

Green energy – rapidly available, anytime, anywhere

The modular fuel cell system “kvyreen” converts hydrogen into electricity and heat – emission-free, location-independent, and off-grid capable. It is suitable for decentralized energy supply in stationary or mobile applications, as well as for peak load, backup power, or hybrid use cases. kvyreen offers an economical and quiet alternative to diesel generators. Typical applications include construction and industrial sites, events, and temporary or emergency power supply.

The system is available with either 80 kW or 160 kW output, featuring AC or DC output and optional heat recovery. It can be flexibly integrated into existing energy infrastructures or operate fully autonomously.



The kvyreen fuel cell system delivers demand-based fast charging, power, and heat

kvyreen fuel cell system



AC-/DC output



Heat output



- DC fast charging at 80 or 160 kW
- 100% reliable and guaranteed power output
- No grid connection or upgrades required
- CO₂ free (when using green hydrogen)
- Mobile unit, can be installed anywhere
- Can be integrated into external hydrogen supply systems (e.g., fueling stations)
- Scalable to 500 kW and beyond

Specifications

General Specifications ¹	Unit	kvyreen 80	kvyreen 160
Dimensions (W × L × H)	m	1,6 × 2,1 × 2,4	1,6 × 3,1 × 2,4
Weight	kg	1800	2500
Max. inclination	degrees	+/- 5 from horizontal	
Ambient temperature ²	°C	-30 to +35	
Hydrogen supply pressure	bar	9 to 16	
Max. altitude	m a.s.l.	1500	

Fuel Cell System

Rated power	kW	80	160
Hydrogen consumption ³	kg/hr	5,5	11
Hydrogen quality	ISO14687-2 2012 Type I, Grade D / SAE J2719		

CG Charger

Max. charging power	kW	90	180
Max. charging voltage	V	800	
Number of charging points		1	
Charging connector		CCS Type II	

GS Generator ⁴

Power	kVA	100	200
Voltage	V	400	
Frequency	Hz	50	
Number of phases		3 + N + PE	

¹ Specifications are still under development and subject to change

² Without de-rating in charging power

³ At rated power and beginning of life

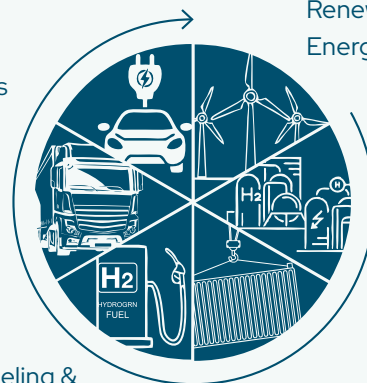
⁴ Initial release of a product capable of off-grid operation only

Kvyreen is a subsidiary of



We are H2 Energy, a Swiss company specialized in the development and implementation of hydrogen technologies, products and ecosystems. We provide services to support the production, storage and logistics of green hydrogen and engage with our partners to integrate hydrogen based solutions into energy and mobility applications. Through our products and services we aim to support the transition towards a sustainable and emissions free future.

Applications



Renewable Energy

Production & Logistics

Refueling & Storage

