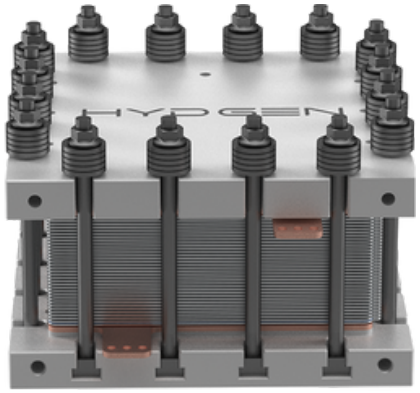
50kW AEM Stack

The HYDGEN 50 kW AEM stack is built for industrial users seeking up to 22 kg/day of on-demand hydrogen. It enables greater supply independence and is well-suited for sectors transitioning to on-site hydrogen production.



Input

Stack Power Consumption	50kW
DC Power Consumption	4.8 (rated Power) kWh/Nm3 H2
Feed Water Quality	≤10 μS/cm (ISO 3696:1987 Grade1)
Water Flow Rate	0.89 m^3/h
Current Density	1 A/cm^2
Cells	70 Pcs
Rated Current	400 A
Rated Voltage	128 V
Rated Temperature	50±5 ℃
Ambient Temperature	10-40 ℃

Output

Volume	10 Nm3/h
Mass	~ 20 kg H2/day
H2 Output Pressure	~5 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	75-82 %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*250 mm
Weight	~300 Kg