

AEM Technology

- High efficiency, fast responsiveness, and cost-effective
- H₂ is electrochemically compressed and delivered at up to 35 barg (Lower associated costs for further compression)
- Titanium and iridium are not required in the AEM design, lowering costs and CO₂ emissions
- Patented "Dry Cathode" technology simplifies system design
- = N_2 or other gases not needed for operation
- Compressed air not needed for operation

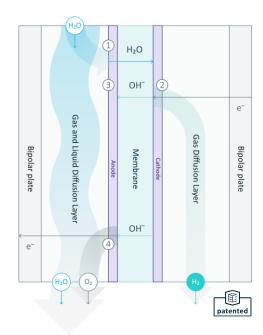


Figure 1 AEM cell cross sections

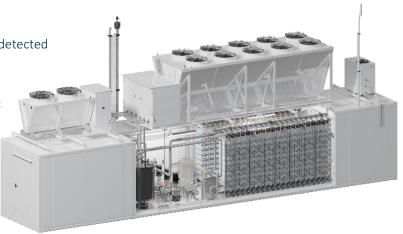
AEM Nexus 1000

The <u>AEM Nexus 1000</u>, is a ~1 MW containerised electrolyser featuring 420 AEM stack modules around a common balance of plant (BoP).

- = H₂ Output: 450 kg/24h, 99.9% purity (99.999% with optional dryer)
- Modular system made of 42 AEM strings
 Each string can produce 5 Nm3/h and is controlled independently

High degree of redundancy:2.4% of production stops if a stack failure is detected

- High Production flexibility: 3% 100%
- Rapid reaction times to variable renewables: hot startup 0-100% in 100 seconds
- Smart and fully automatic operation
- Based on proven and commercially available Enapter AEM technology



See here for commercial references.

Figure 2 AEM Nexus 1000 outside view