

PemGen® CHP-FCPS-600



Nedstack fuel cell technology B.V. Stationary Power Systems www.Nedstack.com

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Low Temperature Proton

The CHP-FCPS-600 is a PEM Fuel Cell Power Systems intended for industrial applications, Power-2-Power purposes for solar fields and wind farms and for co-generation applications in the built environment.

The CHP-FCPS-600 is optimized for seamless integration in local or collective electricity grids by being able to use all sorts of commercial off-theshelf power electronics.

The PemGen Fuel Cell Power System portfolio is available on a configure-to-order basis. Get in touch to tune this system for your specific application.



| GENERAL | Fuel Cell Type | Low Temperature Proton Exchange Membrane (LT-PEM) |
|-----------------------|---------------------------|---|
| | Fuel Cell Stack Model | 60 x Nedstack FCS13-XXL |
| ELECTRICAL | Nominal Power (EoL) | 600 kW _e |
| | Peak Power (BoL) | 740 kW _e |
| | Voltage range | 500 - 1000 VDC |
| | Current range | 0 - 1200 A |
| ENCLOSURE | Weight | 15.000 kg |
| | Built Level | 20 ft ISO Container (high cube) |
| | Length | 6.06 m |
| | Width | 2.44 m |
| | Heigth | 2.90 m |
| | IP-rating | IP 54 |
| DROGEN FEED | Quality | Grade ≥ 2.5 (CO < 0.2 ppm) |
| | Supply pressure | 0.3 – 6 barg |
| | Nominal consumption (BoL) | 59 kg/ MWh _e |
| | Max consumption | 40 kg/h |
| COOLANT | Medium | DI water or BASF FC G20 |
| | Outlet Temperature | Max 65 °C |
| | Required Cooling Capacity | 900 kWth |
| | Recoverable heat | >400 kW _{th} |
| AMBIENT CONDITIONS | Operating Temperature | -5 – 40°C |
| | Storage Temperature | 5 – 60°C (optional -20°C – 60°C) |
| APPLICATION | Intended use | Residential blocks, Commercial and insitutional facilities and Chemical sites |
| | Placement | To be placed on flat concrete surface or steelframe |
| | Balance of Plant | 20 years |
| | Stack Refurbishment | 24k - 30k running hours |
| COMPLIANCY | Standards | IEC-62282-2 IEC-62282-3 2006/95/EC 2006/42/EC |

* Due to continuous development, some data may change