

FCATS™ G700

AUTOMOTIVE FUEL CELL Stack Test Station



- » Approx power range: 10 - 100 kW (available to 250 kW)
- » Precision instrumentation for reliability and repeatability
- » Comprehensive safety features
- » HyWARE II™ control and automation software
- » Data monitoring of CVM and all process parameters
- » Easily expandable for additional I/O and diagnostic tools
- » Fully automated for unattended operation
- » Two-piece design for ease of installation
- » Steam or contact humidification technologies available
- » Resistive or regenerative loads available
- » Available CE certificate of conformity

G700 features

- » Optimized footprint
- » Integrated Lexan safety enclosure
- » Automatic N₂ purge on shutdown
- » Integrated fume hood with H₂ sensor
- » Liquid stack cooling capability
- » Optional regenerative load bank
- » 17" LCD monitor and PC
- » Ample 19" rack space
- » Water balance capability
- » Optional humidifier gas by-pass
- » Generous workspace for the test article with Dri-Dek[®] work surface

The G700 is the most sophisticated large-stack test station in the world. It is the full stack test unit of choice for the world's automotive OEMs and high power fuel cell developers.

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.

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
 - » Optional stack enclosure

POWER RANGE	10 - 100 kW; available to 250 kW
GAS FLOWS	(custom ranges available)
Standard anode flow range	10 - 2000 nlpm; available to 3000 nlpm
Standard cathode flow range	25 - 5000 nlpm; available to 7500 nlpm
GAS MIXING	
Anode and cathode inlets	up to 8 gases available
GAS HUMIDIFICATION	steam injection or contact available
Dew point control	up to 90°C † (194°F) † higher temperatures available
Gas temperature	up to 110°C † (230°F) † higher temperatures available
STACK COOLING	
Temperature control (facility provided fluid)	up to 95°C (203°F) †
STACK PRESSURE CONTROL	
Back pressure control	up to 300 kPa † (45psi) † higher pressures available
PROGRAMMABLE LOAD BANK	optional: resistive or regenerative available
CELL VOLTAGE MONITORING	
Standard number of channels	64 channels in base model; up to 800 additional channels available (average accuracy +/- 1mV)
DIMENSIONS (L x H x W) (approximate)	3500 x 2300 x 1600 mm (137 x 90 x 63 in)

† Dependent on actual operating conditions - higher temperature, pressure options available
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

