

PROVEN MODULAR POTENTIOSTAT

Multi-channel Potentiostat MCP 94



MCP 94 with 4, 10 and 20 channels

The MCP 94 is a modular multi-channel potentiostat and galvanostat for parallel operation of 2 to 40 channels. It can be flexibly adapted to your requirements and allows retrofitting at any time.

Developed for demanding applications in biochemistry, pharmacy, materials engineering, and building materials testing, the MCP 94 complies with many international testing standards such as ASTM G8, ASTM G42, and DIN EN ISO 15711.



Operating principle

Each measuring channel is equipped with a broadband potentiostat with extremely high input resistance for the reference electrode. Current is measured using precise zero-ohm ammeters. The setpoint voltage is adjusted to the millivolt using a 10-turn potentiometer.

An external setpoint voltage can be fed in as an option. Potential or cell voltage and current are displayed on LCD instruments. For a clear overview, these displays can be switched through channel by channel. Regardless of this, the measured values can be output to a data logger.

Your benefits at a glance

- **Long-term stability:** reliable measurement results even during tests lasting several months.
- **High precision:** millivolt and microampere-accurate control for reproducible results.
- **Compliance with standards:** meets international standards, e.g., ISO, ASTM, DIN, VDA.
- **Flexibility:** modular design with up to 40 channels, expandable as required.
- **Robustness:** industrial-grade 19" technology, easy to maintain and durable.
- **Made in Germany:** experience since the 1950s and continuous further development.

DEVELOPED FOR INDUSTRIAL LABORATORIES

Specification MCP 94

Potentiostat

Potential Range	± 10 V
Open-circuit gain	typ. > 1 000 000
Max. Strom Series 20	± 20 mA
Max. Strom Series 100	± 100 mA
Max. Strom Series 200	± 200 mA

Internal setpoint voltage source

Range	± 2 V (optional ± 5 V), fixed adjustment
Accuracy	1 mV
Temperature coefficient	< $10^{-4}/^{\circ}\text{C}$
Drift	< $10^{-4}/1000$ h

Current sink / ZRA measurement

Input Resistance DC	< 0,1 Ω
Noise ref. to input	20 μV rms (typ.)
Current ranges	Basic: 20/ 2/ 0,2 mA Series 100 & 200: 200/ 20/ 2 mA
Current to voltage conversion	2 V ref. to full range, tolerance 0,2%

Dimensions and power supply

4 channels	280 x 160 x 280 mm
6 up to 10 channels	540 x 152 x 385 mm
12 up to 20 Kanäle	540 x 285 x 385 mm
Power supply	115/230 V, 50/60 Hz
Stabilisierungsbereich	± 10 % bez. nominaler Spannung

Potential buffer

Input resistance	10^{12} Ω , 1 pF parallel
Potential Range	± 10 V
Bias Current	< 50 pA at 25°C

Options

- Analog connection for external interfaces/data loggers
- Ethernet interface MCPI with control and recording software
- Galvanostat adapter for constant current control
- Heat-resistant silicone/PTFE cell cables for cells used in heating cabinets

Typical applications

- Corrosion testing of reinforcing steel in artificial mortar beds
- Coating tests for cathodic dislocation (CD tests)
- Material analyses in accelerated aging processes
- Standard-compliant validation of electrode and sensor materials
- Long-term corrosion measurements on multiple cells

**We would be happy to advise you on the right configuration for your application.
Contact us directly or request a customized quote.**

