

Fuel Cell Backup Generator (FCBG-H60)



Product Overview

The FCBG-H60 is a stationary hydrogen-powered backup generator designed for critical infrastructure, defense, and commercial operations. Housed in a sleek, modular enclosure, it delivers 60 kW of clean, silent power using a single Honda CRV fuel cell. This unit is engineered for quick deployment, low maintenance, and compatibility with grid and off-grid environments.

Monitoring & Controls

- 10" touchscreen HMI with encrypted remote access
- Integrated EMS for load control, fault diagnostics, and auto start/stop
- Communication protocols:
 - Modbus TCP/IP
 - CAN
 - RS-485
- Cloud-based performance analytics dashboard

Safety Features


- Hydrogen leak detection with automatic shutoff
- Emergency stop button (internal and external)
- Overvoltage, overcurrent, and over-temp protection
- Dual pressure regulators and relief valves
- NFPA 2 and UL 9540A compliant design

Options & Customizations

- Remote hydrogen storage integration
- HVAC or insulated housing for extreme climates
- Trailer-mounted version (FCBG-H60)
- Extended battery buffer (up to 200 kWh)
- Blackout/start-from-zero mode enabled



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cleaner, smarter backup power.

 TotalHydrogen.com

 281-861-1284

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System Specifications

Category	Specifications
Model	
Power Output	60 kW continuous
Fuel Cell Type	PEM (Proton Exchange Membrane)
Battery Buffer	Optional 60 kWh Lithium-ion (UPS functionality)
Inverter System	SolArk 60K 3-phase hybrid inverter
DC Input System	275 – 600 VDC
AC Output Voltage	480V 3-phase, 60 Hz
Startup Time	< 2 minutes
Hydrogen Supply Pressure	30 – 300 bar (regulated via onboard system)
Hydrogen Consumption	Approx. 3.3 kg/hr at full load

Enclosure & Environmental Specifications

Category	Specifications
Enclosure Type	Painted steel enclosure (NEMA 3R)
Cooling	Forced air-cooled with redundant fans
Ambient Temp Range	-10°C to 45°C (with optional HVAC for extended range)
Noise Level	< 65 dB(A) @ 10m
Footprint	Approx. 102" (L) × 62" (W) × 75" (H)
Weight	Approx. 1,500 lbs (fully loaded)

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