NERNST SOLUTION

Test Stand

600 W PEM Electrolyzer Test Stand

Our 600 W PEM Electrolyzer Test Stand represents the pinnacle of electrolyzer testing technology. Designed for research institutes and

industrial R&D departments, this comprehensive system provides precise control and monitoring capabilities for PEM electrolyzer development and characterization. The integrated data acquisition system captures critical performance parameters in real-time, enabling detailed analysis of electrolyzer behavior under various operating conditions.

Specifications

Power Rating	600 W
Voltage Range	0-6 V DC
Current Range	0-100 A
Pressure Range	1-30 bar
Temperature Range	20-80°C
Flow Rate	0-300 mL/min
Data Acquisition	Adjustable rate
Control Interface	Touch screen + PC software
Communication	Ethernet
Dimensions	20 × 20 × 30 in
Weight	75 kg

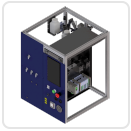
Key Features

- Advanced process control system
- Real-time data logging and analysis
- Safety interlocks and emergency shutdown
- Automated test sequences
- Remote monitoring capabilities

- Modular design for easy maintenance

Applications

- PEM electrolyzer development
- Performance characterization
- Durability testing
- Research and development
- Quality control testing



Test Stand

600 W AEM Electrolyzer Test Stand

The 600 W AEM Electrolyzer Test Stand is specifically engineered for anion exchange membrane (AEM) electrolyzer research. This compact

yet powerful system offers exceptional precision and control for AEM technology development. The intuitive touchscreen interface provides easy access to all system parameters, while the robust construction ensures reliable operation in demanding research environments.

Request Quote

Contact Us

Specifications

Power Rating	600 W
Voltage Range	0-6 V DC
Current Range	0-100 A
Pressure Range	1-30 bar
Temperature Range	20-80°C
Flow Rate	0-300 mL/min
Control Interface	Touch screen + PC software
Communication	Ethernet
Dimensions	20 × 20 × 26 cm
Weight	70 kg

Key Features

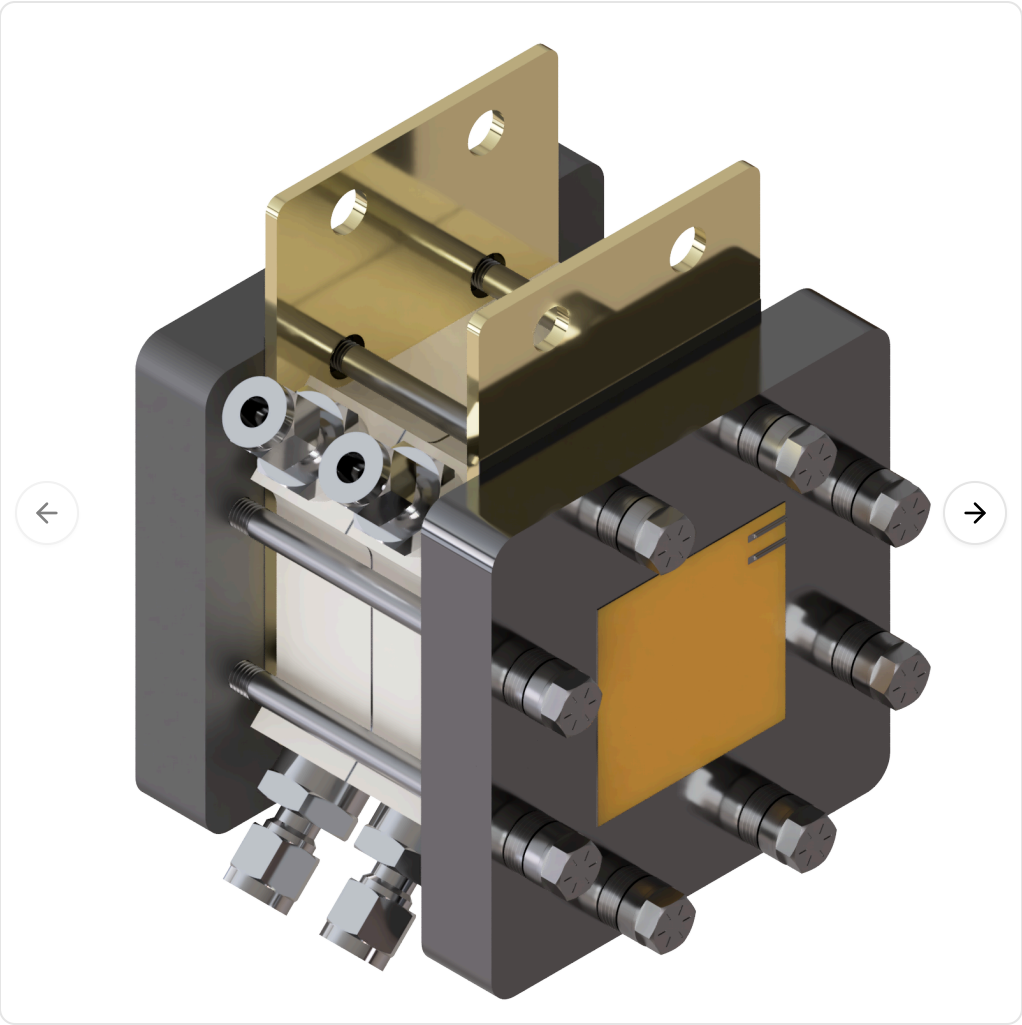
- Dedicated AEM electrolyzer optimization
- Integrated touchscreen control
- Compact footprint design
- High-precision sensors
- Automated safety systems
- Data export capabilities
- User-friendly interface

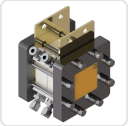
Applications

- AEM electrolyzer research
- Alkaline electrolysis studies
- Catalyst development
- System optimization
- Educational demonstrations

Single Cell Hardware

$4,499





Our Single Cell Hardware represents the gold standard in electrolyzer cell design. Manufactured with precision-machined components and high-grade materials, this hardware enables researchers to conduct detailed single-cell studies with exceptional accuracy and reproducibility. The modular design allows for easy assembly and disassembly, facilitating rapid testing of different membrane electrode assemblies and operating conditions.

Specifications

Active Area	25 cm²
Cell Material	Titanium Grade 2
Gasket Material	PTFE/Viton composite
Operating Pressure	Up to 30 bar
Operating Temperature	Up to 80°C
Current Density	Up to 4 A/cm²
Flow Field	Serpentine design
Connections	1/4" NPT fittings
Dimensions	15 × 15 × 8 cm
Weight	2.5 kg

Key Features

- Precision-machined titanium construction
- Optimized flow field design
- Easy assembly/disassembly
- High-temperature compatibility
- Corrosion-resistant materials

- Standardized connections
- Research-grade precision

Applications

- Single cell testing
- MEA characterization
- Performance optimization
- Research and development
- Educational purposes