



# Nedstack

PEM FUEL CELLS

## PemGen<sup>®</sup> CHP-FCPS-500



Nedstack fuel cell technology B.V.  
Stationary Power Systems  
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# PemGen<sup>®</sup>

## CHP-FCPS-500



The CHP-FCPS-500 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-500 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.



<b>GENERAL</b>	Fuel Cell Type	Low Temperature Proton Exchange Membrane (LT-PEM)
	Fuel Cell Model	60 x Nedstack FCS13-XXL
<b>ELECTRICAL</b>	Nominal Power	500 kW <sub>e</sub>
	Peak Power (BoL)	626 kW <sub>e</sub>
	Voltage range	500 - 1000 VDC
<b>ENCLOSURE</b>	Current range	0 - 1200 A
	Weight	15.000 kg
	Built Level	20 ft ISO Container (high cube)
<b>HYDROGEN FEED</b>	Length	6.06 m
	Width	2.44 m
	Height	2.90 m
	IP-rating	IP 54
<b>COOLANT</b>	Quality	Grade ≥ 2.5 (CO < 0.2 ppm)
	Supply pressure	0.3 – 6 barg
	Nominal consumption (BoL)	59 kg/ MWh <sub>e</sub>
	Max consumption	40 kg/h
<b>AMBIENT CONDITIONS</b>	Medium	DI water or BASF FC G20
	Outlet Temperature	Max 65 °C
	Required Cooling Capacity	900 kW <sub>th</sub>
<b>APPLICATION</b>	Recoverable heat	>400 kW <sub>th</sub>
	Operating Temperature	-5 – 40°C
<b>COMPLIANCY</b>	Storage Temperature	5 – 60°C (optional -20°C – 60°C)
	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
<b>COMPLIANCY</b>	Stack Refurbishment	24k - 30k running hours
	Standards	IEC-62282-2 IEC-62282-3 2006/95/EC 2006/42/EC 2004/108/EC