

Solid Oxide Fuel Cell Single Cell / Stack Test Station



- » Approximate power range: 0.5 - 25 kW
- » Available PLC control for safe and stable operation
- » Comprehensive safety features
- » HyWARE II™ control and automation software
- » Easily expandable for additional I/O and diagnostic tools
- » Fully automated for unattended operation
- » Various furnace, reformer and de-sulfurizer solutions available
- » Available CE certificate of conformity
- » Central control available for remote monitoring and control of multiple test units

X-Series features

- » Fuel gas blending
- » Automated safety system with N₂ purge
- » Multiple furnace options
- » Liquid fuel capable
- » H₂ & CO sensor
- » Multistage gas preheating option
- » Electric or NG pre-heating
- » Heat reclamation options
- » Exhaust treatment options
- » Choice of humidification options
- » Operators have full access to all system safety parameters

The Greenlight X-Series SOFC test stations are designed to have all the flexibility to meet your testing needs. The X-Series open architecture results in a system that is customer definable; tailored to your exact requirements.

HyWARE II™: Our control and automation software offers exceptional functionality with a user-friendly graphical interface. Enhanced with our proprietary HyAL™ automation language and load following technology, HyWARE II comprehensively manages the full range of test station parameters with a simple user-friendly interface that permits even novices to assemble automation scripts in minutes. HyAL is exponentially more powerful than look-up table automation systems, and computer programming skills are not required to create even complex automation scripts. Greenlight even offers optional pre-written scripts to help you start testing right away. Options also exist for external communication via CANBus and TCP/IP.

Specifications

Performance Commitment:

At Greenlight, we pride ourselves on making the world's best fuel cell testing equipment. We are committed to your satisfaction and we will do whatever it takes to meet or exceed your expectations.

Includes 3 levels of safety:

1. Hard-wired interlocks
 2. Factory software interlocks
 3. User-configurable software interlocks (warning high/low alarms and shut-down high/low alarms)
- » N₂ purge
 - » H₂ sensor
 - » Manual emergency stop

APPROXIMATE POWER RANGE	0.5 - 25 kW
GAS FLOWS	
Standard anode flow range	customer definable (100:1 turndown available)
Standard cathode flow range	customer definable (100:1 turndown available)
GAS MIXING	
Anode and cathode inlets	up to 8 gas lines available to simulate reformat and impurities
Liquid fuel	gasoline or diesel
GAS HUMIDIFICATION	
Technology	water injection, contact or steam
PRESSURE CONTROL	
Control range	0 - 300 kPa (45psi) higher pressures available
GAS PRE-HEATING	
Heater type	electric or natural gas
PROGRAMMABLE LOAD BANK	customer definable; resistive or regenerative available
DIAGNOSTIC OPTIONS	EIS, current interrupt, cell voltage monitoring
SAFETY FEATURES	hard-wired interlocks, protection gas flow, manual emergency stop, H ₂ and CO detection

Greenlight Innovation Corporation, Burnaby, B.C. Canada. All specifications and illustrations contained in this brochure are based on the latest product information available at the time of printing. Greenlight reserves the right to make changes at any time without notice in materials, equipment, specifications and models. Printed in Canada.

