Power Generator H2CleanGen

Power generator based on PEM fuel cells

Key features

Available in configurations from 3 to 10 kW

Waste heat can be utilized due to liquid-cooled stack technology

Possible to couple with battery storage to broaden range of applications

Specifications

Power Range:

3 – 10 kW

Fuel:

Gaseous hydrogen, purity > 99.95 %

Fuel consupmtion:

0.07 kg/h/kW

Control system:

Industrial PLC

Output voltage:

Adjustable (DC or AC)

Fuel supple pressure:

5 barg

Cooling:

Air cooler or heat exchanger

Dimensions (W x D x H):

1300 mm x 680 mm x 1200 mm

Weight:

150 kg

Applications

Designed for stationary applications including backup power, off-grid systems, or grid balancing. Reliable operation is ensured thanks to robust design, high-quality components and advanced SW control.

LEANCAT s.r.o.

Web: lean-cat.com
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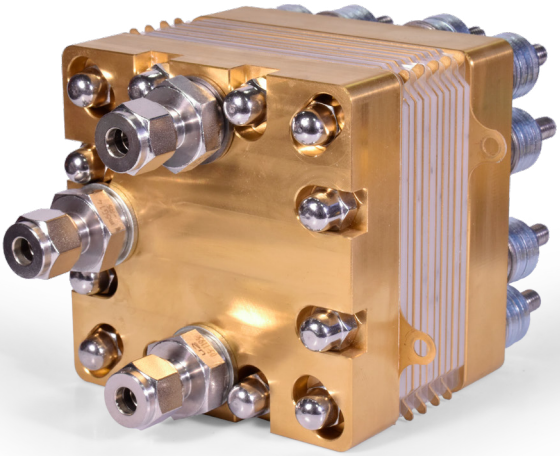

Water-Electrolysis Stack (PEM) LCWE-25

Production of green hydrogen

Key features

Advanced PEM water electrolysis stack

Produces hydrogen at high pressure (cathode)

Low-pressure oxygen outlet (anode)

Designed for integration in H2 systems

Power range up to 3 kW

Specifications

Power Range:

1 – 3 kW

Maximum current:

50 A

Operating pressure O_2:

Unpressurized

Hydrogen production:

Up to 675 NL/h

Active area :

25 cm^2

Operating pressure H_2:

0 - 20 barg

Operating temperature:

30 - 75 °C

Applications

With its high power density, efficiency and reliability, LCWE-25 is perfectly suited for OEMs and integrators aiming at developing their own solution for the production of green hydrogen.

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Water Electrolyser Science Kit
LCWE-kit

Educational kit
for PEM
water electrolysis

Key features

PEM water electrolysis stack with transparent end plate

Water box with DI water container and water separator

Water pump for water recirculation

Control module with touch screen

DC power supply

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Specifications

Electrolyser technology:

Proton Exchange Membrane (PEM)

Active area:

25 cm^2

Maximum operating temperature:

65 °C

DC power supply:

Controlled output

Max. current:

25 A

Power input:

230 V(AC)

User interface:

Touch screen

Applications

Green hydrogen is the key enabler for the energy transition. But how is it made, anyway? Investigate water electrolysis with Leancat hands-on science kit. This electrolyser uses the same industrial design and components as our full-featured electrolysers. As such, it can be used for realistic measurements.

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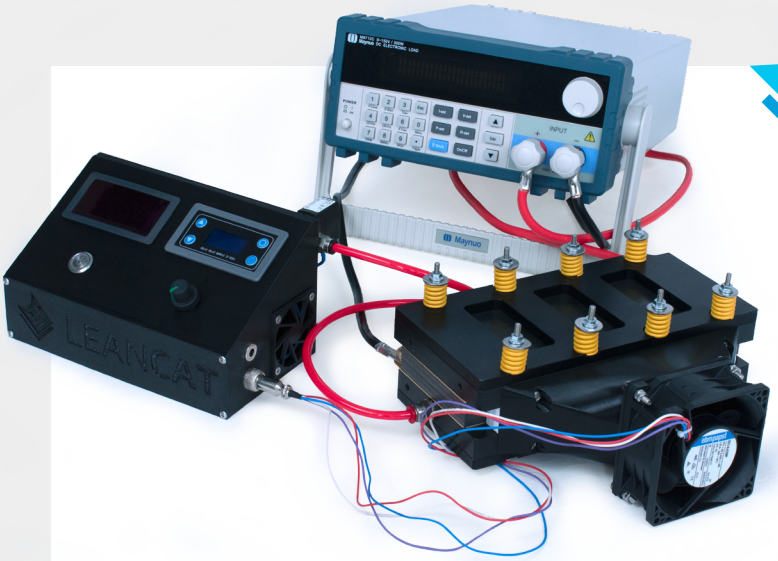

Fuel Cell Science Kit
LCFC-kit

Educational kit for PEM fuel cells

Key features

PEM fuel cell stack with open-cathode architecture

Ventilator for cooling and air supply

Control of ventilator rotation speed

Control module with touch screen

Electronic DC load connected to PC

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Specifications

Fuel cell technology:

Proton Exchange Membrane (PEM)

Active area:

100 cm^2 / cell

Max. power:

100 W

Maximum operating temperature:

70 °C

Electronic DC load:

Precise control of stack power

Max. current:

60 A

Number of cells:

3

Ventilator:

Electronic rpm control

User interface:

Touch screen

Applications

Hydrogen-powered applications are emerging increasingly. But how does power generation from hydrogen work? Investigate PEM fuel cells with Leancat hands-on science kit. This fuel cell stack uses the same industrial design and components as our full-featured stacks. As such, it can be used for realistic measurements.

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