H_2 RangePak

by H_2 Energy Systems

PLUG-IN HYDROGEN POWER
FOR DRONES & ROBOTS

ADD ENDURANCE TO YOUR ROBOT

More mission. Less charging.

H_2 RangePak is a plug-in hydrogen fuel cell module that bolts onto the drones and robots you already run. Lightweight hydrogen canisters clip in and out in seconds, so your platform spends its day working, not waiting on a charger.



CONCEPT ILLUSTRATION

THE PROBLEM

The battery ceiling

Every extra battery adds weight the platform has to carry, so endurance stops scaling. Missions get cut short, crews juggle spare packs and chargers, and long inspections or patrols need several sorties. Hydrogen breaks that ceiling: it stores far more energy per kilogram than lithium batteries.

Plug in

Mounting and interface kits connect RangePak to your platform's existing power bus. No airframe or chassis redesign.

Swap in seconds

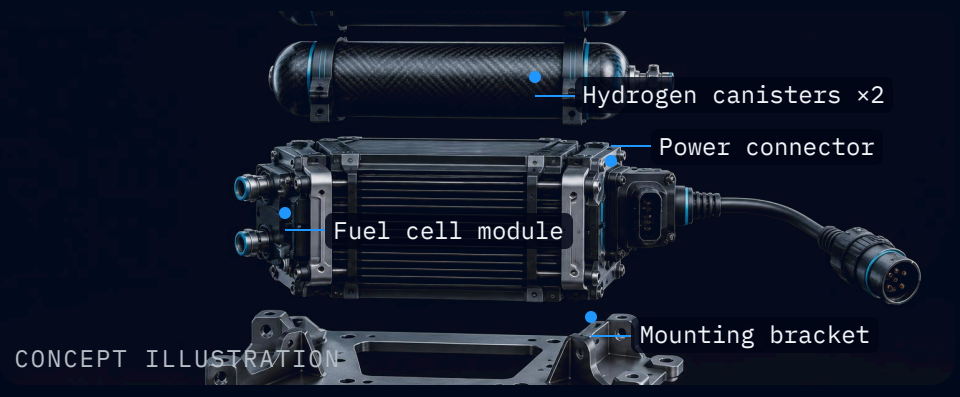
Clip in a full hydrogen canister instead of waiting on a charger. Dual-canister setups let you change one while the other keeps supplying power.

Run longer

The fuel cell carries the steady load while your battery covers peaks, so missions run longer on the platform you already own.

HOW IT WORKS

1. **Mount**
   A platform-specific kit fixes the module in place.
2. **Connect**
   Smart power management shares load with your battery.
3. **Swap & go**
   Change a canister in seconds and get back to work.



CONCEPT ILLUSTRATION

Built for the platforms you already run



Multirotor drones

Pipeline, power-line and wind-farm inspection; mapping; public safety



VTOL & fixed-wing

Long-range survey, border and perimeter patrol, ISR



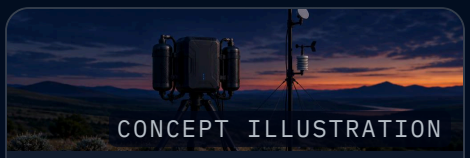
Quadruped robots

Site security rounds, industrial inspection, hazardous areas



Wheeled ground robots

Logistics yards, campus security, agriculture



Field power

Quiet off-grid power for sensors, comms and charging

Your platform?

Every platform gets a fit check before we quote

RangePak vs. a bigger battery

	BIGGER BATTERY	H_2 RANGEPAK
Endurance	Limited by the weight of each extra pack	Scales with hydrogen carried
Turnaround	Charge or juggle spare packs	Swap a canister in seconds
Field logistics	Generators and chargers	Canister exchange or field filling
Signature	Quiet	Quiet, low heat, emits only water vapour
Your platform	Often a redesign	Keep it: plug in with a kit

At a glance (preliminary)

Continuous power	200 W – 4 kW (by model)
Peak power	Up to ~300% with hybrid battery
Output voltage	24–65 V DC
Operating temperature	−20 to +50 °C
Stack life	>2,500 h (air-cooled)
Module mass	On request
Canisters	1–2 swappable, per platform
Canister swap	Tool-free quick-connect

Technology partner data, not yet verified by H_2 Energy Systems. Final figures confirmed per application.

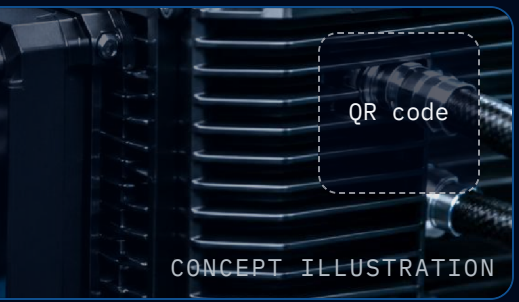
Safe, supported, trusted

- Hydrogen leak detection with automatic shutdown
- Fit check, bench test and field trial before fleet rollout
- Spares, refurbishment and support contracts
- Canister supply plan with every quote
- US production planned [confirm date]

Book a 30-minute fit check

Bring your platform's make and model, today's flight or run time, the endurance you need, and your payload. We'll tell you what RangePak can do for it, and if hydrogen isn't the right fit, we'll say so.

[Name] · [email] · [phone] · https://h2aerialsystems.com



All performance figures are preliminary and depend on platform, payload and conditions; final figures are confirmed per application. Images are concept illustrations.