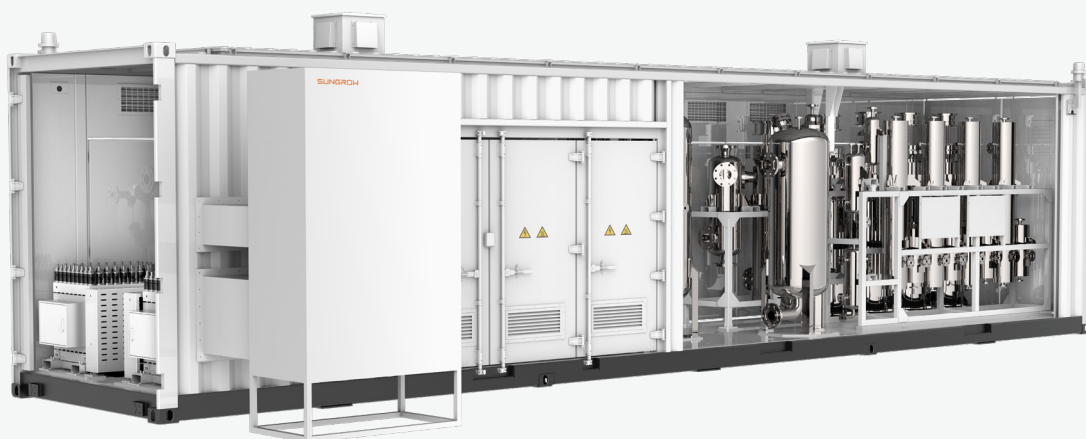


PEM Water Electrolysis Equipment

PEM electrolyzer utilizes DC to electrolyze pure water into hydrogen and oxygen, after the gas-liquid separation and purification to produce hydrogen with high purity. It is composed of PEM electrolyzers, gas-liquid separation equipment, hydrogen purification equipment and public utility equipment.



Flexible

5%-110% operating range
10%/s ramp up/down



Efficient

Adopts high performance electrode, late-model structure and optimized fluid channel design, DC power consumption can be as low as $4.15\text{kWh/Nm}^3 \text{ H}_2$



Reliable

Stack management system integrated
Repeated on/off cycles and continuous accelerated aging tests, longer lifespan



PEM Electrolyzer

Product parameters

PEM Electrolyzer		
H ₂ nominal flow rate	500 Nm ³ /h	200Nm ³ /h
H ₂ delivery pressure	30barg	30barg
H ₂ purity	99.9%(@outlet separation)	99.9%(@outlet separation)
	99.999%(@oulet purification)	99.999%(@oulet purification)
H ₂ outlet temperature	≤45℃	≤45℃
H ₂ dew point	-70℃	-70℃
O ₂ nominal flow rate	250Nm ³ /h	100Nm ³ /h
Stack DC consumption, BOL	4.30kWh/Nm ³ @nominal load	4.30kWh/Nm ³ @nominal load
System AC consumption ^[1] , BOL	4.50kWh/Nm ³ @nominal load	4.50kWh/Nm ³ @nominal load
Operating range ^[2]	5%-110%	5%-110%
Ramp up/down	10%/s	10%/s
Electrolyte	PEM	PEM
Demineralized water consumption	0.90L/Nm ³ H ₂	0.90L/Nm ³ H ₂
Demineralized water quality	Conductivity<1μs/cm Chloridion<0.1mg/L Soluble silicon<0.02mg/L	Conductivity<1μs/cm Chloridion<0.1mg/L Soluble silicon<0.02mg/L
Cooling water requirement	90m ³ /h	35m ³ /h
Ambient operating temperature	5-45℃	5-45℃
Dimensions (W×D×H)	12192×2438×5792mm	12192×2438×2896mm
Compliance	CE-PED/ATEX/MD/LVD/EMC, ISO22734	CE-PED/ATEX/MD/LVD/EMC, ISO22734

[1]PWM hydrogen production power supply, gas-liquid separation and hydrogen purification equipment included

[2]Based on the nominal hydrogen production rate