WOLFTANK

H2 Electrolyzer

Fuel Resource

Water

Electrical Power

6 KW

Output

H2 and warm water

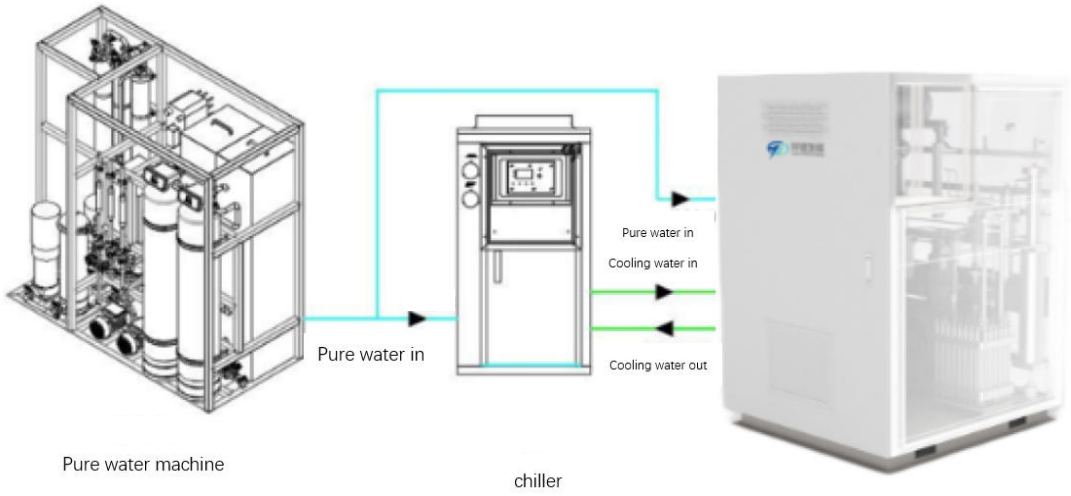
- Easy Installation
- Low Noise & Small Volume

Process flow and system composition

Pure water is directed into a raw water tank that connects to a pipe through a valve. The water then flows through a water quality regeneration filter, where an electrolytic cell conducts electrolysis using direct current, producing hydrogen and oxygen.

Hydrogen gas travels through a pipeline to a hydrogen water separator, where it is cooled and separated from a small amount of water. The separated hydrogen is drained through a solenoid valve. The raw hydrogen then enters the equipment's purification system, where it undergoes various purification processes. A pressure regulating valve automatically adjusts the hydrogen pressure for user consumption.

Cooling water dissipates heat generated during the electrolysis process. This cooling water circulates through a heat exchange system within the equipment, maintaining a system temperature of 45-50°C. The electrolytic power supply is cooled separately using a bypass mechanism.



System Specification

Hydrogen purity	H2 of 99.999% Purity ISO 14687 Standard
operation time	0 -24 h
Electrolysis technical req.	PEM Hydrogen production
Hydrogen output pressure	30 bar
modulation range	0-100 %
hydrogen production	0.5 Nm^3/h
Water consumption	≤ 0.5 l/h
Water quality requirement	< 10MΩ cm
Power consumption	<4.8-5 kWh/Nm^3H2
Dimensions	730 x 1000 x 1224 mm
Weight	Approx. 300 kg