

# **OMNIS Basic Titrator without stirrer**

2.1001.0110

Innovative, modular potentiometric OMNIS Titrator for endpoint titration. Thanks to 3S Liquid Adapter technology, handling chemicals is safer than ever before. The titrator can be freely configured with measuring modules and cylinder units and can have a stirrer added as needed. If required, the range of functions of the OMNIS Basic Titrator can be extended with a corresponding software function license.

- Control via PC or local network
- Can be supplemented with magnetic stirrer and/or rod stirrer
- Various cylinder sizes available: 5, 10, 20 or 50 mL
- Connection option for up to four additional titration or dosing modules for additional applications or auxiliary solutions
- Liquid Adapter with 3S technology: Safe handling of chemicals, automatic transfer of the original reagent data from the manufacturer

Measuring modes and software options:

- Endpoint titration: "Basic" function license
- Endpoint and equivalence point titration (monotonic/dynamic): "Advanced" function license



Endpoint and equivalence point titration (monotonic/dynamic) with parallel titration: "Professional" function license

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 2.1001.0110

Qt.	Order no.	Description	
1 PCS	6.01600.010	OMNIS Liquid Adapter	
		ecting reagent bottles with 3S technology to an OMNIS Module or Dosing Module.	
1 PCS	6.01601.000	Bottle cap, multi-use	
		ap with 3S technology for connecting reagent bottles to , Titration Module or Dosing Module.	C Antesing
1 PCS	6.02004.010	Bottle holder	
	Bottle holder for C	OMNIS Titrator, Titration Module and Dosing Module.	
1 PCS	6.02005.010	Electrode Parking Station	
	Electrode Parking system.	Station for electrode storage on an OMNIS titration	
Metrohm AG		2 / 16	Metrohm



1 PCS 6.06001.900 Function license Basic

Function license "Basic" for one OMNIS Titrator



- Liquid Handling (LQH)
- MEAS U/T/pH
- MEAS CONC (direct measurement and standard addition)
- Calibration (Cal)
- Endpoint titration without conditioning (SET)
- Titration with OMNIS Titration Module or OMNIS Dosing Module
- Parallel dosing

1 PCS 6.1546.030 Extractor rod For PTFE piston of dosing unit

6.1608.020 Glass bottle / 1000 mL / GL 45

Bottle for auxiliary solutions.





1 PCS

# Optional accessories

Order no.	Description			
2.1002.0010	OMNIS Titration Module without stirrer Titration module for connection to an OMNIS Titrator for extending the system to include an additional buret for titration/dosing and up to two measuring modules (analog or digital). Can be supplemented with one magnetic stirrer or rod stirrer for use as separate titration stand. Freely selectable cylinder unit with 5, 10, 20 or 50 mL.			
2.1002.0110	OMNIS Titration Module with magnetic stirrer Titration module with magnetic stirrer for connection to an OMNIS Titrator for extending the system to include an additional titration stand, a buret for titration/dosing and up to two measuring modules (analog or digital). Freely selectable cylinder unit with 5, 10, 20 or 50 mL.			
2.1003.0010	OMNIS Dosing Module without stirrer			

Dosing module for connection to an OMNIS Titrator for extending the system to include an additional buret for titration/dosing. Can be supplemented with one magnetic stirrer or rod stirrer for use as separate titration stand. Freely selectable cylinder unit with 5, 10, 20 or 50 mL.

## 2.1003.0110 OMNIS Dosing Module with magnetic stirrer

Dosing module with magnetic stirrer for connection to an OMNIS Titrator for extending the system to include an additional titration stand and a buret for titration/dosing. Freely selectable cylinder unit with 5, 10, 20 or 50 mL.

#### 2.1006.0020 OMNIS Rod Stirrer Titration

Rod stirrer for connection to one OMNIS Titrator (cable length 1.1 m).









#### 6.00200.300 dUnitrode with Pt1000

Digital, combined pH electrode for OMNIS with integrated Pt1000 temperature sensor. This electrode is particularly suitable for : - pH measurements and titrations in difficult, viscous, or alkaline samples - at elevated temperatures

long-term measurements

The fixed ground-joint diaphragm is insensitive to contamination.

Reference electrolyte: c(KCl) = 3 mol/L, storage in storage solution. Alternatively: Reference electrolyte for measurements at T>80°C: Idrolyte, storage in Idrolyte. dTrodes can be used on OMNIS Titrators.

#### 6.00201.300 dEcotrode Plus

Digital, combined pH electrode for OMNIS. The electrode is suitable for aqueous acid/base titrations. The fixed ground-joint diaphragm is insensitive to contamination. Reference electrolyte: c(KCl) = 3 mol/L, storage in storage solution. dTrodes can be used on OMNIS Titrators.

#### 6.00202.300 dAquatrode Plus with Pt1000

Digital, combined pH electrode for OMNIS, 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(KCI) = 3 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  $c(KNO_3) = 1 \text{ mol/L} (6.2310.010)$ ).

Storage in the bridge electrolyte used.

dTrodes can be used on OMNIS Titrators.





#### 6.00203.300 dSolvotrode

Digital, combined pH electrode for OMNIS 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 suitable for contaminated samples.



This electrode can be used with non-aqueous reference electrolytes (lithium chloride or tetraethylammonium bromide).

Storage in corresponding reference electrolyte. dTrodes can be used on OMNIS Titrators.

#### 6.00204.300 dProfitrode

Digital, combined pH electrode for OMNIS with double-junction system. This electrode is suitable for pH measurements/titrations of samples

- that contaminate the reference system of the electrode (e.g., galvanic baths, samples containing sulfides)
- for which potassium chloride c(KCl) = 3 mol/L cannot be used as reference electrolyte (e.g., reaction of potassium or chloride with sample)

The electrode is equipped with a flexible ground-joint diaphragm which is insensitive to contamination and which can be exchanged when needed.

When c(KCI) = 3 mol/L is used as bridge electrolyte, storage in storage solution is recommended.

The bridge electrolyte can be easily replaced with a suitable electrolyte (e. g., potassium nitrate  $c(KNO_3) = 1 \text{ mol/L} (6.2310.010)$ ). Storage in the bridge electrolyte used.

dTrodes can be used on OMNIS Titrators.

#### 6.00401.300 dPt Titrode

Digital, combined platinum ring electrode for OMNIS with a pH glass membrane as reference electrode.

This maintenance-free electrode is suitable for redox titrations when the pH value remains constant, e.g.:

- Iodometry
- Chromatometry
- Cerimetry
- Permanganometry





#### 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(KNO3

) = 1 mol/ L is used as reference electrolyte and for storage. dTrodes can be used on OMNIS Titrators.

#### 6.00403.300 dPt ring electrode

Digital, combined platinum ring electrode for OMNIS with fixed ground-joint diaphragm.

This electrode is suitable for redox titrations when the pH value varies, e. g.:

- Oxygen content according to Winkler
- Determination of hydrogen peroxide with KMnO<sub>4</sub>
- Diazotization titrations

The fixed ground-joint diaphragm is insensitive to contamination. c(KCl) = 3 mol/ L is used as reference electrolyte and for storage. dTrodes can be used on OMNIS Titrators.

#### 6.00502.300 Combined dCa ISE

Digital, combined calcium-selective electrode for OMNIS. This ISE is suitable for:



- Ion measurements of  $Ca^{2+}$  (1\*10<sup>-7</sup> to 1 mol/L) in aqueous solutions
- Complexometric (back) titrations (e.g., determination of water hardness)

Thanks to a robust/break-proof plastic shaft made of propylene and an impact protection for the polymer membrane, this sensor is mechanically very resistant. The reference electrolyte used is c(KCI) = 3 mol/L.

dTrodes can be used on OMNIS Titrators.

6.01503.120 OMNIS 2 mL cylinder unit without accessories

> Intelligent 2 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Without dosing tubing and antidiffusion tip.

6.01503.150 OMNIS 5 mL cylinder unit without accessories

> Intelligent 5 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Without dosing tubing and antidiffusion tip.

6.01503.210 OMNIS 10 mL cylinder unit without accessories

> Intelligent 10 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Without dosing tubing and antidiffusion tip.

6.01503.220 OMNIS 20 mL cylinder unit without accessories

> Intelligent 20 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Without dosing tubing and antidiffusion tip.















## 6.01503.250 OMNIS 50 mL cylinder unit without accessories

Intelligent 50 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Without dosing tubing and antidiffusion tip.

### 6.01900.010 Stirring propeller 30 mm ETFE

Stirring propeller 30 mm ETFE with adjustable height for use with Rod Stirrer "Titrator" or Rod Stirrer "Sample Robot"

6.01900.030 Stirring propeller 20 mm ETFE

Stirring propeller, 20 mm, with adjustable height for use with Rod Stirrer "Titrator" or Rod Stirrer "Sample Robot"

6.02100.010 Measuring module digital

Digital measurement channel for one OMNIS Titrator or Titration Module for the connection of digital "dTrodes" electrodes.







#### 6.02101.011 Measuring module analog

Analog measurement channel for one OMNIS Titrator or Titration Module for the connection of analog electrodes. Compatible with OMNIS software version 2.18 or higher.

6.02102.010 Cable MDL PL/SO 0.5 m

Connecting cable for OMNIS instruments with MDL connector (0.5 m)

6.02102.020 Cable MDL PL/SO 1 m

Connecting cable for OMNIS instruments with MDL connector (1 m)

6.02102.030 Cable MDL PL/SO 2 m

Connecting cable for OMNIS instruments with MDL connector (2 m)

6.02102.040 Cable MDL PL/SO 5 m

Connecting cable for OMNIS instruments with MDL connector (5 m)

10/16











6.02102.050 Cable MDL PL/SO 10 m

Connecting cable for OMNIS instruments with MDL connector (10 m)



#### ) Electrode cable plug-in head G / plug P, 0.55 m

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

6.02104.010 Electrode cable plug-in head G / plug P, 1.5 m

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



## 6.02104.020 Electrode cable plug-in head G (temp.) / plug P, 0.55 m

Cable for connecting a temperature sensor (head G) to an analog measuring module from OMNIS.





#### 6.02104.030 Electrode cable plug-in head G (temp.) / plug P, 1.5 m

Cable for connecting a temperature sensor (head G) to an analog measuring module from OMNIS.

6.02104.040 Electrode cable plug-in head G (pol.) / plug P, 0.55 m

Cable for connecting an analog polarizable electrode (plug-in head G) to an analog measuring module from OMNIS.

6.02104.050 Electrode cable plug-in head G (pol.) / plug P, 1.5 m

Cable for connecting an analog polarizable electrode (plug-in head G) to an analog measuring module from OMNIS.

6.02104.300 Electrode cable plug-in head Q / plug P, 0.55 m

Cable for connecting a dTrode (plug-in head Q) to the digital measuring module from OMNIS.

6.02104.310 Electrode cable plug-in head Q / plug P, 1.5 m

Cable for connecting a dTrode (plug-in head Q) to the digital measuring module from OMNIS.













# 6.02104.600 Electrode cable plug-in head U / plug P, 0.55 m

Cable for connecting an electrode with plug-in head U to an analog measuring module from OMNIS.

6.02104.610 Electrode cable plug-in head U / plug P, 1.5 m

Cable for connecting an electrode with plug-in head U to an analog measuring module from OMNIS.

6.02106.000 Liquid Adapter extension cable, 0.55 m

Extension cable (0.55 m in length) for connecting an OMNIS Liquid Adapter to an OMNIS Titrator, Titration Module or Dosing Module.

6.02106.010 Liquid Adapter extension cable, 2 m

Extension cable (2 m in length) for connecting an OMNIS Liquid Adapter to an OMNIS Titrator, Titration Module or Dosing Module.



Abbel

6.03001.120 OMNIS 2 mL cylinder unit

Intelligent 2 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Includes dosing tubing and antidiffusion tip.

6.03001.150 OMNIS 5 mL cylinder unit

Intelligent 5 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Includes dosing tubing and antidiffusion tip.

6.03001.210 OMNIS 10 mL cylinder unit

Intelligent 10 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Includes dosing tubing and antidiffusion tip.

6.03001.220 OMNIS 20 mL cylinder unit

Intelligent 20 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Includes dosing tubing and antidiffusion tip.

6.03001.250 OMNIS 50 mL cylinder unit

Intelligent 50 mL cylinder unit for an OMNIS Titrator, Titration Module or Dosing Module. Includes dosing tubing and antidiffusion tip.













#### 6.05609.000 KFT ec

KFT equipment for OMNIS Titrator

Complete accessory set for volumetric Karl Fischer titration.

6.05609.010 KFT equipment for OMNIS Titrator with Polytron

Complete accessory set for volumetric Karl Fischer titration with Polytron.

6.06001.100 Function license DET

"Dynamic equivalence point titration" function license for one OMNIS titration system.

OLE NEW LEVEL OF PERFORM

6.06001.110 Function license MET

"Monotonic equivalence point titration" function license for one OMNIS titration system.









6.06001.160 Function license KFT with conditioning
Function license for volumetric Karl Fischer titration with conditioning for an OMINIS titration system.
6.06001.320 Function license for 5 parallel titrations
Function license for a maximum of five parallel titrations using one OMINIS Titrator with additional Titration Modules or Dosing Modules.
6.06006.000 Function license Upgrade Basic-Advanced
Function license for the upgrade of one OMINIS Titrator: Basic to Advanced.

6.06006.010 Function license Upgrade Basic-Professional

Function license for the upgrade of one OMNIS Titrator: Basic to Professional.

DLE NEW LEVEL OF PERFORM