

Auxiliary Power Fuel cells

CONSTANT, UNATTENDED, SAFE POWER



As more and more auxiliary power is required on vehicles, the ability to provide a “mains hook-up” for re-charging the batteries gets harder and harder

Our fuel cell range can offer a complete solution to ensure that auxiliary batteries are always re-charged back to the maximum. Unattended. Even in an enclosed garage or workshop. Or on-board a cross-channel ferry.

For continuous use the range starts at 25W and goes up to 90W. For greater power levels multiple units can be connected in parallel, or consider the larger 24V 500W and 900W high power fuel cells.

Often the equipment on-board the vehicle is only used occasionally, and the power requirement over a 24hr period is actually quite small - less than 2kWhrs so a fuel cell is the perfect technical solution to ensure fully re-charged batteries.

The fuel is methanol, and comes pre-packed in safe, easily transportable cartridges that be changed over while the cell is running.

Optional extras allow connection of 2 canisters with automatic change-over, SMS monitoring and remote control.

Ideal for covert operations, or running without runlock. If you think you have a fuel cell application, contact us and our application engineers will be happy to help.

Benefits

- No harmful emissions
- Can be used in enclosed spaces
- Fully automatic, unattended operation
- Remote fuel level monitoring option
- A range of different power levels
- Automatic battery charging built-in
- Sealed fuel cartridge for safe, easy handling
- Fully autonomous—no mains required
- “In-flight refuelling” Changing the cartridge only takes seconds and can be done whilst the fuel cell is running.
- Integrated by Antares

The Efoy Fuel Cell

The Antares fuel cell is a device that generates power (DC current) by converting Chemical energy to Electrical energy, converting hydrogen into electricity through a chemical reaction. In its simplest form, the fuel cells are just like battery chargers, except they do not need to be connected to mains- they simply need a supply of fuel and air. Fuel cells can also provide instant power and are a **green energy source** with very low to **zero** emissions when in use. They can be used to power motors, lighting, or any number of electrical appliances. Did you know a 500W Fuel Cell can power the average 2 bedroom home!

[How it all works](#)

When the methanol and water enter the body and flow towards the anode they split into Hydrogen ions, electrons and carbon dioxide. The Hydrogen protons (H^+) pass through the Proton Exchange Membrane (PEM) towards the cathode, leaving the electrons (e^-) which then produce the electrical current. Once the Hydrogen protons have passed through the Proton Exchange Membrane they then recombine with the oxygen and electrons to produce water vapour. The water vapour gets cooled by the heat exchanger (Water reclaiming). This process is clean, reliable, and virtually silent all of which produces environmentally friendly electricity!



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ANTARES
engineering with answers

FUEL CELLS

CONSTANT, UNATTENDED, SAFE, AUXILIARY POWER

Reliable and always available!

These fuel cells just deliver clean and quiet electrical power, doing so reliably and effortlessly whenever you need power, day and night, regardless of the weather, anywhere. These fuel cells provide a maximum of convenience and safety.

In short, it's energy you can use safely and easily. Changing the fuel cartridge only takes seconds, and can be done while the fuel cell is running.

Completely automatic

The "Automatic Charge Control" permanently monitors the battery's voltage level. Once the voltage dips below 12.3/24.6 volts, the fuel cell switches on automatically and recharges the battery. When the battery is fully recharged, it switches itself off again – fully automatically. You don't have to worry about a thing. And while the fuel cell is running, it extends the useful "runtime" available from the battery.


With the optional level sensor and sender it can even text you and tell you to come and change the fuel cartridge.

Superlight!


Weighing in at less than 9kg, these fuel cells are compact, lightweight units that can be considered for any professional vehicle. And with the practical fuel cartridges, you'll finally be able to take several weeks of electrical power with you. Powering your auxiliary loads has never been this easy!




Accessories:



Remote panel




Cluster Controller



optional remote sender

Technical Details				
Model	Pro 600	Pro 1600	Pro 2200	XT 2200
Nominal Voltage	12v/24v	12v/24v	12v/24v	12v/24v
Nominal Power	25W	65W	90W	90W
Nominal current (12v/24v)	2.1A/1.05A	5.4A/2.7A	7.5A/3.75A	7.5A/3.75A
Weight	7.8kg	8.4kg	8.8kg	8.8kg
Fuel Consumption:	0.9 litres/kWh or 1litre/100Ahr			
Operating temp range	-20°C to +45°C			
Dimensions (mm)	450 long x 200 wide x 275 high			
Warranty (operating hrs)	3,000	3,000	3,000	XT:4,500

Fuel Cartridges:	M5	M10	M28	
Capacity (litres)	5	10	28	
Weight (approx, kg)	4.3	8.4	24	
Energy Content (kWh)	4.5	9.1	25.5	
Energy Content (Ah @ 12V)	380	760	2128	
Dimensions (mm)	190 x145 x 283	230x 193 x318	370 x 285 x 394	