodes. This version has a 3 m long cable and is therefore intended for use in automated systems.



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

2.802.0020

802 Stirrer for sample changer

Rod stirrer for sample changer and Sample Processor.

With 104 mm 6.1909.020 stirring propeller and permanently installed cable.



Robotic USB Sample Processor XL with one workstation for the automatic processing of routine samples in series with large quantities and for complex sample preparation or parallel runs. Up to two 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.



The 843 Pump Station (peristaltic) has two built-in peristaltic pumps. These can be controlled directly from the Sample Processors via pump commands. The rinse/aspirate version is provided with all the accessories needed for automatically emptying the titration beaker and rinsing the titration equipment. The accessories are intended for use with the 814 and 815 Sample Processors.



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 sensor data for all non-aqueous acid/base titrations.

The glass membrane is optimized for poorly conducting solutions, and thanks to the flexible ground-joint diaphragm, the electrode is well suited for contaminated samples. This electrode can be used with non-aqueous reference electrolytes (lithium chloride or tetraethylammonium bromide). Storage in the respective reference electrolyte.

iTodes can be connected to Titrando, Ti-Touch, or 913/914 meters.



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

6.1459.300

Sample beaker, plastic (PP), 120 mL, 250 pieces

Sample beaker, plastic (polypropylene, PP), 120 mL, suitable for sample racks: 6.2041.470, 6.2041.840, 6.2041.850, 6.2068.010, 6.2068.020, 6.2068.030, and 6.9920.141, 250 pieces



1 PCS

6.1462.060

Robotic arm with holder for titration head, left swinging

Titration head holder to 786 Swing Head



1 PCS

6.1608.023

Amber glass bottle / 1000 mL / GL 45

For Exchange Units. Bottle for auxiliary solutions.



1 PCS

6.1608.070

Eluent bottle / 2 L / GL 45



2 PCS 6.1805.030 FEP tubing / M6 / 150 cm
With light and kink protection



1 PCS 6.1826.160 Viton pump tubing
For peristaltic pumps.



1 PCS 6.1909.050 Stirring propeller / 102 mm
Propeller for 802 Stirrer when this is used with sample racks for 120 mL beakers (6.1459.300)



1 PCS 6.2041.850 Sample rack, 59 x 120 mL, (PP)

Sample rack for 815 Robotic USB Sample Processor XL, 855 Robotic Titrosampler "Basic", suitable for 59 sample beakers. The following sample beakers can be used: 6.1459.300, 6.1459.307.

Plastic: Polyvinyl chloride (PVC)



1 PCS

6.2151.000

Cable USB A – mini-DIN 8-pin

Controller cable



1 PCS

6.2320.000

TEABr 0.4 mol/L in ethylene glycol (250 mL)

Electrolyte solution TEABr (tetraethylammonium bromide in ethylene glycol), $c(\text{TEABr}) = 0.4 \text{ mol/L}$



1 PCS

6.2711.070

Drip pan for 789/815/855

Drip pan for 789, 815, 855 Robotic Sample Processors XL



1 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.



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.



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.



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.

