

AEM Electrolyser





Enapter's patented anion exchange membrane (AEM) electrolyser is a standardised, stackable and flexible system to produce on-site hydrogen. The modular design – paired with advanced software integration – allows set up in minutes and remote control and management. Stack this electrolyser to achieve the required hydrogen flowrate.

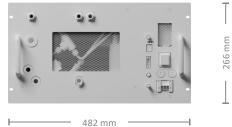






AEM Electrolyser EL 4.1 www.enapter.com/aem-electrolyser

Specifications





Production rate	Up to 500 NL/h, up to 1.0785 kg/24 h
Hydrogen output purity	35 barg (508 psig): 99.9% (< 1,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (77 °F 8 barg (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (77 °F 9 barg (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (77 °F 9 barg (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (77 °F 9 barg (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 5 ppm O ₂) at 25 °C (116 psig): 98.8% (< 12,000 ppm H ₂ O and < 100 ppm
Output pressure	Up to 35 barg (Up to 507.63 psig)
Nominal power consumption per Nm ³ of H ₂ produced	4.8 kWh/Nm³, beginning of life
Operative power consumption	2.4 kW, beginning of life
Heat dissipation	0.6 kW, beginning of life
Standby power consumption ¹	0.03 kW
Power supply	208 – 240 V (AC), 50/60 Hz, both split phase and 3-phase
Maximum water input conductivity	Minimum ASTM D1193-06 Type IV or recommended Type II or Type III ²
Water consumption	~ 420 mL/h at 25 °C (~ 0.11 gal/h at 77 °F)
Water input pressure range	1 – 4 barg (14.5 – 58 psig)
Cooling water pressure range	1 – 4 barg (14.5 – 58 psig)
Cooling water temperature range	5 °C - 40 °C (41 °F - 104 °F) ³
Cooling water flow	1 – 2 L/min (0.26 – 0.53 gal/min)
Ambient operative temperature range	5 °C – 45 °C (41 °F – 113 °F)
Ambient operative humidity range	Up to 90% humidity, non-condensing
IP rating	IP 20
Dimensions	W/D/H: 482 mm × 635 mm × 266 mm (19" × 25" × 10.5")
Weight	41 kg (90.4 lbs)
Space inside cabinet	6 U
Control and monitoring	Fully automatic with Enapter's EMS via 2.4 GHz Wi-Fi and Bluetooth, Modbus TCP over Ethernet
Conformity	CE mark according to the machine directive 2006/42/CE ⁴ UKCA mark according to Supply Machinery (Safety) Regulations 2008 ⁵ CSA/ANSI B22734:2023 Ed.1 Hydrogen Generators Using Water Electrolysis - Industrial, Commercial, and Residential Applications ⁶

¹ Standby refers to the condition in which no hydrogen is being produced and the auxiliary components are not powered.

³ Please, check the Battery limits and the Owner's Manual for the complete requirements list
 ³ Please, check the Owner's Manual for operational values

⁴ The Electrolyser belongs to S.E.P. category according to Pressure Equipment Directive 2014/68/EU ⁵ The Electrolyser belongs to S.E.P. category according to Pressure Equipment (Safety) Regulations 2016
⁶ ETL recognized electrolyser versions only (ELE410535A2AE, ELE410535A2LE)

Note: The product is under continuous improvement and the technical specifications might be

subject to change. Please make sure to refer to our website for the most recent specifications.



AEM Electrolyser EL 4.1 www.enapter.com/aem-electrolyser

