

Jupiter

by FutureE



Fuel Cell Outdoor Solution Resists extreme weather conditions Saves valuable space

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 OUTDOOR FEATURES

Fuel Cell Type	PEM (Proton Exchange Membrane)
Nominal Voltage	-48,0 VDC
Voltage Range	-40,5 VDC * to -57,0 VDC
Nominal Power	up to 8 kW
Nominal Current	up to 200 A
Response Time	uninterrupted
Electrical Energy Storage **	Lilon-Batteries
Fuel	Hydrogen 99,9%
Hydrogen Consumption	11 slpm/kW
Hydrogen Supply Pressure	10 bar
Runtime	proportional to stored amount of Hydrogen 1 H ₂ bottle, 50 l @ 200 bar ~ 13 kWh _{el} 1 H ₂ bottle, 50 l @ 300 bar ~ 18 kWh _{el} 1 H ₂ bundle, 12 x 50 l @ 300 bar ~ 216 kWh _{el}
Cooling	Air
Environmental Temperature	-45°C to 45°C
Maximum Altitude	4000 m ***

Weight per Unit	< 30 kg
Height per Rack	1900 mm
Width per Rack	900 mm
Depth per Rack	700 mm
Operating Life	> 3.000 hours
Service Interface	Ethernet, Modem optional
Standards	designed to meet ETSI 300 019-1-3 class 4.1E, ETSI 300 132-2
Certification	CE
Rectifier	optional
Inverter	optional
Power Distribution	optional

* If required, the voltage range can be adjusted to -44 VDC

** Electrical energy storage is required for fuel cell startup

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



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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.