

800 Series Fuel Cell Module



Zero
Emission



Quiet
Operation



Compact
Power
Solution

Diesel generators have been the traditional power source for many types of industrial equipment as well as providing back-up for when the electricity grid fails. However, with an increased focus on the reduction of carbon footprint and the prioritisation of corporate social responsibility issues, there is a real demand for industries to adopt cleaner fuels whilst maintaining reliability and cost effectiveness.

Diesel generators are polluting, noisy and heavy on maintenance and it is clear a smarter alternative is needed.

Intelligent Energy's fuel cell systems provide an opportunity to both reduce operating costs and increase environmental performance relative to the use of traditional diesel generators. They are near silent, emit only pure water vapour and are designed for modularity and scalability.

Intelligent Energy's 800 series Fuel Cell Modules (FCM) are suitable for a wide variety of off-grid applications. Our fuel cells can help your business succeed by giving you the clean and quiet edge over your competition.

About Intelligent Energy

Intelligent Energy is a fuel cell engineering company focused on the development and commercialisation of its PEM fuel cell technologies for a range of markets including automotive, stationary power and UAVs. We are headquartered in the UK, with additional operations in the US, Japan, India, and China.

Power for a cleaner, quieter world

Intelligent Energy's FCM is a self-contained power solution with all requisite balance-of-plant components to produce zero-emission regulated DC power in a power-dense and convenient package. The compact unit can be deployed with a small battery to deliver power for a wide range of electricity needs to keep your critical applications working when you need them most.

Immediately you will notice a **significant reduction in noise emissions** when you replace your existing diesel generator with a FCM. With near-silent operation the FCMs are an ideal power choice for applications in urban areas. Couple this with **no harmful emissions** and you have a solution for industries that are working to reduce their carbon footprint and, more importantly, improve the environment for communities in the vicinity of operation.

Zero emission
and quiet
operation

Ease of
integration

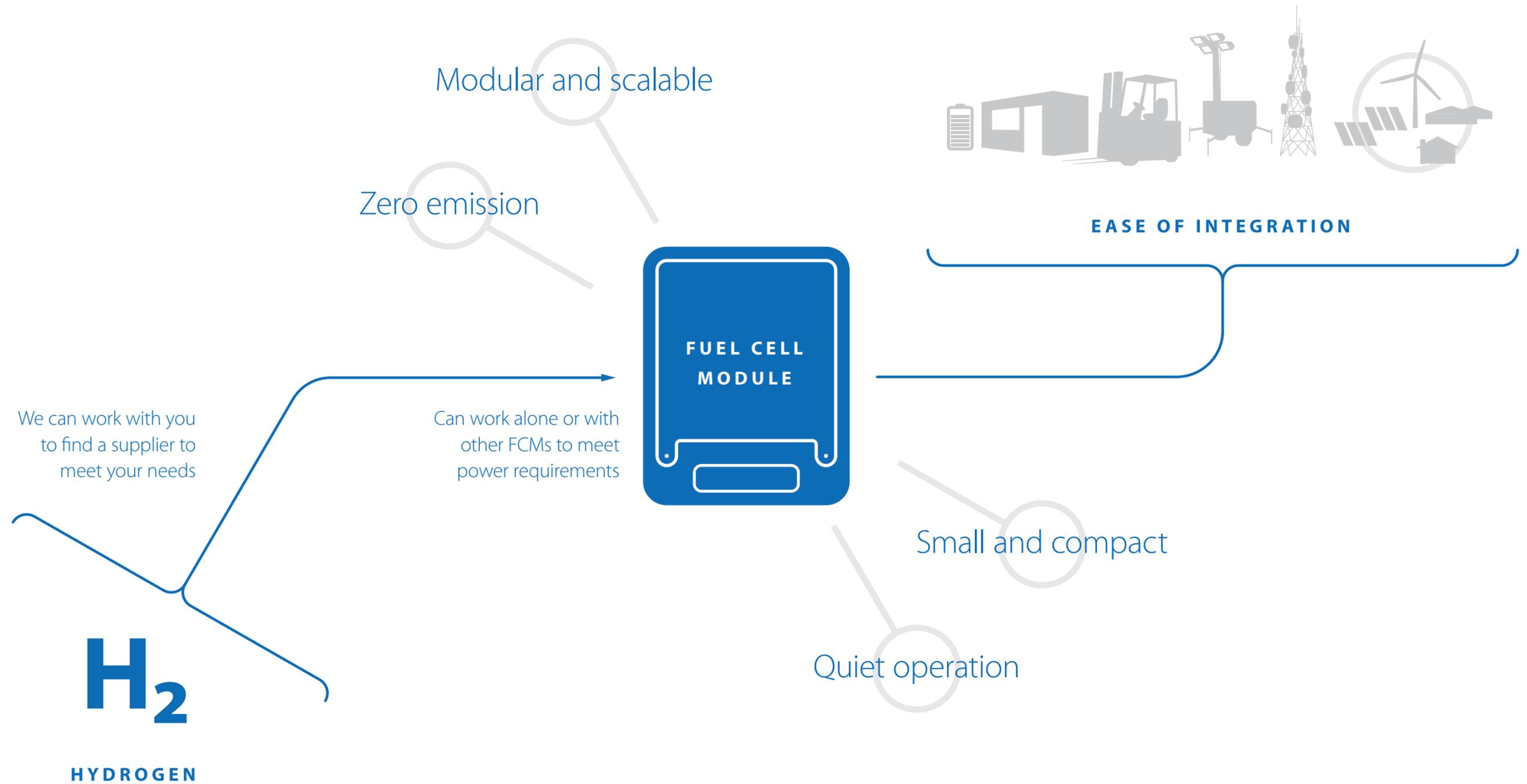
with full balance
of plant

Lower life
cycle costs and
maintenance

compared to diesel
generators



Easy integration across a number of applications / sectors



Comparison of Intelligent Energy's Fuel Cell Module vs traditional power sources

Parameter	Fuel Cell Solution	DG Solution	Battery Solution
Weight	■□□	■□□	■□□
Footprint	■□□	■□□	■□□
Emissions	■□□	■□□	■□□
Noise	■□□	■□□	■□□
Risk of Land Pollution	■□□	■□□	■□□
Life	■□□	■□□	■□□
Cost to buy	■□□	■□□	■□□
Cost to run	■□□	■□□	■□□
Safety	■□□	■□□	■□□
Scalability	■□□	■□□	■□□
Handling	■□□	■□□	■□□
Maintenance	■□□	■□□	■□□

Key: ■□□ = Good, low, inexpensive ■□□ = Medium ■□□ = High

Products available in this range:

801 (1.2kW)

802 (2.4kW)

804 (4kW)

Frequently Asked Questions

How do I integrate an FCM into my application?

Easily; all that's required is a gas supply at the right pressure, and electrical load to connect to a couple of control lines and a small battery. Of course, we provide a detailed user and installation guide as well. If you need more power than one FCM can provide, simply connect two or more in parallel.

Where can I buy hydrogen from?

You can buy hydrogen gas from the internet or local gas supplier as easily as you can buy barbecue gas. We can introduce you to suppliers in our network.

What servicing does the module need?

The module only needs to have its air filter inspected and cleaned periodically depending upon ambient conditions.

How much does it cost and when can I get one?

Contact us for pricing and lead times. Our products are manufactured and shipped from the UK.

Do you provide warranty?

The product has a 3000hr/one year warranty (two years in the EU).

Can I connect FCMs and use more than one?

Yes, the FCMs are modular and scalable. Up to eight FCMs can be connected together to meet your power requirements.

What is the fuel consumption?

Less than 65g of hydrogen per 1kWh over lifetime of the Fuel Cell Module.

What other components do I need?

Just the fuel (hydrogen) and a battery.

Zero Emission

Quiet Operation

Compact Power Solution

[intelligent-energy.com](https://www.intelligent-energy.com)