

DILICO HCTS-50 Hydrogen Cell Test System

- Turnkey system for PEM & AEM electrolyzer single cells and short stacks
- Integrated locally resolved in-situ current and temperature measurement
- Quick and easy test object replacement
- Available with electrochemical impedance spectroscopy (EIS)



TECHNICAL FEATURES	HCTS-50
Operating pressure	8 bar with „baltic quickCONNECTfixture“, up to 50 bar optional
Cell area	25 cm ² with „baltic quickCONNECTfixture“
Cell temperature	20 - 80 °C
Maximum current	250 A
Voltage	0 - 2.5 V (single cell), 0 - 10 V (short stack)
Crossover detection	0 - 5 vol% hydrogen in oxygen 0 - 5 vol% oxygen in hydrogen
In-situ measurement	Locally resolved current and temperature distribution
EIS measurement	Optional
DI-water purification system	Optional
Operating modes	Constant current (CC) and constant voltage (CV)
Control	NI-based software for test automation, analysis and data logging

BENEFITS

- Fast test object change thanks to „baltic quickCONNECTfixture“
- Optional short stack integration for higher pressure ranges
- Expandable with potentiostat for electrochemical impedance spectroscopy (EIS)

APPLICATIONS

- Materials research and cell design
- Long-term stability tests
- Analysis of operating strategies in research and development

SCOPE OF DELIVERY

- DILICO HCTS-50 test stand incl. baltic quickCONNECTfixture FC25/125
- DILICO CURR TEMP sensor module
- NI-based control software
- Operating instructions
- (Optional) EIS measurement system

