

Cobra - High Efficiency Hydrogen Fuel Cell



Cobra is a 1kW hydrogen operated Fuel Cell designed to automatically recharge batteries on-board a vehicle and supply power to sustain silent watch applications. Its main advantages when compared to a conventional generator is that it operates virtually silently, emits only a small amount of water vapour (no visible exhaust output) and has a much lower thermal signature.

In addition, when compared to simply installing more batteries or even high energy density Lithium options - Cobra offers much longer run times. A range of ballistically tested fuel storage and delivery systems are available to suit different run time requirements and to suit different space claims.

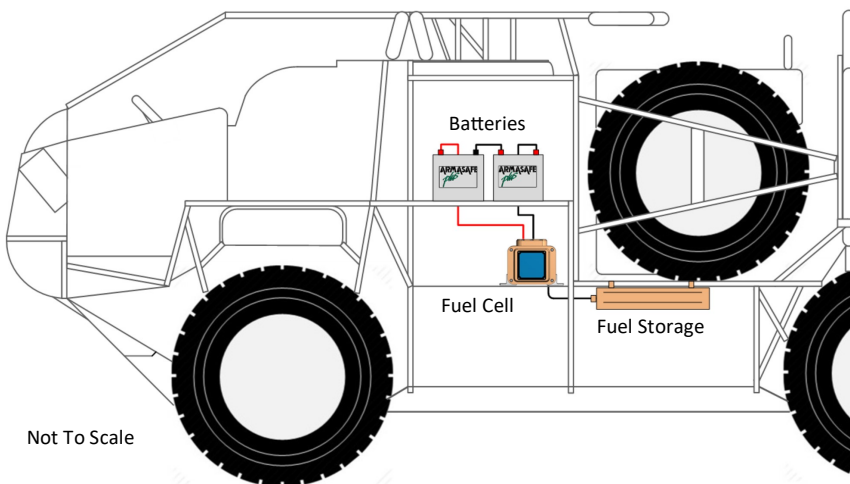
- No detectable emissions and virtually silent running
- Allows game changing silent watch run time profiles
- Around five times more powerful than comparable fuel cells in a similar size and weight package
- Further run time extensions available when integrated with Merlin's DataCell II Battery Monitoring and VBMS Battery Management systems

	Weight	Dimensions
Fuel Cell	22Kg	L 581 x W 318 x H 301mm
Example Tank	31Kg	L 715 x Diameter 328mm
Total	53Kg	

**Equals:
16 x 6T Batteries
@ 640Kg**



Installation Example:



Run Time Examples*

Amps	Hours	Watts	Volts
42A	17	1000	24
30A	24	710	24
20A	36	470	24
15A	48	350	24
10A	73	230	24

Storage Tank	31Kg	Length 715 x Diameter 328mm
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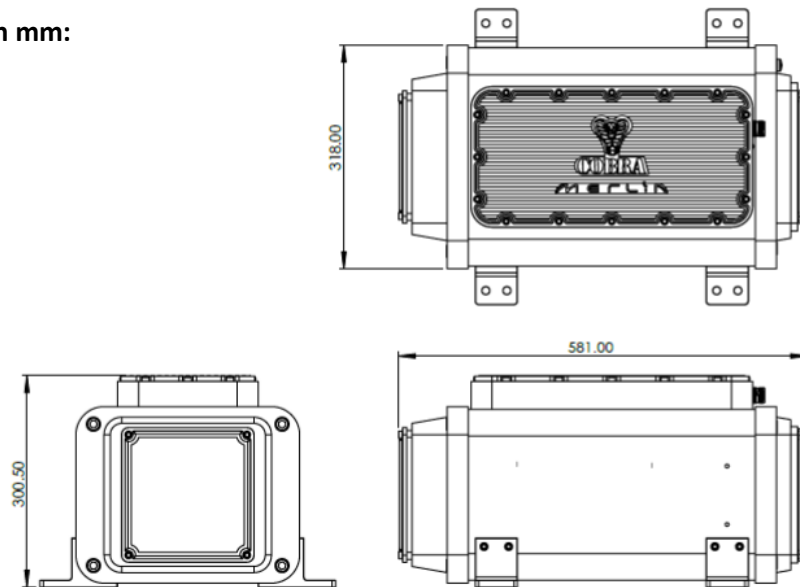
* Different Tank Options Available

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Specifications:

Performance	Battery Charging (Max)	42A @ 28.8V (12V Available)
	Output Voltage Regulation	Configurable
	Emissions	Water Vapour
Fuel	Fuel Type	Hydrogen Gas
	Fuel Pressure	500 – 800 mbarg
	Fuel Storage	External
Operation	Delayed Start Trigger Voltage	24.6V DC
	Delay Start Trigger Time	30 Seconds
	Turn Off Trigger Voltage	29.5V DC
	Turn Off Trigger Current	2 Amps
	Turn Off Delay	20 Seconds
	Low Voltage Shutdown	18 Volts
Maintenance	Regular Maintenance	Air Filters
	Stack Maintenance	Replacement circa 8000 hours
	Health Monitoring	On-Board (Via CAN Bus Output)
Physical	Weight	21.5Kg (Excluding Fuel)

Dimensions in mm:



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