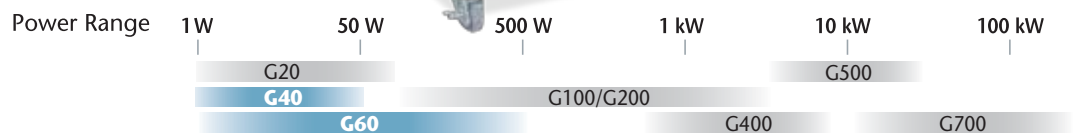


G40
G60

FCATS™

PEM FUEL CELL Component Test Station



- » G40 power range: 1 - 50 W
- » G60 power range: 10 - 500 W
- » Automated safety features
- » HyWARE II™ control and automation software
- » Turn-key test system
- » Minimal footprint
- » Fully automated for unattended operation
- » Optional configuration for high temperature PEM research
- » Available CE certificate of conformity



G40/60 features

- » Small footprint
- » Optional fuel cell enclosure
- » Automatic N₂ purge on shutdown
- » Integrated fume hood with H₂ sensor
- » 2 separate PID loops for cell endplate heaters
- » Optional liquid cell cooling capability
- » 17" LCD monitor and PC
- » Ample 19" rack space
- » DMFC operation available
- » Optional humidifier gas by-pass
- » Generous workspace for the test article with Dri-Dek[®] work surface

The G40 and G60 are designed as sophisticated, customizable and flexible low flow test stations. Over 200 FCATS test stations of this power range have been successfully delivered worldwide.

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

APPROXIMATE POWER RANGE	G40: 1 - 50 W	G60: 1 - 500 W
GAS FLOWS (custom ranges available)	100:1 turndown MFC's	
Standard anode flow range	G40: 0.015 - 1.5 nlpm	G60: 0.1 - 10 nlpm
Standard cathode flow range	G40: 0.025 - 2.5 nlpm	G60: 0.2 - 20 nlpm
GAS HUMIDIFICATION TECHNOLOGY	contact humidifier or optional low flow bubbler	
Dew point control	up to 95°C † (203°F) † optional high temperature operation	
Gas temperature	up to 110°C † (230°F) † optional high temperature operation	
Dry gas by-pass	optional; with automatic control	
ELECTRICAL END PLATE HEATER CONTROL	included; with software PID	
LIQUID CELL COOLING	optional; manual or automatic flow control, high temp option available	
CELL PRESSURE CONTROL	automated	
Back pressure control	up to 300 kPa † (45psi) †; higher pressures available	
LOAD BANK		
Maximum load, current, voltage	400 W, 60 A, 100 V; others available	
CELL VOLTAGE MONITORING		
Standard number of channels	2; additional channels available (average accuracy +/- 1mV)	
DIMENSIONS (L x H x W) (approximate)	824 x 1800 x 629 mm (33 x 71 x 25 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.

