



Nedstack

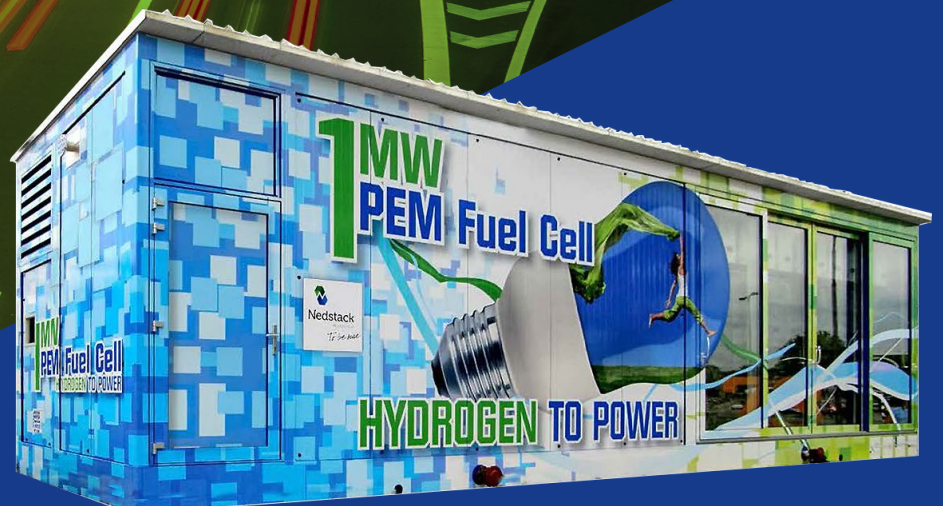
PEM FUEL CELLS

PemGen[®]

CHP-FCPS-1000

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

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PemGen[®]

CHP-FCPS-1000



The CHP-FCP-1000 is a PEM Fuel Cell Power System 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-FCP-1000 is optimized for seamless integration in local or collective electricity grids by being able to use all sorts of commercial off-the-shelf 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 Model	120 x Nedstack FCS 13-XXL
ELECTRICAL	Nominal power	1000 kW _e
	Peak power (BoL)	1252 kW _e
	Voltage range	500 - 1000 VDC
	Current range	0 - 2400 A
ENCLOSURE	Weight	29000 kg
	Built Level	40 ft ISO Container (High Cube)
	Length	12.19 m
	Width	2.44 m
	Height	2.90 m
	IP-rating	IP 54
HYDROGEN FEED	Quality	Grade ≥ 2.5 (CO < 0.2 ppm)
	Supply pressure	0.3 – 6 barg
	Nominal consumption (BoL)	59 kg/ MWh _e
	Max consumption	80 kg/h
COOLANT	Medium	DI water or BASF FC G20
	Outlet Temperature	Max 65 °C
	Required Cooling Capacity	1800 kW _{th}
	Recoverable heat	>800 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 Chemical sites
	Placement	To be placed on flat concrete surface or steelframe
LIFESPAN	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 2004/108/EC