

Jupiter

by FutureE



Jupiter Product Family **reliable - durable - scaleable**

Energy today must be efficient, reliable, affordable... and clean!

Fuel cell systems provide ideal solutions for many applications, especially in backup power for telecommunications uses. They offer a significant opportunity to reduce energy costs, as well as increase the overall energy efficiency of ICT industry players.

Fuel cell systems vs. conventional batteries:

Fuel cell systems are often smaller, lighter, cheaper to install and run and minimize the use of lead and acid. Depending on capacity and power requirements they also allow for savings in capital expenditure.

Fuel cell systems vs. internal combustion engines:

Fuel cell systems offer zero pollutant emissions, lower noise signatures and reduced maintenance.

JUPITER PRODUCT FAMILY FEATURES: Maximum flexibility for a customer's power supply needs

- Units available in 0.5, 1.0 and 2.0kW
- Modules allow for easy scaling to any required power level – now and in an application's future
- N +1 capable to increase an application's reliability
- Simple system installation and maintenance
- Long economic life secured by innovative use of technology
- Indoor solutions – outdoor versions available upon request
- Remote control capability ensures low on-site maintenance requirements

COMMON FEATURES:

Fuel Cell Type	PEM (Proton Exchange Membrane)
Nominal Voltage	-48,0 VDC
Voltage Range	-40,5 VDC * to -57,0 VDC
Response Time	Uninterrupted
Electrical Energy Storage **	customer specific
Standby Power	< 10 W / module
Fuel	Hydrogen 99,9%
Hydrogen Consumption	11 slpm/kW
Hydrogen Supply Pressure	5 to 10 bar
Cooling	Air
Environmental Temperature	-5°C to 45°C
Maximum Altitude	4000 m ***
Weight per Module	< 30 kg
Design Life	> 3.000 hours
Service Interface	USB Modem and Ethernet optional
Standards	designed to meet ETSI 300 019-1-3 class 3.2., ETSI 300 132-2
Certification	CE



SPECIFIC FEATURES:

	2,0 kW	4,0 kW	6,0 kW	8,0 kW	10,0 kW
Nominal Power	2,0 kW	4,0 kW	6,0 kW	8,0 kW	10,0 kW
Nominal Current	50 A	100 A	150 A	200 A	250 A
Height ****	900 mm	1200 mm	1600 mm	2000 mm	2200 mm
Width	600 mm	600 mm	800 mm	800 mm	800 mm
Depth	600 mm	600 mm	600 (800) mm	600 (800) mm	600 (800) mm
Optional Space in Standard Height Configuration	6 U	6 U	7 U	8 U	6 U

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

** 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

**** The height of the rack can be varied according to customer's requests. In the given heights, optional space is provided for rectifiers or other telecom equipment.



OUR APPROACH:

Reducing complexity to a modular design to **maximize reliability**.
Applying cutting edge technology to **maximize durability**.
The result for customers: **minimized Total Cost of Ownership**.

HOW WE WORK:

We scope a customer's precise power needs, including a complete power solutions analysis as required. We are able to offer engineering advice and a full installation service. Our after-sales service includes training, maintenance and repair right through to monitoring of our fuel cell system units.

ABOUT US:

FutureE Fuel Cell Solutions GmbH is a German fuel cell system company focused on innovative fuel cell systems and energy solutions. Our team is stable, enthusiastic and has a many years' experience in fuel cell technology, gained in industry leaders.

CONTACT US:

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