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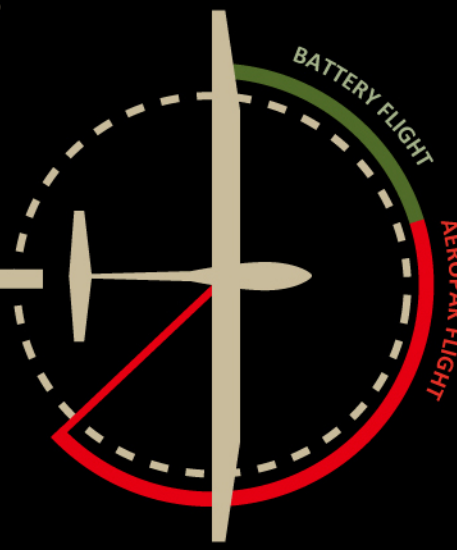
AEROPAK

hydrogen fuel cell system

- High energy power system for electric UAS
- Ultralight hydrogen fuel cell technology
- Plug & play cartridge-based system

redefining flight endurance of mini-UAS



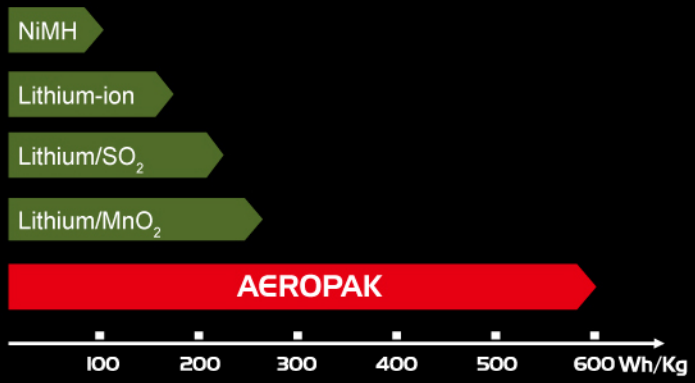
300% LONGER FLIGHT DURATIONS!

- Extended persistent surveillance capability
- Silent, reliable power for stealthy operations
- Multiple missions in one take-off
- Eliminates cumbersome battery chargers

In today's active and multi-faceted battle space, the demand for persistent surveillance and accurate real-time tactical intelligence is ever increasing. The AEROPAK is a game-changing device which transforms UAS deployment modes. Increased flight endurance translates to less take-offs, reducing casualty risks and the possibility of compromising tactical formations, while saving logistic and operational costs.

Delivering 300% more flight endurance compared to advanced batteries, the AEROPAK opens new mission capabilities not previously possible. Designed as a drop-in replacement for batteries, the system can be fitted into aircrafts with minimal modifications.

ENERGY DENSITY COMPARISON



- Scalable for higher power or longer runtime
- Safe and non-flammable chemical hydride fuel
- Optional hybrid battery for peak power
- Configurable fuel tank geometry

redefining flight endurance of mini-UAS

Horizon Energy Systems

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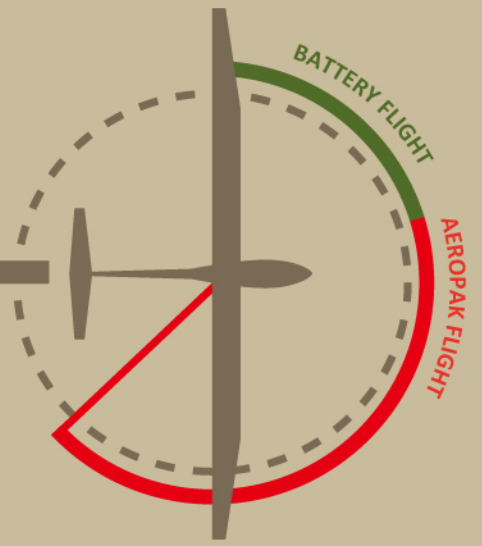

AEROPAK SYSTEM PERFORMANCE	
Continuous Output Power	200W
Peak Power *	600W for <10 minutes
Continuous Output Current	10A
Output Voltage Range	20V-32V
System Weight	470g / 1.04 lbs
System Volume	1.2L
Lifetime at Rated Power	500h
Ambient Temperature **	0-40°C

*With optional hybrid batteries
**Up to -20°C with additional winter add-on kit

FUEL CARTRIDGE Type	Type I (900 Wh)	Type II (2125 Wh)
Energy	900 Wh	2125 Wh
Dry Weight	790g / 1.74 lbs	1180g / 2.6 lbs
Hydrated Weight	1530g / 3.37 lbs	3030g / 6.68 lbs
Cartridge Volume	2.2L	3.7L
Total System Specific Energy	450 Wh/kg	607 Wh/kg

The AEROPAK combines Horizon's ultra-light aerospace grade fuel cell system with a proprietary chemical hydride based hydrogen generator to provide 900Wh of usable energy within only 2kg of weight.

Book your flight now!

If you are a UAS manufacturer interested to integrate the AEROPAK technology into your aircraft, order your system through our website now. Horizon can provide the AEROPAK in different configurations depending on your specific mission needs. Customizable options include power output level, electronic control design, fuel cartridge geometry, system packaging and mounting.

For more information, visit: www.hes.sg or contact us at aeropak@hes.sg

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