



884 Professional VA

2.884.0010

884 Professional VA is the universal entry-level instrument in the Professional VA/CVS instrument series. In conjunction with the compatible measuring head and compatible electrode set, you can perform trace analysis determinations with voltammetry and polarography using the Multi-Mode Electrode pro, the scTRACE Gold, the Bismuth drop electrode or determinations of organic additives in electroplating baths, with "Cyclic Voltammetric Stripping" (CVS), "Cyclic Pulse Voltammetric Stripping" (CPVS), and chronopotentiometry (CP). The proven Metrohm electrode methods combined with a high-performance potentiostat/galvanostat and the extremely flexible viva software open up new perspectives. The potentiostat with a certified calibrator readjusts itself automatically before each measurement, thus guaranteeing maximum precision. The replaceable measuring head enables rapid changes between the various applications with different electrodes.

The viva software is required for control, data collection, and evaluation.

The 884 Professional VA is supplied with reduced accessories, without measuring head and electrodes. Electrode set and viva license need to be ordered separately.

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 2.884.0010

Qt.	Order no.	Description
1 PCS	1.884.0010	884 Professional VA

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The viva software is required for control, data acquisition, and evaluation.

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1 PCS	6.1801.100	PVC tubing / 4 mm / 7 mm / 5 m
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1 PCS	6.2151.000	Cable USB A – mini-DIN 8-pin
		Controller cable



1 PCS	6.2703.000	Stand ring for titration vessels
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1 PCS	6.2711.090	Drip pan for Professional VA/CVS instruments
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1 PCS	6.2739.000	Wrench For tightening connectors
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1 PCS	6.2813.050	Dummy cell for Professional VA/CVS instruments
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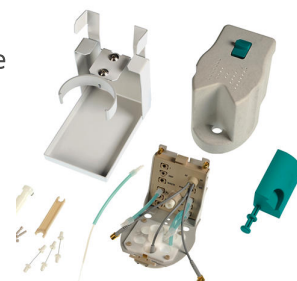
Optional accessories

Order no.	Description	
2.800.0020	800 Dosino Drive with write/read hardware for intelligent dosing units. With permanently attached cable (length 0.65 m).	
2.858.0130	858 Professional Sample Processor VA for antioxidants The 858 Professional Sample Processor VA for antioxidants enables the fully automatic processing of sample series of lubricants for determining the concentration of antioxidants in combination with Professional VA instruments and viva. The system is controlled directly with the viva software. The sample rack (supplied) holds 24 samples, which are extracted automatically on the sample changer for sample preparation prior to determination. The 858 Professional CVS Sample Processor VA for antioxidants is supplied with built-in robotic arm, together with accessories, sample rack, magnetic stirrer, and connection cable for setting up a complete workplace, although it does not come with rinsing equipment.	
6.1110.120	Pt1000 temperature sensor for CVS (installation length 9 cm) Pt1000 temperature sensor (class B) for Professional CVS Instruments.	
6.1256.010	RDE measuring head for Professional VA/CSV instruments Measuring head for operation with rotating disk electrodes.	



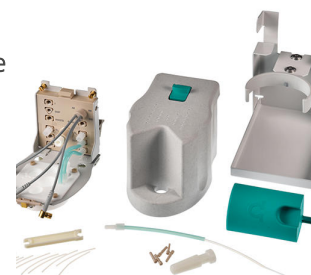
6.1256.020 MME measuring head for Professional VA instruments

Measuring head for operation with the Multi-Mode electrode pro or the scTRACE Gold.



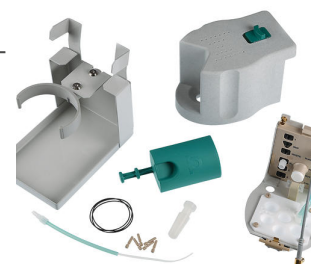
6.1256.030 SPE measuring head for Professional VA instruments

Measuring head for operation with *screen-printed electrodes* (SPE) or the scTRACE Gold.



6.1256.040 RDE measuring head for Professional VA/CVS instruments with high chemical resistance

Measuring head for operation with rotating disk electrodes. Solvent-resistant version for applications in nonaqueous media.



6.2104.140 Electrode cable / 1 m / 2 x 2 mm

For connecting temperature sensors with Metrohm plug-in head G with 780, 781, 826, 827 pH/Ion meters and all Titrandos



6.5339.000 CVS electrode equipment with 1 mm platinum electrode for Professional VA/CVS instruments

Complete electrode set for the determination of organic additives in electroplating baths with CVS (Cyclic Voltammetric Stripping). Contains rotating platinum working electrode (electrode diameter: 1 mm), reference electrode, platinum auxiliary electrode, measuring vessels and electrolyte solutions.



6.5339.010 CVS electrode equipment with 2 mm platinum electrode for Professional VA/CVS instruments

Complete electrode set for the determination of organic additives in electroplating baths with CVS (Cyclic Voltammetric Stripping). Contains rotating platinum working electrode (electrode diameter: 2 mm), reference electrode, platinum auxiliary electrode, measuring vessels and electrolyte solutions.



6.5339.020 CVS electrode equipment with 3 mm platinum electrode for Professional VA/CVS instruments

Complete electrode set for the determination of organic additives in electroplating baths with CVS (Cyclic Voltammetric Stripping). Contains rotating platinum working electrode (electrode diameter: 3 mm), reference electrode, platinum auxiliary electrode, measuring vessels and electrolyte solutions.



6.5339.030 VA electrode equipment with Multi-Mode Electrode pro for Professional VA instruments

Complete electrode set for polarographic and voltammetric determinations. Includes Multi-Mode Electrode pro, reference electrode, platinum auxiliary electrode, measuring vessel, stirrer, electrolyte solution

and additional accessories for setting up and operating the Multi-Mode Electrode.



6.5339.040 VA electrode equipment with rotating disk electrode (RDE) made of glassy carbon for Professional VA instruments

Complete electrode set for voltammetric determinations, e.g. using mercury film method. Includes drive for rotating disk electrode, glassy carbon electrode tip, reference electrode, glassy carbon auxiliary electrode, measuring vessel, and electrolyte solution.



6.5339.050 VA electrode equipment with scTRACE Gold for Professional VA instruments

Complete electrode set for the determination of arsenic or mercury. Includes holders for scTRACE Gold, scTRACE Gold, stirrer and measuring vessel.



6.5339.060 CVS electrode equipment with 2 mm platinum electrode for Professional VA/CVS instruments for intensive use

Complete electrode set for the determination of organic additives in electroplating baths with CVS (Cyclic Voltammetric Stripping). Contains rotating platinum working electrode (electrode diameter: 2 mm), driving axle with mercury contact, maintenance-free gel reference electrode, platinum auxiliary electrode, measuring vessels and KCl electrolyte solution.



6.5339.070 VA accessory equipment with SPE electrode shaft for professional VA instruments

Accessory equipment for use with *screen-printed electrodes* (SPE). Contains electrode shaft for screen-printed electrodes, stirrer, and measuring vessel. Without electrodes.



6.5339.080 VA electrode equipment with bismuth drop electrode for Professional VA instruments

Complete electrode set for voltammetric determinations of heavy metals. Contains bismuth drop electrode, reference electrode, glassy carbon auxiliary electrode, measuring vessel, stirrer, electrolyte solution, and additional accessories.



6.5339.100 VA electrode equipment with rotating glassy carbon disc electrode (RDE) for antioxidant determination for Professional VA instruments

Complete electrode set for determinations of antioxidants. Includes drive for rotating disk electrode, glassy carbon electrode tip, platin reference electrode, platin auxiliary electrode and measuring vessel.



6.5339.110 CVS electrode equipment with 2 mm platinum electrode, gel reference electrode and steel auxiliary electrode for Professional VA/CVS instruments

Complete electrode set for the determination of organic additives in electroplating baths with CVS (Cyclic Voltammetric Stripping). Contains rotating platinum working electrode (electrode diameter: 2 mm), driving axle with mercury contact, maintenance-free gel reference electrode, steel auxiliary electrode, measuring vessels and KCl electrolyte solution.



6.5339.500 Equipment with 2x 807 Dosing Units for VA and CVS measurements

Accessory set for 2 auxiliary solutions for expanding VA or CVS systems. Contains 2x 807 Dosing Units 2 mL, 2x 100 mL clear glass bottles, bottle holder for 2 bottles, and connector material. Without Dosinos.



6.5339.510 Basic equipment with 2x 807 Dosing Units for VA measurements for 884 Professional VA

Accessory set for 2 auxiliary solutions for expanding manual VA systems. Includes one 807 Dosing Unit 2 mL and one 807 Dosing Unit 5 mL, clear glass bottles 100 mL, 250 mL and 2 L, bottle holders for 2 bottles, one 4-way micro tip, and connector material. Without Dosinos.



6.5339.520 Equipment with two 807 Dosing Units (2 + 50 mL) for CVS measurements

Accessory set for two auxiliary solutions for expanding CVS systems. Includes one 2 mL and one 50 mL 807 Dosing Unit each, clear glass bottles 100 mL and 2 L, bottle holders for 2 bottles, one 2-way microtip, and connector material. Without Dosinos.



6.6065.402 viva 4.0 Full: 1 license

Computer program for control and data management of Professional VA /CVS instruments. The software permits checks, data acquisition, evaluation, and monitoring, as well as generation of reports.

Graphic user interface for routine operations, extensive database programs with reevaluation, graphic method editor with numerous templates, system configuration, very flexible user management, extensive data export functions, individually configurable report generator.

Includes the "Differential Pulse" (DP), "Square Wave" (SQW), "Linear Sweep Voltammetry" (LSV), "Cyclic Voltammetry" (CV), "Cyclic Voltammetric Stripping" (CVS), "Cyclic Pulse Voltammetric Stripping" (CPVS), and Chronopotentiometry (CP) measuring modes. The following calibration techniques are supported: Standard addition, external calibration, DT (Dilution Titration), LAT (Linear Approximation Technique), MLAT (Modified Linear Approximation Technique), RC (Response Curve).



Dialog languages: German, English, Chinese, Japanese.

The following instruments are supported: 884 Professional VA, 894 Professional CVS

1 license for a maximum of 4 Professional VA/CVS instruments on a single computer. Contains USB flash drive and installation documentation.

6.6065.403

viva 4.0 Multi: 3 licenses

Client/server-compatible computer program for control and data management of Professional VA/CVS instruments. The software permits checks, data acquisition, evaluation, and monitoring, as well as report generation.

Graphic user interface for routine operations, extensive database programs with reevaluation, graphic method editor with numerous templates, system configuration, very flexible user management, extensive data export functions, individually configurable report generator.

Includes the "Differential Pulse" (DP), "Square Wave" (SQW), "Linear Sweep Voltammetry" (LSV), "Cyclic Voltammetry" (CV), "Cyclic Voltammetric Stripping" (CVS), "Cyclic Pulse Voltammetric Stripping" (CPVS), and Chronopotentiometry (CP) measuring modes. The following calibration techniques are supported: Standard addition, external calibration, DT (Dilution Titration), LAT (Linear Approximation Technique), MLAT (Modified Linear Approximation Technique), RC (Response Curve).

Dialog languages: German, English, Chinese, Japanese.

The following instruments are supported: 884 Professional VA, 894 Professional CVS

Client/server version with 3 licenses for 3 computers with a max. of 4 Professional VA/CVS instruments per computer. Contains USB flash drive and installation documentation.

