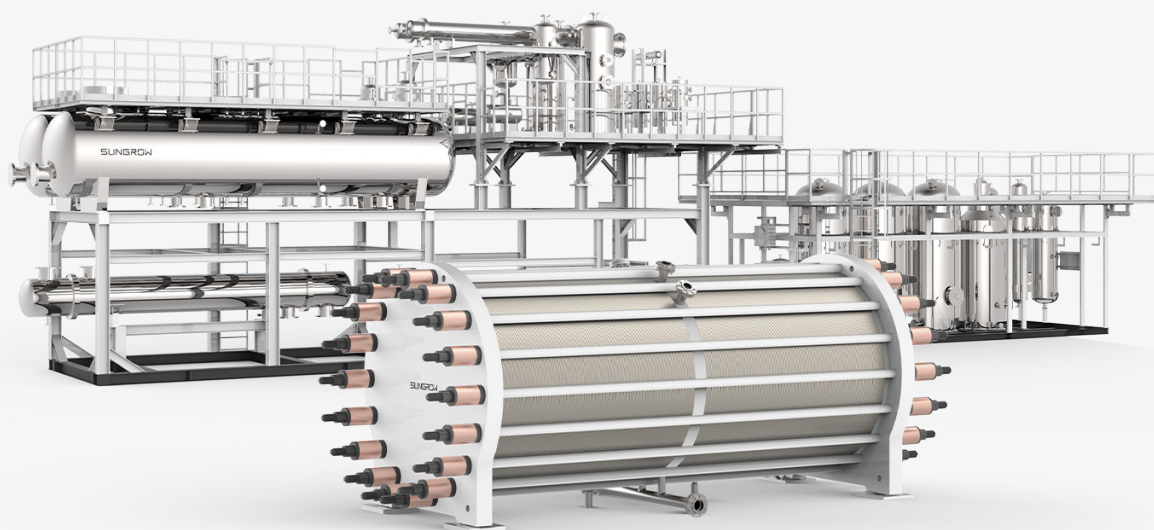


ALK Water Electrolysis Equipment

ALK electrolyzer utilizes DC to electrolyze alkaline aqueous solution into hydrogen and oxygen, after the gas-lye separation and purification to produce hydrogen with high purity. The system is composed of ALK electrolyzers, gas-liquid separation equipment, hydrogen purification equipment and public utility equipment.



Flexible

25%-110% operating range
5%/s ramp up/down



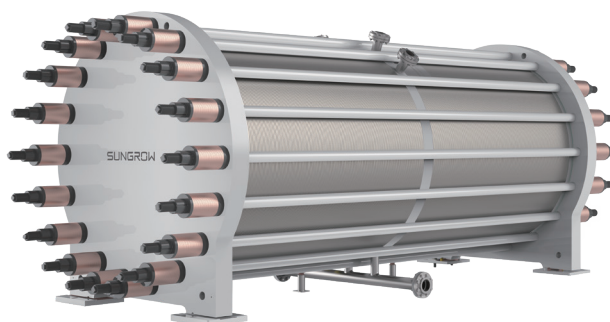
Efficient

Adopts high performance electrode, late-model structure and optimized fluid channel design, DC power consumption can be as low as 4.5kWh/Nm³ H₂



Reliable

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



ALK Electrolyzer

Product parameters

ALK Electrolyzer		
H ₂ nominal flow rate	1000Nm ³ /h	500Nm ³ /h
H ₂ delivery pressure	16barg	16barg
H ₂ purity	99.8%(@outlet separation)	99.8%(@outlet separation)
	99.999%(@outlet purification)	99.999%(@outlet purification)
H ₂ outlet temperature	≤45°C	≤45°C
H ₂ dew point	-70°C	-70°C
O ₂ nominal flow rate	500Nm ³ /h	250Nm ³ /h
Stack DC consumption, BOL	4.50kWh/Nm ³ @nominal load	4.50kWh/Nm ³ @nominal load
System AC consumption ^[1] , BOL	4.60kWh/Nm ³ @nominal load	4.65kWh/Nm ³ @nominal load
Operating range ^[2]	25%-110%	25%-110%
Ramp up/down	5%/s	5%/s
Electrolyte	30% KOH	30% KOH
Demineralized water consumption	0.90L/Nm ³ H ₂	0.90L/Nm ³ H ₂
Demineralized water quality	Conductivity < 5 μs/cm Chloridion < 0.5mg/L	Conductivity < 5 μs/cm Chloridion < 0.5mg/L
Cooling water requirement	140m ³ /h	90m ³ /h
Ambient operating temperature	5-45°C	5-45°C
Dimensions (W×D×H)	Separiton:5400×3200×5850mm	Separiton:4500×3000×5350mm
	Purifacation:5200×2760×3630mm	Purifacation:4300×2700×3580mm
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