

# Solid Oxide Fuel Cells and Electrolyzers from the largest stack production facility in Europe

SolydEra

SolydEra is a key world player in the market of Solid Oxide Cells, Stacks and Solutions, with an annual production capacity of 25MW SOFC (75MW SOE) on its industrial site in Pergine Valsugana, Italy. Our Solid Oxide Technology has a proven track record in the field and delivers top in class performance and durability in both fuel cell and electrolysis mode. Our highly efficient solid oxide stacks can be integrated into systems from a few kW to MW sizes.

**Would you like to know more? Please contact us!**



## SolydEra Fuel Cell Module (FCM)



**We stack it.**

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# SolydEra Fuel Cell Module (FCM)

## Technical data

### Physical data

Stack	G8
Number of cells	70
Size (w-h-d)	399 x 878 x 456 mm
Weight	83.8 kg
Fuels	Desulphurized natural gas (EN437) natural gas blends, Hydrogen, Biogas

### Performance data

	Natural Gas
Max. Power	1.7 kW DC
El. Efficiency	Up to 58 %
Voltage at rated power	56V
Current at rated power	30A
Modulation	30 - 100 %
Operating Stack temperature	750-780
Degradation	< 0.3%/kh
Steam to carbon	> 1.8
Exhaust temperature	120-140°C
Exhaust mass	3-5 g/s
Life time	5 - 7 years

## Advantages

- Easy integration
  - Integrated igniter
  - Integrated reformer
  - Integrated afterburner
  - Integrated heat exchanger
  - Integrated current collector
- High performance
- High fuel utilization
- High power density
- Good part load capacity
- Robustness
- Low pressure drop
- Proven technology:
  - > 81 mio. hours (cum.) /
  - > 96 GWh el. Produced
- High volume stack production
- European supply chain / Made in Europe
- Internal media conditioning / steam
- No noble catalyst

## Application Areas

µCHP:

- 1 kW-60 kW

### Performance

