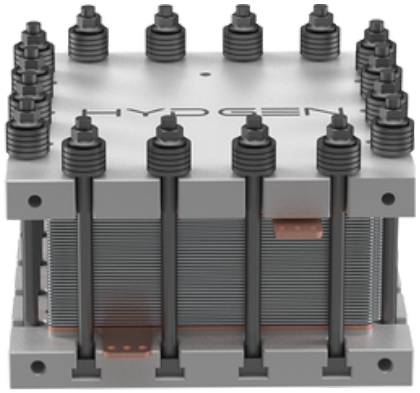
25kW PEM Stack

The HYDGEN 25 kW PEM stack is designed for small-scale industrial applications requiring reliable, on-site hydrogen production of approximately 11 kg/day. It strikes a balance between capacity and footprint, making it an excellent choice for research projects and small-scale manufacturing.



Input

Stack Power Consumption	25kW
DC Power Consumption	4.6 (rated Power) kWh/Nm3 H2
Feed Water Quality	≤0.1 μS/cm (ISO 3696:1987 Grade1)
Water Flow Rate	0.44 m^3/h
Current Density	2 A/cm^2
Cells	16 Pcs
Rated Current	800 A
Rated Voltage	32 V
Rated Temperature	60±5 ℃
Ambient Temperature	10-40 ℃

Output

Volume	5 Nm3/h
Mass	~ 11.46 kg H2/day
H2 Output Pressure	~10 Barg
O2 Side Pressure	~1 Barg
O2 in H2	≤0.1 (dry basis) %
H2 in O2	≤1 (dry basis) %
Purity	99.97%

Performance Parameters

DC efficiency	87-89 %HHV
Start Up Time	10s/8min Warm/Cold
Response time	30s
Water Consumption	~4.29 L/h
Power Range	25~125 %
Design Life	40 000 hours

Mechanical Parameters

Size (W×L×H)	420*420*190 mm
Weight	~300 Kg