GREENLIGHT
INNOVATION

PEM FUEL CELL
Single Cell and Component Test Stations

G40/60

G20

G100/200

| 0 W | 50 W | 100 W | 500 W | 1000 W | 2000 W | 4000 W |

G40

G100

G20

G60

G200
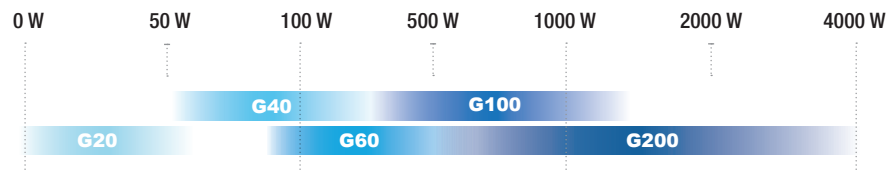
- Emerald™ control software for fully automated, unattended operation
- Comprehensive, user-adjustable safety features
- Expandable with additional I/O and diagnostic tools
- Multiple humidification technologies available, including optional Rapid Response™
- Accurate reformate gas simulation (automated blending)
- Available CE certificate of conformity
- Available with optional environmental chambers, high temperature and DMFC operation

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Specifications

	G20	G40	G60	G100	G200
APPROXIMATE POWER RANGE	5 - 100 W	5 - 500 W	20 - 500 W	40 - 1000 W	100 - 2500 W
GAS FLOWS	100:1 turndown MFC's				
Standard anode flow range	0.01 - 1 nlpm	0.015 - 1.5 nlpm	0.1 - 10 nlpm	0.25 - 25 nlpm	0.8 - 80 nlpm
Standard cathode flow range	0.02 - 2 nlpm	0.025 - 2.5 nlpm	0.2 - 20 nlpm	0.8 - 80 nlpm	2 - 200 nlpm
GAS HUMIDIFICATION TECHNOLOGY	gas immersion with sparger	contact humidifier (optional low flow sparger)		contact humidifier	
Dew point control	up to 90°C † (194°F)†	up to 95°C † (203°F)†			
Gas temperature	up to 110°C † (230°F)†				
Dry gas by-pass	manual control standard (optional automated control)	optional; with automatic control			
ELECTRICAL END PLATE HEATER CONTROL	individual anode & cathode PID heater controls	included			
LIQUID CELL COOLING	-	high temperature operation optional			
CELL PRESSURE CONTROL	manually controlled regulators (optional automated)	automated			
Back pressure control	Up to 300kPa † (45psi)† higher pressures available				
LOAD BANK Maximum load, current, voltage	300W, 80A, 50V	400W, 80A, 50V	650W, 125A, 50V	1400W, 250A, 50V	2500W, 500A, 50V
CELL VOLTAGE MONITORING Standard number of channels	1 (average accuracy +/- 1mV)	up to 800 channels (average accuracy +/- 1mV)			
DIMENSIONS	635 x 546 x 788 mm (25 x 21.5 x 31 in) Benchtop design	890 x 710 x 1855 mm (32 x 28 x 73 in)		1375 x 1132 x 1810 mm (54 x 45 x 72 in)	

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

Emerald™ : Our flexible control software features a user-friendly interface, and is enhanced with our proprietary automation capability. The flexible Emerald™ scripting language allows complex script assembly within minutes for all types of users; from novices to experts.
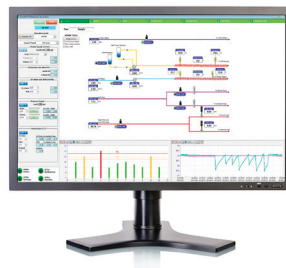
The Test and Automation Specialists: **greenlightinnovation.com**