# 884 Professional VA CVS

MVA-23

«»CVS«»CPVSCP CVS 884 Professional VA858 Professional Sample Processor 800 Dosino
843  56

MVA-23  scTRACE Gold

**viva** PC **viva**

## Scope of delivery MVA-23

| Qt. | Order no. | Description |
|---|---|---|
| 2 PCS | **2.800.0020** | **800 Dosino** |

Drive with write/read hardware for intelligent dosing units. With permanently attached cable (length 0.65 m).

Metrohm

| 1 PCS | **2.843.0240** | **843 Membrane Pump Station for Professional VA /CVS systems** |

The 843 Membrane Pump Station enables the automatic rinsing and emptying of the measuring vessel in partly automated and fully automated Professional VA and CVS systems. It has two built-in membrane pumps that can be controlled via the remote signal.

The versions for VA and CVS are equipped with the complete accessories for the automatic rinsing and emptying of the measuring vessel.



| 1 PCS | **2.858.0110** | **858 Professional Sample Processor for VA and CVS** |

The 858 Professional Sample Processor for VA and CVS, in conjunction with Professional VA/CVS instruments and **viva**, enables the fully automatic processing of large sample series of organic additives in electroplating baths, e.g. "brighteners" and "suppressors" using "Cyclic Voltammetric Stripping" (CVS). The system is controlled directly by the **viva** software and permits automatic changes of method between different types of determinations. The sample rack supplied holds 56 samples of a maximum of 11 mL and 28 samples of a maximum of 50 mL for brightener determination.



The 858 Professional Sample Processor for VA and CVS is supplied with built-in robotic arm, together with accessories, sample rack and connection cable for setting up a complete workplace, although it does not come with rinsing equipment.

**Ω Metrohm**

| 1 PCS | **2.884.1210** | **884 Professional VA semiautomated for CVS with 2 Dosinos** |
|-------|----------------|-----------------------------------------------------------------|

884 Professional VA semiautomated for CVS applications is a convenient high-end routine analyzer for determinations of organic additives in electroplating baths with "Cyclic Voltammetric Stripping" (CVS), "Cyclic Pulse Voltammetric Stripping" (CPVS), and chronopotentiometry (CP), or voltammetric heavy metal determinations with rotating disk electrodes. The proven Metrohm electrode methods combined with a high-performance potentiostat/galvanostat and the extremely flexible **viva** software open up new perspectives in CVS. The potentiostat with a certified calibrator readjusts itself automatically before each measurement, thus guaranteeing maximum precision. The integrated temperature measurement input allows you to monitor the solution temperature during the measurement.

The instrument can also be used to perform voltammetric determinations. The replaceable measuring head enables rapid changes between the various applications with different electrodes.

2x 800 Dosinos (supplied) permit the automatic addition of auxiliary solutions during the determination, e.g., VMS, standard solutions or samples for the Dilution Titration technique (DT).

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

The 884 Professional VA semiautomated for CVS applications is supplied with extensive accessories and a measuring head for rotating disk electrodes. Electrode set and **viva** license need to be ordered separately.

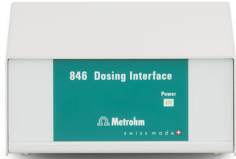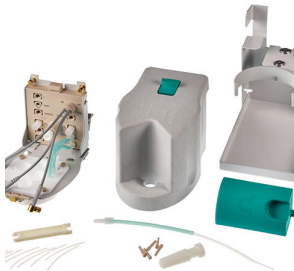| 1 PCS | **6.2141.300** | **Remote cable 843 Pump Station to Sample Processor** |
|-------|----------------|--------------------------------------------------------|

Remote cable for the direct connection of the 843 Pump Station to the pump connectors of the Sample Processors

| 1 PCS | **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.

# Optional accessories

| Order no. | Description |
| --- | --- |
| **2.846.0010** | **846 Dosing Interface** |

USB-capable control unit for connecting a maximum of four 800 Dosinos or 805 Dosimats for dosing and Liquid Handling tasks. A Touch Control or the connection to a PC with OMNIS Software, **tiamo ™**, MagIC Net, viva, or 797 VA Computrace is required for operation.

---

**6.1110.120**  **Pt1000 temperature sensor for CVS (installation length 9 cm)**

Pt1000 temperature sensor (class B) for Professional CVS Instruments.

---

**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.

---

Metrohm

**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.



---

Ω Metrohm

**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.

---

Ω Metrohm

**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*.*

---

**6.5339.100**     **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.

---

Ω Metrohm

**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 Voltametric 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 Voltametric 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.