



# Provide energy at the lowest carbon footprint

## ES|hydrogen

### A state-of-the-art hydrogen fuel cell with built-in battery

From music festivals to trade shows, events and temporary spaces that require a reliable and efficient power source to keep things running smoothly.

The ES Hydrogen produces energy in areas currently reliant on diesel generators by converting hydrogen into electrical energy.

The ES Hydrogen isn't just a power solution. It's eliminating CO<sub>2</sub> and NO<sub>x</sub> emissions and unlocking new possibilities for projects previously unfeasible.

Committed to greener practices, this system is guaranteed to revolutionize different projects, making them energy-efficient and environmentally responsible.

### Including 100 kW – 100 kWh battery storage

The built-in battery serves as the startup buffer for the fuel cell.

The battery's power is extra-large, so it also serves to accommodate energy surges of up to 100 kW. Think of a tower crane that suddenly requires a lot of power.

By loading the battery and consuming from the battery, the efficiency of the electrification process is drastically increased.

### Provide energy when there is none available

The ES Hydrogen provides a solution for diverse

electricity needs. It ensures continuous power supply to critical infrastructure such as buildings and data centers.

The fuel cell acts as a dependable backup during unexpected power outages and extends electricity access to remote off-grid regions.

### Events and temporary energy production

Organize an environmentally friendly and energy-efficient event by generating power from a sustainable source like hydrogen. Throughout the process, no CO<sub>2</sub> emissions are produced.

### Huge improvement compared to classic generators

This hydrogen fuel cell is known for its fast reaction time, as diesel generators suffer from sudden peak consumptions. Furthermore, the system works fully soundless

### Increase energy efficiency thanks to the heating outlet

Apart from producing electrical energy, the hydrogen fuel cell also provides 80kW of heat in the shape of warm water.

Easily connect a boiler for different heating applications.

#### Electric performance

AC rated nominal output	80KVA
AC rated peak output	100KVA
Rated output current	115,5A
Peak efficiency	55%

#### Physical parameters

Hydrogen inlet	13-16 bar
Dimensions (LxWxH)	3x2,5x2,8m
Total mass	5000kg
Protection level	IP55
Working temperature	-30 to 60°C
Communication and interfacing	Ethernet, Modbus TCP, Network interface
Safety	PED certified