

# HYDROGEN

## FUEL CELL

### DESCRIPTION

The generators are based on proton exchange membrane (PEM) technology, which makes power generation efficient and environmentally friendly. The fuel used is pure hydrogen: by generating electricity, hydrogen and oxygen molecules combine and form a harmless by-product known as H<sub>2</sub>O or water.

Easy to use with a smart and compact design, the cells give you energy independence even on small and medium-sized motor and sailing boats. This unit will allow you to charge all your electrical systems, depending on the output and battery backup size. Create your first micro-smart grid by combining it with batteries, solar panels or wind turbines. In addition with the generators, we are offering a complete gas management system. Type 4 cylinders are quickly becoming the standard for hydrogen usage as they are extremely durable and lightweight. Together with our quick connect system, filling or exchanging bottles has never been simpler. Type 4 cylinders come in various sizes from 2 – 9 liters (water volume) and will fit in most compartments.

#### TECHNICAL SPECIFICATIONS CELL GENERATOR - UP200

Nominal power output: 200 W
Nominal output voltage: 12 V DC
Current @ 24 V: 17 A
Fuel: Gaseous hydrogen (≥ 99.95%)
Fuel consumption @ 1000 W: 2.8 NL/min
Operating temperature: -5°C to 40°C
Dimensions (LxWxH): 525x153x256 mm
Weight: 8 kg

#### TECHNICAL SPECIFICATIONS CELL GENERATOR - UP400

Nominal power output: 400 W
Nominal output voltage: 12 V DC
Current @ 24 V: 34 A
Fuel: Gaseous hydrogen (≥ 99.95%)
Fuel consumption @ 1000 W: 5.2 NL/min
Operating temperature: -5°C to 40°C
Dimensions (LxWxH): 590x200x390 mm
Weight: 10 kg

#### TECHNICAL SPECIFICATIONS CELL GENERATOR - UP1K

Nominal power output: 1000W
Nominal output voltage: 24 V DC
Current @ 24 V: 41.7 A
Fuel: Gaseous hydrogen (≥ 99.95%)
Fuel consumption @ 1000 W: 13 NL/min
Operating temperature: -5°C to 40°C
Dimensions (LxWxH): 700x222x410 mm
Weight: 25 kg

#### TECHNICAL SPECIFICATIONS HYDROGEN CYLINDERS

	2.0 LITERS	3.0 LITERS	6.0 LITERS
Working pressure:	300 bar	300 bar	300 bar
Water capacity:	2.0 l	3.0 l	6.0 l
Empty weight:	1.61±0.09 kg	1.91±0.09 kg	3.33±0.19 kg
Gas:	Gaseous hydrogen (≥ 99.95%)	Gaseous hydrogen (≥ 99.95%)	Gaseous hydrogen (≥ 99.95%)
Operating temperature:	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C
Dimensions:	369±5 x 107±3 mm	440±5 x 116 mm	481±2 x 159±2 mm

  

	6.8 LITERS	7.2 LITERS	9.0 LITERS
Working pressure:	300 bar	300 bar	300 bar
Water capacity:	6.8 l	7.2 l	9.0 l
Empty weight:	3.54±0.23 kg	3.75±0.24 kg	4.80±0.24 kg
Gas:	Gaseous hydrogen (≥ 99.95%)	Gaseous hydrogen (≥ 99.95%)	Gaseous hydrogen (≥ 99.95%)
Operating temperature:	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C
Dimensions:	520±5 x 159±2 mm	545±5 x 159±2 mm	545±5 x 180±2 mm

