



Powering the hydrogen future™ with our outstanding fuel cells and service.

IE-SOAR 2.4kW

IE-SOAR™ fuel cell power modules directly replaces a battery and give much longer flight times.

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

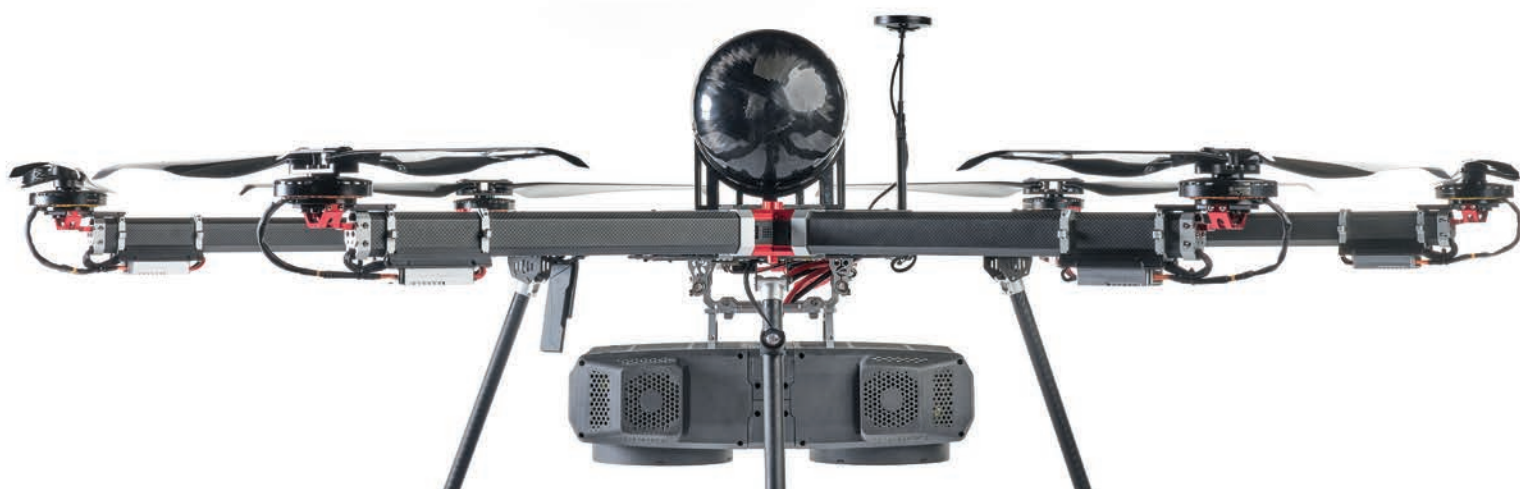
- ✓ Designed for safety and reliability. Single point failure tolerant and built in power system redundancy.
- ✓ Modular – combine systems in parallel for 2.4kW, 4.8kW outputs.
- ✓ Direct battery replacement – 12S to 16S compatible. Automatically follows load demand just like a battery.
- ✓ CE and FCC certified.
- ✓ 1000 hour commercial warranty.

Fuel cells vs. batteries

- Increased flight time
- Fast refueling
- Built in power system redundancy

Fuel cells vs. internal combustion engines

- Clean & zero-emission
- Near silent operation
- Reduced maintenance. No moving parts. No tuning.
- Vibration free for maximum stability



IE-SOAR™ 2.4kW specifications

Maximum continuous power	2400W		
Peak power	Up to 8000W		
Output voltage (DCDC regulated)	Configurable between 50V and 70V		
Fuel Cell Power Module (FCPM)	Dimensions	128 × 442 × 233mm	
	Mass	4800g	
Hydrogen Regulator	Mass	315g	
	Maximum regulator (cylinder) pressure	350 bar/5000 psi	
	Output pressure	0.9 bar ± 0.1 / 13 psi ± 1.5	
	Maximum cylinder mass	10kg	
Default Hybrid batteries (Configurable for higher or longer peak power)	Configuration	2 × 6S in series	
	Dimensions (per battery)	135 × 40 × 40mm	
	Mass (per battery)	535g	
	Capacity (per battery)	3300mAh	
	Peak power	4800W	
Environmental operating conditions	Startup temperature	5°C to 40°C	
	Operating temperature	-5°C to 40°C	
	Maximum altitude*	3000m	
	Storage temperature	-10°C to 70°C	
	System warranty	1000 hours	
Safety features	Dual redundant power system and backup battery		
	Certification of IE-SOAR™ 2.4kW	CE and FCC	
Other features	Internal data storage for firmware update, performance and diagnostics	SD card	
	Communication protocol to UAV or accessories	UART / CAN	
	Output electrical connector	Ring Terminal / AS150	
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)

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

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



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