

- Traceable reference conductivity system for online calibration and/or validation in conductivity measurements
- Reduces downtime when calibrating and or validating conductivity measurements in your process
- All-in-one protected bench that includes all devices. No risk to disconnect cables, probes, chambers and loosing data
- No contamination risk of the water loop as the process conductivity probe being calibrated/validated remains in place
- Conductivity sensors can be checked in-line or with a flow through chamber
- Specific software for installed cell constant calculation with logbook of the 10 last operations
- Uncompensated mode available to meet USP requirements
- NEMA 4X, IP65 Housing
- Certification traceability with certificates conforming to ASTM D5193, ASTM D1125, NIST standards

## Principle of measurement

The POLYMETRON 9126 is a portable calibration system used as a certified reference for calibrating and/or validating on-line conductivity measurements for pharmaceutical, semiconductor and power plant pure and ultrapure water systems. This instrument is designed to facilitate such actions while the conductivity probes remain in process.

The POLYMETRON 9126 conductivity calibration/verification system for pure and ultrapure conductivity sensors can be mounted in parallel or in series with conductivity measuring systems being checked. It is easy-to-use; the user only needs to connect the inlet to a sampling point and the outlet to the drain.

The POLYMETRON 9126 can also be used as backup unit for all conductivity installed units.

The POLYMETRON 9126 is compact and completely protected. It comes with a drawer of tools and user manual. A special program is included that allows the user to perform an automatic calculation of the cell constant of the probe being checked. In addition to this, an electrical calibration of the conductivity input of the transmitter can be performed with a certified resistor and is in compliance with the ASTM D5391-99 standards.



## Performance specifications

**Description** POLYMETRON 9126 including a 9125 conductivity transmitter with a flow chamber and a high purity conductivity probe.

(cell constant k=0.01 with Pt100 sensor grade A)

Analysis Accuracy Whole analyzer ± 2%

Temperature ± 0.2 °C

Measuring rangeResistivity5 k .cm to 100 M .cm  $\pm$  2% of the value displayedRepeatabilityConductivity0.01 to 200  $\mu$ S/cm  $\pm$  2% of the value displayed

Temperature -20 to 200 °C (-4 to 392 °F) + 0.2 °C

Temperature compensation Modes available Uncompensated for USP waters

Ultrapure compensation (HCl or NaCl)

Compensation range -20 to 200 °C (-4 to 392 °F)

**Operating conditions** Temperature -20 to 60 °C (-4 to 140 °F)

Humidity 10 to 90 %

 Sampling
 Max. temperature
 100 °C (212 °F) at 1 bar

 Max. pressure
 10 bar at 70 °C (160 °F)

Min. flow rate > 20 l/h (5.3 gal/h)

Display and menu Presentation Inclined plane (30°) with backlight, 5 lines of 16 characters : icons and graphic zone (80 x 64 pixels)

Languages English, French, German, Italian, Spanish

Cell constant Automatic calculation of cell constant being checked

Traceability Last 10 calibration / validation memorized

**Enclosure** Material Calibration bench ABS

Dimensions H 450 mm x W 250 mm x D 460 mm (17.7 x 9.8 x 18.1 inches)

Weight 7 kg (15.5 lb.)

Connections Sample Inlet & Outlet Compression fitting DN8 or 5/16"

Tubing material  $PE \text{ if sample} \leq 60 \, ^{\circ}\text{C} \, (140 \, ^{\circ}\text{F})$ 

PTFE if sample > 60 °C (140 °F)

Power supply
4-20 mA
IP 67 waterproof female connector, supplied as standard
IP 67 waterproof socket female with connector as option

To tested transmitter IP 67 waterproof socket

Version 9126=A=0000 90 to 265 VAC 50/60 Hz

Version 9126=A=0020 13 to 30 VAC and 18 to 42 VDC

Consumption 25 VA

Analogue  $2 \times 0/4 - 20 \text{ mA}$  (linear, bilinear, log)  $\pm 0.1 \text{mA}$ 

(temperature & conductivity/resistivity)

Maximum load 800

Alarms 2 thresholds or limits according to USP

Others Certification Quality certificate provided EMC

ASTM D5391-99; ASTMD1125, NIST N 50081-1& EN 50082-2 (RFI)

Enclosure protection EIEC 61010-1 (low voltage directive), IP65, NEMA4X

**Delivery** Supplied as standard with user manual, laminated quick programming guide, calibration certificates binder, tool for

disconnecting the sample tubing's, 2 conversion fittings (DN8 into DN6), certified resistance.

Verification and calibration

According ISO 10012-1 Guidelines on confirmation system, a yearly recalibration of the 9126 is recommended in our factory.

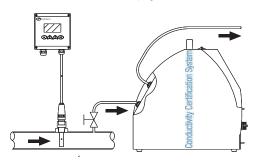
of the POLYMETRON 9126 Order # 09126=A=100

Documentation provided Optional binder with traceable COFRAC calibration certificates for yearly recalibration

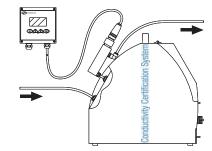
Optional binder with traceable COFRAC calibration certificates for yearly recalibration (includes detailed certificates on each instrument used in the recalibration process). Order # TE9126=A=000

Accessories Operators manual, quick guide flow chart, calibration certificate of the system, socket for supply cable, tool for plugs and

sampling tube disconnection, 2xDN/DN6 reduction sleeves for connection to DN6 tubing.



In process calibration of a conductivity loop



Serial calibration of a conductivity loop

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