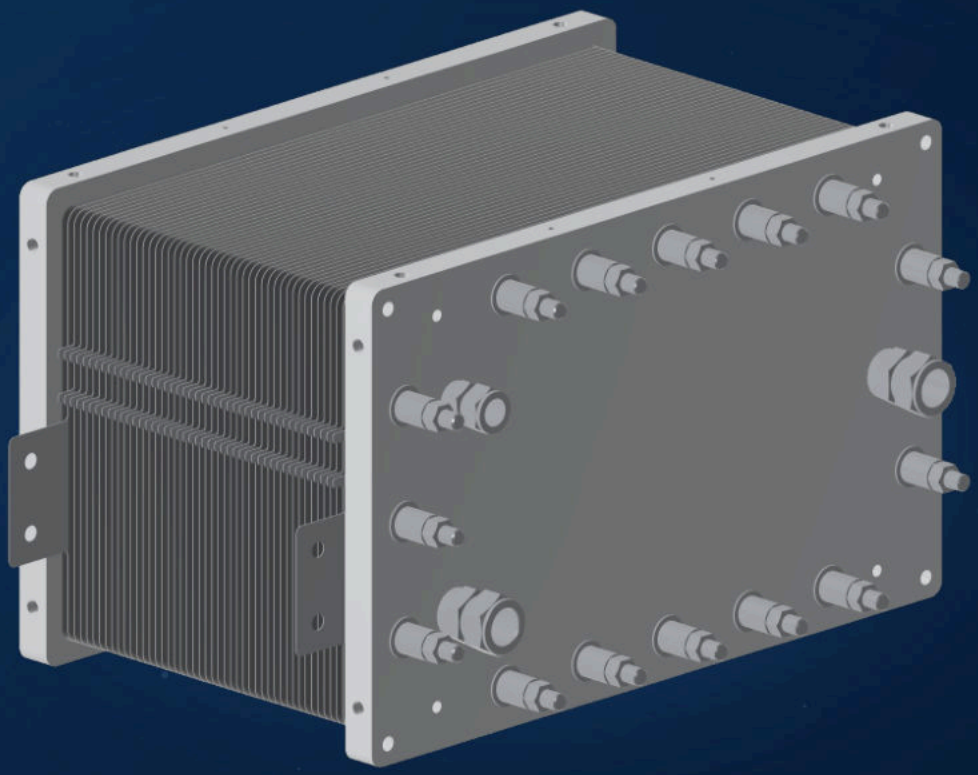
AEM WATER ELECTROLYSIS

HXS-30

5-cell available · 46-cell available Q4 2026

30 kW AEM electrolyser stack

A 30 kW AEM stack for integration into research, demonstration and industrial hydrogen plant.



KEY RATINGS

15 kg/day	30 kW	46 cells
Rated H_2 output	Rated power	Full-stack configuration

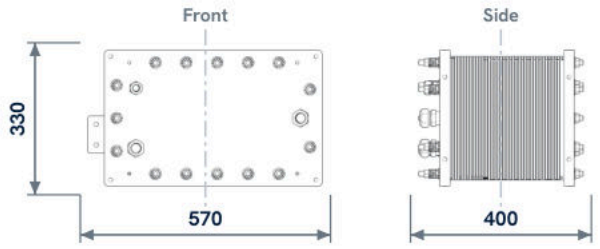
Product boundary · Standard supply

Stack assembly. Rectification, circulation, cooling and gas treatment are configured in the customer's system.

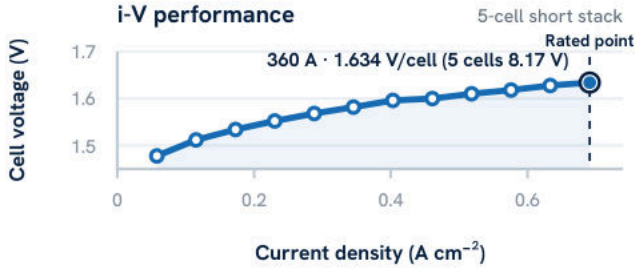
HXS-30 · PRELIMINARY SPECIFICATION

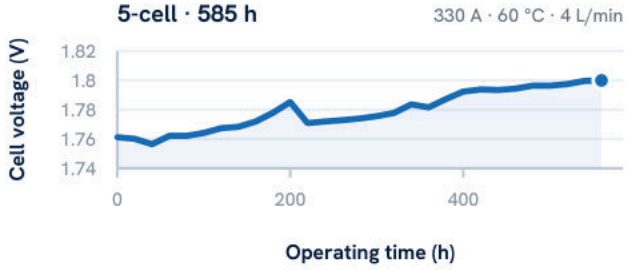
Design specifications · operating range

Dimensional drawing



W × D × H 570 × 400 × 330





Performance

PERFORMANCE

H_2 production	7,500 L/h · 15 kg/day
Efficiency (HHV)	46-cell design 84% · 5-cell measured 90.7%
Rated power	30 kW
Feedwater consumption	6.5 L/h · 360 A
Operating temperature	up to 80 °C
Recommended operating condition	0.1 M KOH · 50 °C

Physical

PHYSICAL

Cell count	46
Electrode area · reference active area	600 cm^2 anode electrode area · approx. 521 cm^2 reference active area
Dimensions	570×400×330 mm
Weight	120 kg

Connections

CONNECTIONS

DC input	80 V · 360 A
DC terminal	M10
Electrolyte inlet	1″ double-ferrule
H_2 outlet	3/4″ double-ferrule
O_2·Electrolyte outlet	1″ double-ferrule

Materials

MATERIALS

Anode	HXP-an (non-precious-metal NiFe-LDH)
Cathode	HXP-ca (Pt- or PtRu-based · 0.2 mgPGM/cm^2)
electrolyte membrane	Polymer ion-exchange membrane

Measured reference

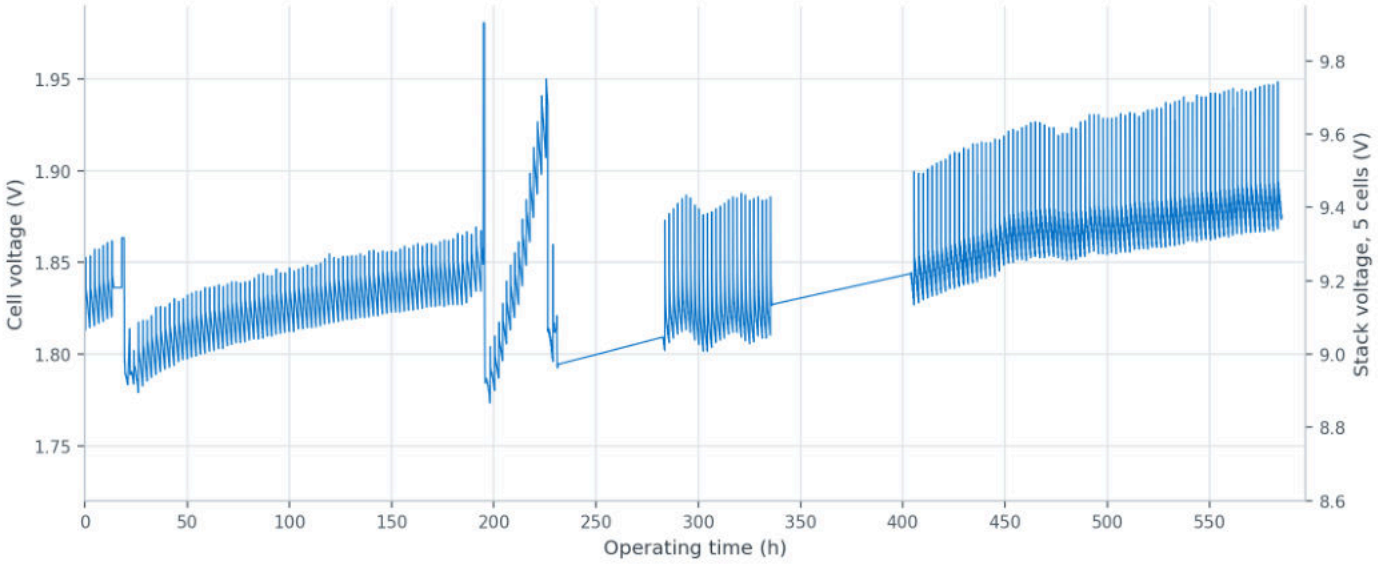
- Current density: approx. 521 cm^2 reference active area
- Efficiency: 46-cell design 84% · approx. 47 kWh/kg / 5-cell measured 90.7% · approx. 43 kWh/kg
- Durability: 5 cells · 330 A · 60 °C · electrolyte 4 L/min · 585 h (27 Jul 2026)
- Water consumption: 6.3 L/h measured at 350 A and converted to 360 A
- Cathode loading: 0.2 mgPGM/cm^2 · PtRu-based loading is total Pt+Ru

HXS-30 · MEASURED DATA

Measured on a 5-cell short stack

5-cell short-stack durability run

585 h · 5 cells · 330 A galvanostatic · 60 °C · electrolyte flow 4 L/min · approx. 521 cm² reference active area



Cell voltages at 360 A (5 cells)