



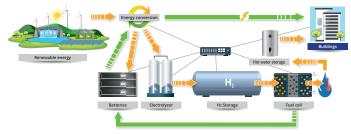
# STATIONARY APPLICATIONS



#### SAGES<sup>®</sup> STATION (Smart Autonomous Green Energy Station)

The SAGES<sup>®</sup> technology transforms intermittent, noncontrollable renewable energy to make it available to users at any time. This is made possible by hybrid energy storage devices using hydrogen and batteries.

Our technology also allows for the reuse of waste heat generated by the equipment by injecting it back into buildings.



The SAGES® station is controlled by an E.M.S. (Equipment Management Software), PowiDian Energy's proprietary software, installed in a Master Controller, to manage the equipment locally. An intelligent software layer is added to enable autonomous equipment control decisions (starting, shutdown, optimization of the operating point, alarms, etc.).

The control also integrates an OPC-UA (Open Connectivity-Unified Architecture) communication standard to access numerous data, in real time or delayed, coming from the SAGES<sup>®</sup> station.

This data is stored on a

server via a centralized

supervision web interface,

accessible to users and

technicians, according to

the defined access rights.

**Applications :** 

- Off grid consumer power supply
- Storage of intermittent energy
- Energy storage related to buildings
- Fixed or mobile emergency power supply

## **H2 STORAGE SOLUTIONS**

Hydrogen can be stored and compressed in a gaseous state from 30 to 500 bars in tanks or bundles.

Gaseous Solid

For industrial, residential and large-scale projects, hydrogen is stored in a solid, containerized and modular state: up to 30 kg per m<sup>3</sup>, with capacities from 45 to 675 kgH2.



## STANDARD PRODUCTS

## MODULAR ELECTROLYSER

This solution allows the decentralized production of green hydrogen up to 76 kg per day.

Our modular electrolysers are available as standalone containers or cabinets, or as combined units.



#### **Applications :**

Excess energy storage from solar and wind energy Fleet vehicles fueling stations



## FUEL CELL SYSTEM

The fuel cell enables electricity generation using hydrogen fuel, with a range from 50 kW to 1 MW. Higher power is achieved by parallelizing systems. This system is available alone or coupled with a modular electrolyser to obtain an autonomous SAGES<sup>®</sup> station.

#### **Applications** :

- Transport
- Goods handling
- Fixed, transportable and emergency power supply
- Energy storage systems Power supply to buildings
- Heat recovery for offices heating



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