

5kW AEM Stack

The HYDGEN 5 kW AEM stack is a compact, entry-level system ideal for small-scale hydrogen production. Designed for research labs, pilot projects, and niche industrial applications that need less than 5 kg/day of hydrogen, it offers an efficient and modular solution for decentralized hydrogen generation.



Input

Stack Power Consumption	5kW
DC Power Consumption	4.8 (rated Power) kWh/Nm3 H2
Feed Water Quality	≤10 µS/cm (ISO 3696:1987 Grade1)
Water Flow Rate	0.19 m³/h
Current Density	1 A/cm²
Cells	7 Pcs
Rated Current	400 A
Rated Voltage	14 V
Rated Temperature	50±5 ℃
Ambient Temperature	10-40 °C

Mechanical Parameters

Size (W×L×H)	420*420*160 mm
Weight	~120 - 150 Kg

Output

Volume	1 Nm3/h
Mass	~ 2.5 kg H2/day
H2 Output Pressure	~5 Barg
O2 Side Pressure	~1 Barg
02 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	~0.940 L/h
Power Range	25~125 %
Design Life	40 000 hours