

# Wide Power Range Adjustable Electrolyzer and Separation & Purification Unit

The wide power range adjustable electrolyzer and separation & purification unit are designed to cope with fluctuations in new energy sources, allowing frequent start/stop operations and flexible power adjustment across a broad range.

## Product Parameters

MAIN PERFORMANCE INDICATORS OF 1,000 NM3 ELECTROLYZER

1,000 Nm3/h electrolyzer	Technical indicator parameter
Rated DC voltage	720V
Rated DC current	6600A
System pressure	1.6MPa
Hot start time	≤5min (@ 50°C)
Hydrogen purity after drying and purification	99.999%
Demineralized water consumption	800-1000L/h
Hydrogen output	≥1000Nm3/h
Oxygen output	≥500Nm3/h
DC power consumption	≤4.4kWh/Nm3H2
Operating range	25%-110%

## TECHNICAL OPTIMIZATION



Small zero-gap chambers are used to optimize the design of baffles and flow channel structures, improving the uniformity of flow and temperature fields; Explosion-proof design



Unique alkali solution distribution structure is designed to ensure consistent temperature control among individual small chambers along the axial direction of the electrolyzer, with a temperature difference of less than 5°C between the inlet and outlet.



Ternary electrodes with high activity and large specific surface area are used to reduce overpotentials for both HER and OER, resulting in a 10% increase in current density;



Dual-valve parallel regulation is integrated for system pressure, enabling precise control of system pressure at low load.