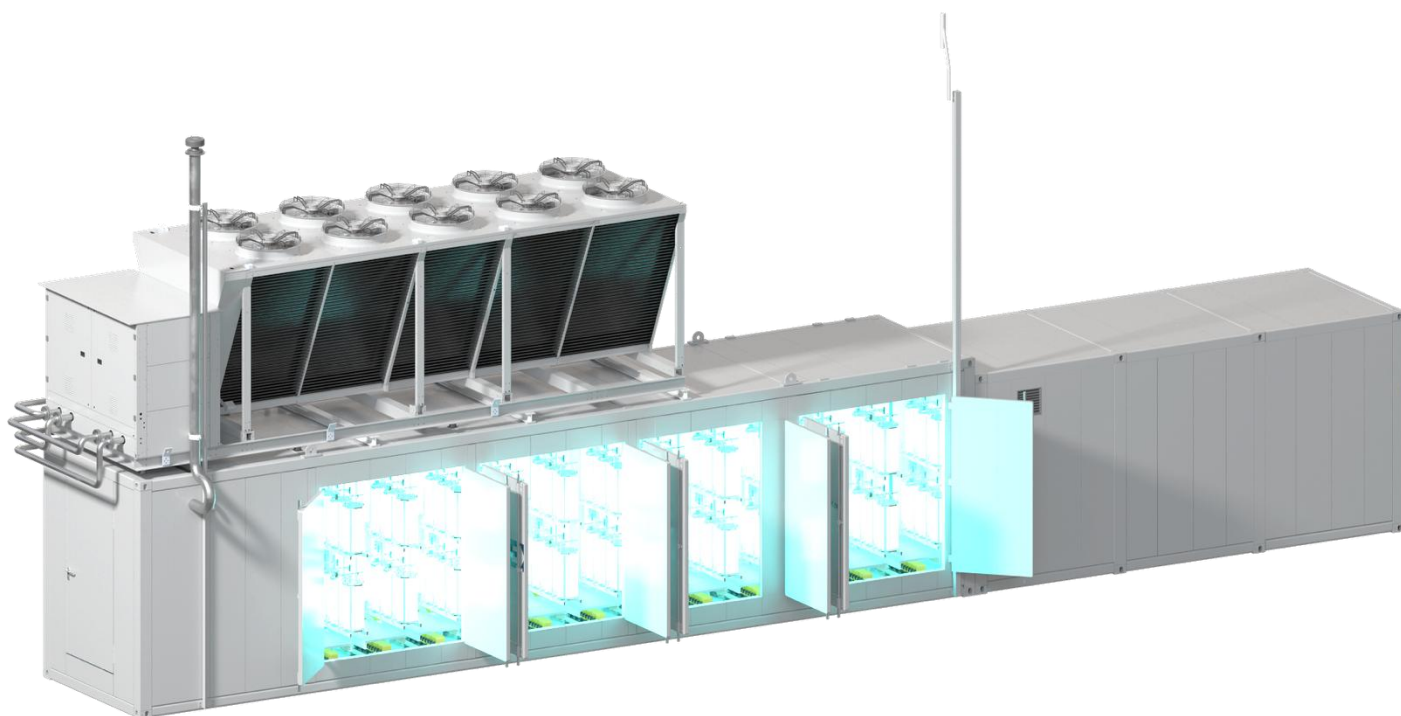


AEM NEXUS 2500



Key features

- ≡ Unmatched system efficiency: <math><52 \text{ kWh/kg}</math>
- ≡ Fully automatic operation, AI optimized
- ≡ **Modular** architecture for max. redundancy
- ≡ Rapid reaction times to variable renewables
- ≡ Low maintenance requirements

The AEM Nexus 2500 is a megawatt class containerized AEM Electrolyser featuring many AEM stacks around a common balance of plant (BoP) that includes rectifiers, safety system, cooling/heating and electrolyte loop.



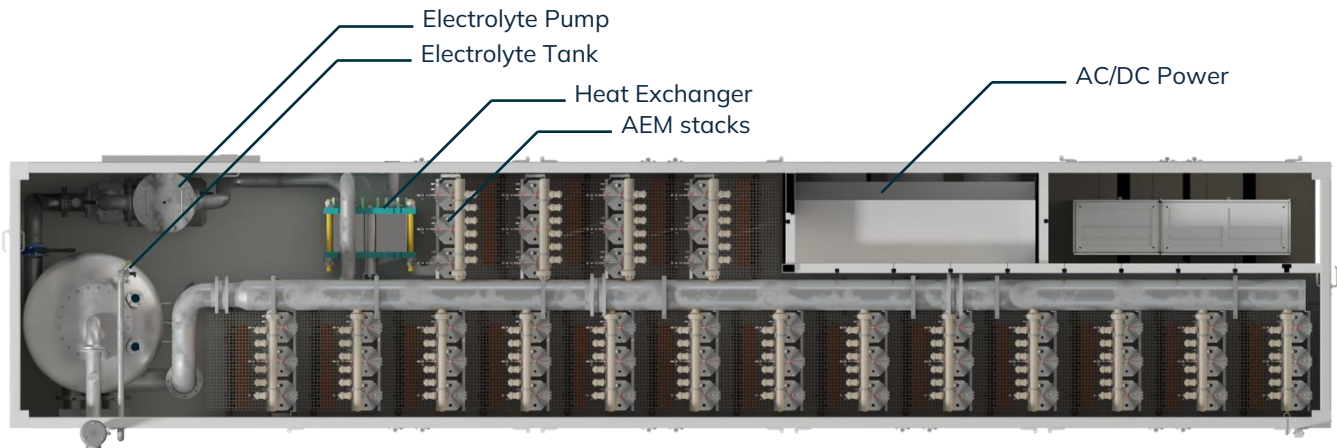
AEM Nexus 2500

www.enapter.com/aem-nexus

Specifications

Enapter

AEM Nexus 2500



| | | |
|---|---|---|
| H₂ nominal flow | 491.6 Nm ³ /h (44.2 kg/h) | Net volume flow rate |
| H₂ outlet pressure | Up to 31 barg | |
| H₂ purity | 99.5% in molar fraction | Impurities: H ₂ O < 5000 ppm, O ₂ < 5 ppm |
| H₂ purity with optional chiller | 99.95% in molar fraction | Impurities: H ₂ O < 500 ppm, O ₂ < 5 ppm |
| H₂ purity with optional dryer | 99.999% in molar fraction | Impurities: H ₂ O < 5 ppm, O ₂ < 5 ppm |
| Specific power consumption (Efficiency) | 4.61 kWh/Nm ³ H ₂ 51.3 kWh/kg H ₂ | Including all utilities inside the battery limits @standard conditions*, 99.5% configuration. |
| Nominal power consumption | 2266 kW | Including all utilities inside the battery limits, @standard conditions*, 99.5% configuration. 99.95% configuration + ~6 kW 99.999% configuration + ~18 kW |
| Voltage | 400 Vac 3ph+N+PE 230 Vac 1ph+N+PE | ± 10 % ± 10 % |
| Frequency | 50 Hz | ± 10 % |
| H₂O nominal consumption | 396 L/h | Purified water |
| H₂O inlet purity (recommended) | Type II water Acidity < 0.1 meq/l | According to ASTM D1193-06 According to ASTM D1067 |
| Operational flexibility | 3.5% – 100% | Of nominal H ₂ flow rate (for a continuous time of max 24h. Then 10% - 100%) |
| Hot startup time | 0 – 100% in 225 seconds | Electrolyte valve open, solution circulating at ≥45°C |
| Dimensions of Process container | 12.19 × 2.44 × 5.13 m | L x W x H (H= 5.13 m including equipment on the roof) |
| Dimensions of Electrical container | 6.06 x 2.46 x 2.59 m | L x W x H |

**at full load, normal operation, BoL, 55°C electrolyte temperature and 15°C ambient temperature*