



Nedstack

PEM FUEL CELLS

PemGen[®]

CHP-FCPS-100



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

Westervoortsedijk 73 VB
6827 AV ARNHEM
The Netherlands



PemGen[®]

CHP-FCPS-100



The CHP-FCPS-100 is a Combined Heat and Power PEM Fuel Cell System intended for co-generation applications in the built environment. The CHP-FCPS-100 is optimized for integration in fourth generation heat-grids and allows for seamless integration in electricity grids by being able to use all sorts of commercial-off-the-self power electronics. Get in touch to tune this system to your application.



GENERAL	Fuel Cell Type	Low Temperature Proton Exchange Membrane (LT-PEM)
	Fuel Cell Model	12 x Nedstack FCS13-XXL
ELECTRICAL	Nominal power	100 kW _e
	Peak power (BoL)	125 kW _e
	Voltage range	300 - 600 / 600 - 1200 VDC
	Current range	0-200 / 0-400 A
ENCLOSURE	Weight	2500 kg
	Length	2010 mm
	Width	1100 mm
	Height	2090 mm
	IP-rating	IP 54
HYDROGEN FEED	Quality	Grade ≥ 2.5 (CO < 0.2 ppm)
	Supply pressure	0.3 – 4 barg
	Nominal consumption (BoL)	59 kg/ MWh _e
	Max consumption	8 kg/h
COOLANT	Medium	DI water or BASF FC G20
	Outlet temperature	Max 65 °C
	Required Cooling Capacity	180 kW _{th}
	Recoverable heat	>80 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
LIFESPAN	Balance of Plant	20 years
	Stack Refurbishment	24k - 30k running hours
COMPLIANCY	Standards	IEC 62282-3 2006/42/EC 2014/35/EC 2004/30/EC 2011/65/EU