



Data sheet

IE-SOAR™ 800W second generation

Lightweight fuel cell power module enabling longer flight times for UAVs.

Enable previously impossible applications – your business is no longer constrained by flight time.

Unlock BVLOS operations – BVLOS makes sense with the range provided by fuel cells.

Increase operational efficiency – spend more time in the air and achieve more.

Technical benefits

- Designed for safety and reliability. Single point failure tolerant and built in power system redundancy.
- Combine systems in parallel for 1600W output.
- Direct battery replacement. 6S to 12S compatible – automatically follows load demand just like a battery.
- Modular design - separate control and fuel cell for more flexible integration into fuselage.
- Range extender and battery management versions available.
- Low noise signature and zero-emissions.
- Targeted at VTOL and fixed wing integrations.
- Based on architecture of Intelligent Energy's proven 2.4kW product.

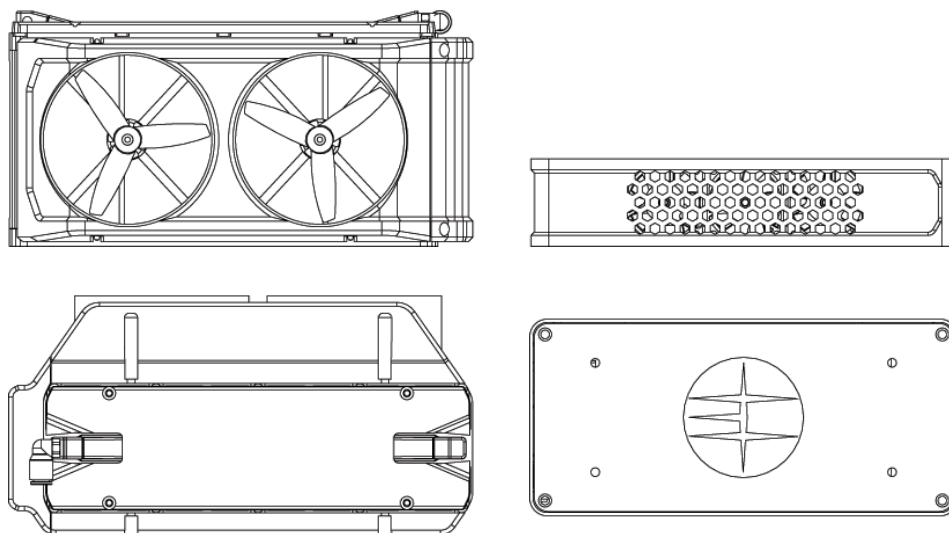
Coming soon

IE-SOAR™ 800W second generation specifications*

Maximum continuous power	800W		
Peak power	Up to 2400W		
Output voltage (DCDC regulated)	Configurable between 24V and 48V		
Fuel Cell Power Module (FCPM)	Dimensions	128 × 442 × 233mm	
	Mass	1450g	
Hydrogen Regulator	Mass	315g	
	Maximum regulator (cylinder) pressure	350 bar/5000 psi	
	Output pressure	0.9 bar.g ± 0.1 bar.g / 13 psig ± 1.5 psig	
	Maximum cylinder mass	10kg	
Environmental operating conditions	Startup temperature	5°C to 40°C	
	Operating temperature	-5°C to 40°C	
	Maximum altitude**	5000m	
	Storage temperature	-10°C to 70°C	
	System warranty	1000 hours	
Safety features	Dual redundant power system and backup battery		
Other features	Internal data storage for firmware update, performance and diagnostics	SD card	
	Communication protocol to UAV or accessories	UART / CAN	
Example Integration	UAV	Gryphon HX-1600	Gryphon XQ-1400 VS
	Flight time (no payload)	120 minutes	120 minutes
	Flight time (max. payload)	80 minutes (5.2kg payload)	60 minutes (4.5kg payload)

* Subject to change

** It may be possible to widen this range depending on customer power requirements.



+44 (0) 1509 271 271
 sales@intelligent-energy.com
 intelligent-energy.com

For more information about our products visit our website: www.intelligent-energy.com

To find out how you could benefit from longer flight times, arrange a meeting with a sales representative in your region by emailing: sales@intelligent-energy.com