



Fuel Cell Solutions for UPS Applications

Clean extended backup power for IT and industry

FutureE's fuel cell systems provide ideal solutions for premium power applications. They offer good opportunities to reduce energy costs and increase the overall energy efficiency.

FutureE's fuel cell systems are often smaller, lighter, cheaper to install and run than conventional batteries - and minimize the use of lead and acid. Compared to internal combustion engines, fuel cell systems offer zero pollutant emissions, lower noise signatures and reduced maintenance.

JUPITER FEATURES FOR UPS USE

Fuel Cell Type	PEM (Proton Exchange Membrane)
Nominal Voltage	12 - 400 VDC
Nominal Power	up to 40 kW *
Response Time	uninterrupted
Electrical Energy Storage **	customer specific
Standby Power	< 10 W / module
Fuel	Hydrogen 99,9%
Hydrogen Consumption	12 slpm/kW
Hydrogen Supply Pressure	10 bar
Runtime	proportional to stored amount of Hydrogen 1 H ₂ bottle, 50 l @ 200 bar ~ 12 kWh _{el} 1 H ₂ bottle, 50 l @ 300 bar ~ 17 kWh _{el} 1 H ₂ bundle, 12 x 50 l @ 300 bar ~ 204 kWh _{el}
Cooling	Air
Environmental Temperature	-5°C to 45°C Outdoor version -45°C to 45°C
Maximum Altitude	4000 m ***

Weight per Unit	< 30 kg
Height per Rack	up to 2200 mm
Width per Rack	800 mm
Depth per Rack	600 mm
Operating Life	> 3.000 hours
Service Interface	Ethernet, Modem optional
Certification	CE

The equipment is built to customer specification.

* Racks can be configured in 2 kW increments (max. 10 kW/rack)

** Electrical energy storage (e.g. UltraCaps, Lilon- or LeadAcid Batteries) is required for fuel cell startup

*** 5% / 1000 m power de-rating starting from 2000 m



FutureE Fuel Cell Solutions GmbH

Kisslingstraße 1
D-72622 Nuertingen, Germany

Tel.: +49 (0)7022-211536
Fax: +49 (0)7022-2165730

www.future-e.com
info@future-e.com

OUR APPROACH

Reducing complexity to **maximize reliability**

Applying cutting edge technology to **maximize durability**

The result: **meeting customer's exacting power demands – at minimized total cost of ownership**

HOW WE WORK

We offer customized solutions based on standardized products. If required, we scope a customer's precise power needs, including a complete power solutions analysis. We are able to offer engineering advice and full installation service. Our after-sales service includes training and maintenance right through to monitoring of our systems.

ABOUT US

FutureE Fuel Cell Solutions GmbH is a German company specialized in advanced fuel cell systems and energy solutions. High efficiency, low complexity and fast response are core values for us, both for our products and the organization. Our team is stable, enthusiastic and has a many years' experience in fuel cell technology. We are working with high motivation for a cleaner world.