

BOXHY®

Fuel cell generator
Powered with H2



Applications



**MAIN MOBILE
ELECTRICITY SOURCE**



**BACK-UP
UNIT**



**EVENTS &
CONSTRUCTIONS**



**SECURITY
MARKET**

Introduction

H2SYS is a fuel cell engineering company focused on the development of PEM Fuel Cell Systems for OEM and the production of hydrogen powered generators.

To answer the need of clean energy, H2SYS developed a complete range of generators producing electricity safely and silently without carbon emission.

The BOXHY® range is the first mobile fuel cell generator matching electric needs from 1 kW to 8 kW.

Specific options are available such as integrated hydrogen tank, forkliftable frame.

Features and benefits

- ✓ Compact design
- ✓ Zero emissions
- ✓ Noiseless
- ✓ Instant start
- ✓ No maintenance
- ✓ High safety features

Specific technical data¹

Performances	BOXHY	1 kW	3 kW	5 kW	8 kW
Fuel cell power (W)		600	1000	3000	3000
Full power (W) – Boost Mode		1000	3000	5000	8000
Boost mode duration time		> 30 min			
Output voltage		230 VAC - 50 Hz			
Plug current		2 x 16 A		3 x 16 A	2 x 16 A + 1 x 32A
Size (mm)		820 x 440 x 580			1000 x 440 x 580
Weight (kg)		30	50	110	130

¹ Sizes, weights and technical specifications may vary without prior notice according to customer specifications.

Hydrogen

H2 specification	Minimum quality grade 3,5 (99,95%) ²
H2 inlet pressure with external H2 tank	4 – 10 bar
Optional integrated H2 tank	Specific option – contact us for details

² According to quality characteristics of Type 1, Grade E and Category 3 hydrogen fuel specified by ISO 14687-3:2014

Operation

Fuel cell technology	Aircooled PEM fuel cell
Noise (dB) @ 5 meter	Boost mode < 50 dB / Silent mode < 20 dB
Type of DC/AC inverter	Pure Sinus inverter
Hydrogen consumption	< 68 g / kWh
Running ambient T°C range	- 5°C to + 40°C ³
IP protection	IP 44

³ Larger temperature range on demand. Contact us for details.

Certification

Designed under CE directives and specific market norms

Machine – 2006/42/CE
 Low voltage – BT 2014/35/UE
 EMC – 2014/30/UE
 Portable Fuel Cell Systems – EN 62282-5-1