## HYET HYGIOGEN

Commercial deliveries have started

Electrochemical Hydrogen purification and compression

## THE NEW STANDARD IN HYDROGEN COMPRESSION

No moving parts

High reliability and availability

Low energy consumption

No vibrations

Compact

Silent

## HyET HCS100 H<sub>2</sub> Compression and Purification systems

2, 10 and 120 - 600 kg/day standard systems

Modular design: more stacks = more capacity
Up to 875 bar in a single stage, throughput from 0-100%
Proprietary highly efficient power electronics



RELIABLE SILENT COMPACT

HyET is now taking orders for delivery of EHC systems. Purchase and rental units available. Please contact **info@hyethydrogen.com** for more information.

Operating input pressure	3 – 15 barg
Operating output pressure	410 barg/6000 PSI (900 barg/13000 PSI as an option)
Nominal hydrogen flow rate	4.65 m <sup>3</sup> /h (at STP)
Maximum hydrogen flow rate	7.23 m³/h (at STP)
Required input purity	99.9%; $H_2O$ saturated, $CO < 1$ ppm, $CO_2 < 2$ %, $(0-100\% H_2 input purity as an option)*$
Inlet connection	1/4 inch Swagelok tube fitting
Hydrogen purity output	99 999%

Hydrogen purity output

Hydrogen output temperature

Outlet connection

99.999%

35°C

1/4 inch Swagelok medium pressure IPT fitting

Nominal compression energy consumption

Maximum compression energy consumption

8.5 kWh/kg (at nominal flow rate)\*\*

13.2 kWh/kg (at maximum hydrogen flow rate)

MODEL Skid 10kg/day

Voltage 15 kW

Voltage 2 Demineralized water, other options possible

Ambient temperature range +5°C to +30°C Installation area Indoor, non-ATEX zone (outdoor non-ATEX zone as an option)

Size (L x W x H) 1.5 x 0.9 x 2.0 m

## Notes

- \* A CO/CO<sub>2</sub> tolerant membrane is under development
- \*\* Current developments will lead to significantly lower energy consumption rates.

