



# Pharm Titrande

2.907.1020

The Pharm Titrande is based on the 907 Titrando and offers a complete package for the most common analyses of pharmaceutical products. Apart from the titration software tiamo™ full and determination methods described in detail, you will also receive comprehensive accessories for your titrations.

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 2.907.1020

Qt.	Order no.	Description
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2 PCS

1.800.0030

800 Dosino (cable length 1.5 m)

Drive with write/read hardware for intelligent dosing units. With permanently attached cable (length 1.5 m).



1 PCS

1.802.0010

802 Rod Stirrer for 727 Ti Stand

Rod stirrer with separate 6.2137.000 Speed controller and 6.1909.010 Propeller stirrer.



1 PCS

1.804.0010

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.



2 PCS

1.854.0010

854 iConnect

854 iConnect - electrode cable and measuring amplifier for intelligent electrodes «iTrodes».



High-end titrator for use with intelligent electrodes – iTrodes – with

- up to four dosing systems of the 800 Dosino type
- dynamic (DET), monotonic (MET) and endpoint titration (SET), enzymatic and pH-STAT titrations (STAT), Karl Fischer titration (KFT)
- Measurement with ion-selective electrodes (MEAS CONC)
- Dosing functions with monitoring (DOS), Liquid Handling
- four MSB connectors
- two galvanically isolated measuring interfaces
- USB connector



Intelligent, combined silver ring electrode with a pH glass membrane as reference electrode and integrated memory chip for storing sensor data. This maintenance-free electrode is suitable for precipitation titrations when the pH value remains constant (titrant silver nitrate), for example of:

- Chloride, Bromide, Iodide
- Sulfides
- Hydrogen sulfide
- Mercaptans
- Cyanides



This electrode is stored in distilled water.

Depending on the application, we recommend using an Ag Titrode with  $\text{Ag}_2\text{S}$  coating, which can be ordered accordingly.

iTrodes can be used on Titrande, Ti-Touch or 913/914 meters.

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.

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.

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



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 Titrand, Ti-Touch, or 913/914 meters.



Combined platinum ring electrode with a pH glass membrane as reference electrode and integrated memory chip for storing sensor data. This maintenance-free electrode is suitable for redox titrations when the pH value remains constant, e.g.:

- Iodometry
- Chromatometry
- Cerimetry
- Permanganometry

This electrode is stored in distilled water.

iTodes can be used on Titrand, Ti-Touch oder 913/914 meters.



1 PCS

6.1115.000

Optrode

Optical sensor for photometric titrations offering 8 different wavelengths. The wavelength can be switched using the software (tiamo 2.5 or higher) or with a magnet. The glass shaft is completely solvent-resistant and easy to clean. For example, this space-saving sensor is suitable for:

- Non-aqueous titrations in accordance with USP or EP
- Determinations of carboxyl end groups
- TAN/TBN in accordance with ASTM D974
- Sulfate determination
- Fe, Al, Ca in cement
- Water hardness
- Chondroitin sulfate in accordance with USP

The sensor is not suitable for determinations of concentrations via measurement of color intensity (colorimetry).



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1 PCS

6.1546.030

Extractor rod

For PTFE piston of dosing unit



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2 PCS

6.1608.023

Amber glass bottle / 1000 mL / GL 45

For Exchange Units. Bottle for auxiliary solutions.



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



1 PCS

6.2001.060

Support stand without support rod

To attach an 801, 804, 803 Stirrer to a Titrande, Titrimo plus, Dosimat plus or 856 and 867.



1 PCS

6.2013.010

Clamping ring

For support rods with a diameter of 10 mm.



1 PCS

6.2016.070

Support rod / 400 mm



1 PCS

6.2021.020

Electrode holder

Electrode holder for 4 electrodes and 2 buret tips



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2 PCS

6.2043.005

Holding clip for bottles

Holding spring for reagent bottles in exchange units.



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1 PCS

6.2104.020

Electrode cable / 1 m / F

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



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1 PCS

6.2151.000

Cable USB A – mini-DIN 8-pin

Controller cable



1 PCS

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



1 PCS

6.2308.050

Electrolyte 3 mol/L KCl (50 mL)

Electrolyte solution  $c(\text{KCl}) = 3 \text{ mol/L}$  (for Ag/AgCl reference systems)



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

6.2323.000

Storage solution

Storage solution for all combined pH glass electrodes with reference electrolyte  $c(\text{KCl}) = 3 \text{ mol/L}$





1 PCS

6.2621.070

5 mm hex key for IC Sample Processors



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1 PCS

6.2621.130

Hexagon key 2 mm

2 mm.



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2 PCS

6.3032.220

807 Dosing Unit 20 mL

807 Dosing Unit with integrated data chip with 20 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
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6.2103.130 Adapter red 2 mm plug / 4 mm socket  
For connecting plug B (4 mm) to 2 mm socket.



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6.2103.140 Adapter black 2 mm plug / B socket 4 mm  
For connecting plug B (4 mm) to 2 mm socket.

