



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                                       |                              |                            |
| <b>Fuel Cell Power Module (FCPM)</b>  | Dimensions   | 128 × 442 × 233mm            |                            |
|   | Mass   | 4800g                        |                            |
| <b>Hydrogen Regulator</b>   | 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                         |                            |
| <b>Default Hybrid batteries</b><br>(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                        |                            |
| <b>Environmental operating conditions</b>   | 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                   |                            |
| <b>Safety features</b>  | Dual redundant power system and backup battery                         |                              |                            |
|   | Certification of IE-SOAR™ 2.4kW  | CE and FCC                   |                            |
| <b>Other features</b>   | 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        |                            |
| <b>Example Integration</b>  | <b>UAV</b>   | <b>Gryphon HX-1600</b>       | <b>Gryphon XQ-1400 VS</b>  |
|   | 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](http://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](mailto:sales@intelligent-energy.com)



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