FuelGen®

Electrolyzers for Hydrogen Fueling

FEATURES

- 15 or 30 barg output
- Caustic free
- Compressor free
- Low maintenance
- Fully automated
- On board DI system
- Dew point monitor
- Outdoor rated
- Remote monitoring

The FuelGen® hydrogen generator system is specifically designed and packaged for the demands of the vehicle fueling application.

Proton® ENERGY SYSTEMS

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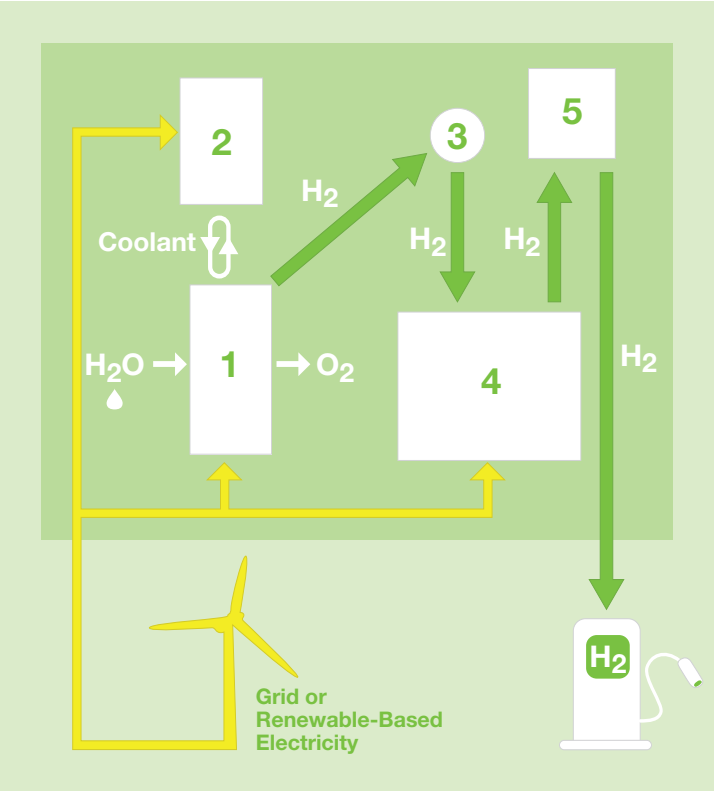
HOW IS IT INTEGRATED?



1. HYDROGEN GENERATOR

Uses electricity to split water into hydrogen and oxygen gas with Proton Energy's PEM electrolysis technology. The hydrogen is generated at a pressure of up to 30 barg (435 psig) and at a rate of up to 13 kg/day. The oxygen is produced at atmospheric pressure and is vented into the air.

2. COOLER/CHILLER

Regulates the temperature of the hydrogen generator.

3. BUFFER TANK

Stores the hydrogen gas from the generator and feeds it into the compressor at between 4.5 and 30 barg (70 and 435 psig).

4. COMPRESSOR

Compresses the hydrogen from the buffer tank to 430 barg (6250 psig) and fills the high pressure tanks.

5. HIGH PRESSURE STORAGE

Stores the gas in pressurized banks to allow fueling at the required pressures needed for the appropriate range capability of the vehicle.

6. DISPENSER

Dispenses fuel into hydrogen powered vehicles and is designed to allow for consistent back-to-back fueling.

SPECIFICATION SUMMARY

HYDROGEN GENERATOR	
Production rate	Up to 12.94 kg/ 24 hr at 15 barg (218 psig) or Up to 13.68 kg/ 24 hr at 30 barg (435 psig)
Electrolyte	Proton exchange membrane (PEM) - caustic free
Delivery pressure - nominal	15 barg (218 psig) or 30 barg (435 psig)
Hydrogen purity	99.999%, water vapor < 5 ppm, N_2<2ppm, O_2<1ppm, all others undetectable
Dimensions (L x D x H)	218 cm x 84 cm x 191 cm (86" x 33" x 75") 249 cm x 117 cm x 191 cm (98" x 46" x 75") with shrouds
Weight - shipping	900 kg approx (1984 lbs)

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ISO 9001
Registered Company
TÜV Rheinland of North America, Inc.