IONIC Titrator Salt

2.1040.2010

As powerful as a computer! With its 10-inch display and its large internal database, the IONIC Titrator provides full convenience with respect to user-friendliness and data handling. Operate it like your mobile telephone or tablet and save thousands of determinations directly to the instrument.
Thanks to the installed mobile communications module, you can upload your determination data directly into Metrohm Data Service, the new cloud data storage from Metrohm – without integration in your local network. This means that the data is available at all times and everywhere.

– pH, voltage, and temperature measurement
– Endpoint titration
– Monotonic equivalence point titration
– Dynamic equivalence point titration
– Over 30 method templates included for the most common potentiometric titrations in the areas of aqueous titration, nonaqueous titration, and redox and surfactant titrations
– Titration/dosing with up to 4 Dosino Modules (250,000 dosing steps)
– Report output on compact or network printers

Optional titration modes and additional functional enhancements:

– Volumetric Karl Fischer titration
– Compliance with statutory regulations: 21 CFR Part 11; EudraLex, Volume 4, Annex 11
– Option for second titration stand with magnetic or rod stirrer
– Use of up to three analog or digital electrodes

Version with one digital measuring input and one magnetic stirrer (left). Complete package for argentometric titration, including Dosino Module, 10 mL dosing unit, and dAg Titrode.

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 2.1040.2010

Order Number	Description	Quantity
6.1903.020	**Stirring bar / 16 mm** Stirring Bar with magnetic core, PTFE coated, length 16 mm	1 PCS
6.1903.030	**Stirring bar / 25 mm** Stirring bar with magnetic core, PTFE covering, length 25 mm.	1 PCS
6.1546.030	**Piston tongs** For pistons for 807 Dosing Units or cylinder units OMNIS.	1 PCS

6.00404.300

dAg Titrode 1 PCS

Digital, combined silver ring electrode for OMNIS with a pH glass membrane as reference electrode.
This maintenance-free electrode is suitable for precipitation titrations where the pH value remains constant (titrant silver nitrate), e.g. of

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

This electrode is stored in distilled water.
dTrodes can be used on OMNIS Titrators.

6.2016.050

Support rod / 300 mm 1 PCS

6.2013.010

Clamping ring 1 PCS

For support rods with a diameter of 10 mm.

6.02005.000

OMNIS electrode holder 1 PCS

Electrode holder for one OMNIS titration system.

6.2709.070

Guiding sleeve 1 PCS

For fixation of buret and dosing tips in titration heads and electrode holders

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6.3032.210

807 Dosing Unit 10 mL 1 PCS

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.

1.1042.0010

Dosino Module (cable 0.75 m) 1 PCS

The Dosino Module is a high-precision drive for the space-saving extension of an OMNIS titration system to include an additional intelligent buret for titrations, dosings, and other liquid handling tasks. With permanently attached cable (length 0.75 m).

1.1040.0120

IONIC Titrator with 1 magnetic stirrer 1 PCS

As powerful as a computer! With its 10-inch display and its large internal database, the IONIC Titrator provides full convenience with respect to user-friendliness and data handling.

6.02104.320

Electrode cable for plug-in head Q / plug P 0.75 m 1 PCS

Cable for connecting a digital electrode (plug-in head Q) to a digital measuring module or measuring interface.

6.02164.020

Power supply unit 100–240 V / 24 V DC 5 A 1 PCS

Power supply unit for IONIC Titrator

6.6083.010

USB flash drive for the IONIC Titrator 1 PCS

This USB flash drive contains example methods and other documents.

6.06009.100

Function license for IONIC potentiometric titrator 1 PCS

Function license for one potentiometric IONIC Titrator. This contains the following modes:
– MEAS U/T/pH
– Calibration (Cal)
– Liquid Handling
– Endpoint titration without conditioning (SET)
– Monotonic equivalence point titration (MET)
– Dynamic equivalence point titration (DET)

6.02712.010

Protective cover for IONIC Titrator display 1 PCS

The protective cover protects the IONIC Titrator display against unintended splashes.

6.06009.028

Function license IONIC magnetic stirrer (1x) 1 PCS

Function license for the operation of the magnetic stirrers. One function license enables the operation of one magnetic stirrer. If two magnetic stirrers are to be operated with the IONIC Titrator, then two licenses must be activated.

Optional accessories

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.

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.

6.3032.150
807 Dosing Unit 5 mL

807 Dosing Unit with integrated data chip with 5 mL glass cylinder and light protection, mountable to a reagent bottle with ISO/DIN GL 45 glass thread. FEP tubing connection, antidiffusion tip.

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.

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.

6.00404.300
dAg Titrode

Digital, combined silver ring electrode for OMNIS with a pH glass membrane as reference electrode.
This maintenance-free electrode is suitable for precipitation titrations where the pH value remains constant (titrant silver nitrate), e.g. of

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

This electrode is stored in distilled water.
dTrodes can be used on OMNIS Titrators.

6.00404.300S

dAg Titrode with Ag2S-coating

Digital, combined silver ring electrode for OMNIS with a pH glass membrane as reference electrode. The silver ring is coated with sulfide (Ag_2S) to increase the sensitivity and result in a better limit of determination.
The maintenance-free electrode is suitable for precipitation titration with a constant pH value (titrant: silver nitrate), e.g.
– Chloride, Bromide, Iodide
– Sulfide
– Dihydrogen sulfide
– Mercaptane
– Cyanide

This electrode is stored in deionized water.
dTrodes can only be used with OMNIS titrators and titration modules with digital measuring interface.

6.00402.300

dAg ring electrode

Digital, combined silver ring electrode for OMNIS with fixed ground-joint diaphragm.
This electrode is suitable for precipitation titrations where the pH value varies (titrant silver nitrate) of, e.g.

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

The fixed ground-joint diaphragm is insensitive to contamination. $c(KNO_3)$ = 1 mol/ L is used as reference electrolyte and for storage.
dTrodes can be used on OMNIS Titrators.

6.00402.300S

dAg ring electrode with Ag2S coating

Digital, combined silver ring electrode for OMNIS with fixed ground-joint diaphragm. The permanently fused-in silver ring is coated with sulfide (Ag_2S) for higher sensitivity and a better limit of detection.

This electrode is suitable for precipitation titrations where the pH value varies (titrant silver nitrate) of, e.g.:

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

The fixed ground-joint diaphragm is insensitive to contamination. $c(KNO_3)$ = 1 mol/ L is used as reference electrolyte and for storage.

dTrodes can be used on OMNIS Titrators.

6.02104.070

Electrode cable (temp.) plug P 0.75 m

Cable for connecting an analog temperature sensor (plug-in head G) to an analog measuring module or measuring interface.

6.02104.080

Electrode cable plug P, 0.75 m

Cable for connecting an analog electrode (plug-in head G) to an analog measuring module or measuring interface.

6.02104.320
Electrode cable for plug-in head Q / plug P 0.75 m

Cable for connecting a digital electrode (plug-in head Q) to a digital measuring module or measuring interface.

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.

2.143.0200
TX-900MH impact printer

Compact impact printer with USB and RS232 interface for
– 900 Touch Control (+)
– 915 KF Ti-Touch (+)
– 916 Ti-Touch (+)
– 917 Coulometer (+)
– 91X Meter (+)
  Eco Dosimat/Titrator (+)
– 877/848 Titrino plus (additional 6.2151.100 required)
– 865/876 Dosimat plus (additional 6.2151.100 required)
– 862 Compact Titrosampler (additional 6.2151.100 required)
– 870 KF Titrino plus (additional 6.2151.100 required)
– 899 Coulometer (additional 6.2151.100 required)

(+) Cable included in scope of delivery

6.06009.280
Function license IONIC Compliance/Regulation

Function license for the use of the compliance functionalities in connection with the IONIC Titrator.

6.02712.010
Protective cover for IONIC Titrator display

The protective cover protects the IONIC Titrator display against unintended splashes.

6.02061.010
Bottle holder for IONIC Titrator

Bottle holder for up to two 1 L supply bottles. The bottle holder can be positioned at either the rear or the side of the instrument.

6.05803.060
Retrofit set for magnetic stirrer assembly for IONIC

This retrofit set contains all of the components necessary for retrofitting the IONIC Titrator with an additional magnetic stirrer.

6.05803.080
Retrofit set for second titration stand of the IONIC Titrator

This retrofit set contains all of the components necessary for retrofitting the IONIC Titrator with a second titration stand.

6.05803.100
Upgrade kit Measuring Interface Analog

This upgrade kit contains all of the components needed for retrofitting an additional measuring interface analog.

6.05803.120
Upgrade kit measuring interface digital

This upgrade kit contains all of the components needed for retrofitting an additional measuring interface digital.