

THE CITYHAWK

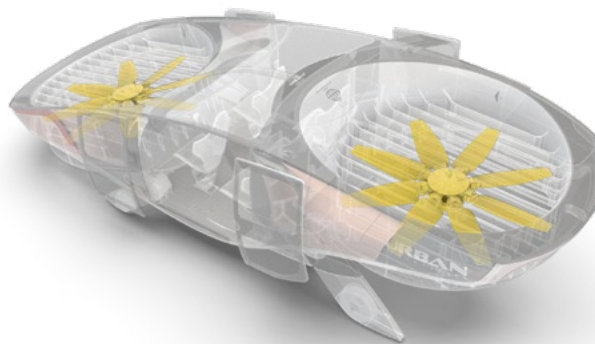
THE FIVE-SEATER ELECTRIC VERTICAL TAKEOFF AND LANDING (EVTOL) DESIGNED FOR THE URBAN ENVIRONMENT

The CityHawk is a safe, quiet, and ecofriendly 'car-sized' urban aircraft that is revolutionizing the future of air mobility and blends seamlessly into the city.



FANCRAFT™ ENCLOSED ROTOR TECHNOLOGY

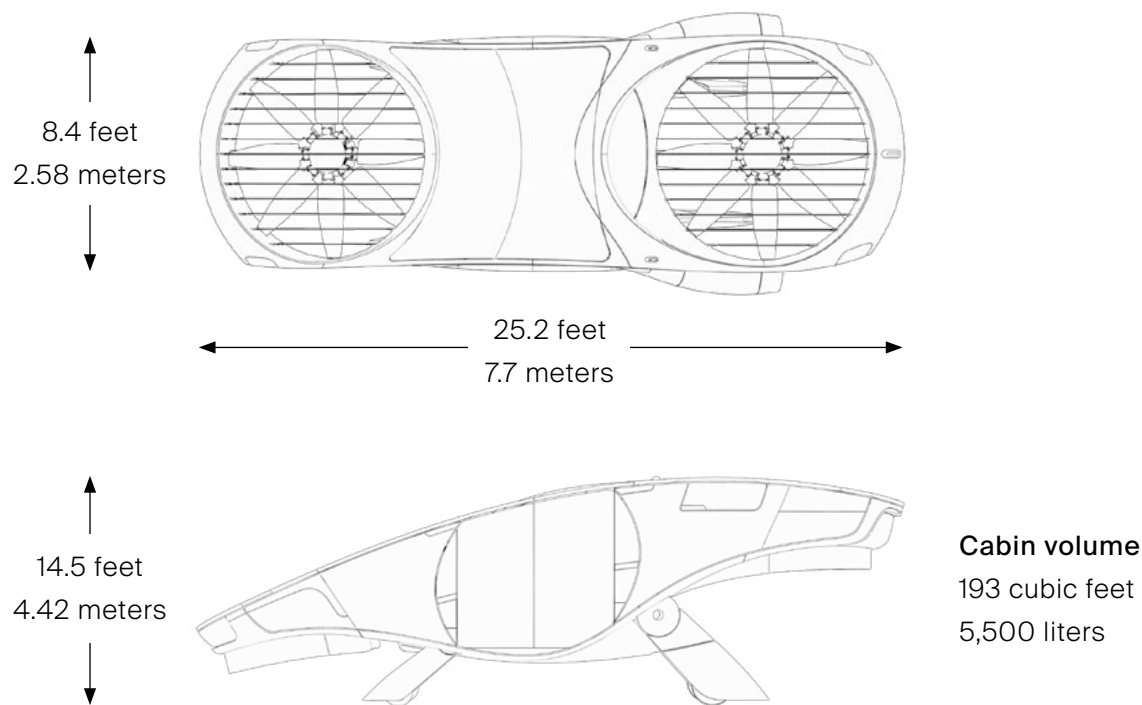
- Dual enclosed, counter rotating, ducted rotors with variable pitch for thrust control.
- Aerodynamically optimized guide vanes, enabling all-axis flight control.
- Composite rotor blades with anti-erosion edging.
- Uncompromised stability through strong winds and turbulence during takeoff, hovering and landing.
- Minimal noise, inside and out. Making hearing protection redundant in the cabin.
- Inherent anti-icing capabilities.



HYDROGEN FUEL CELL POWER PLANT

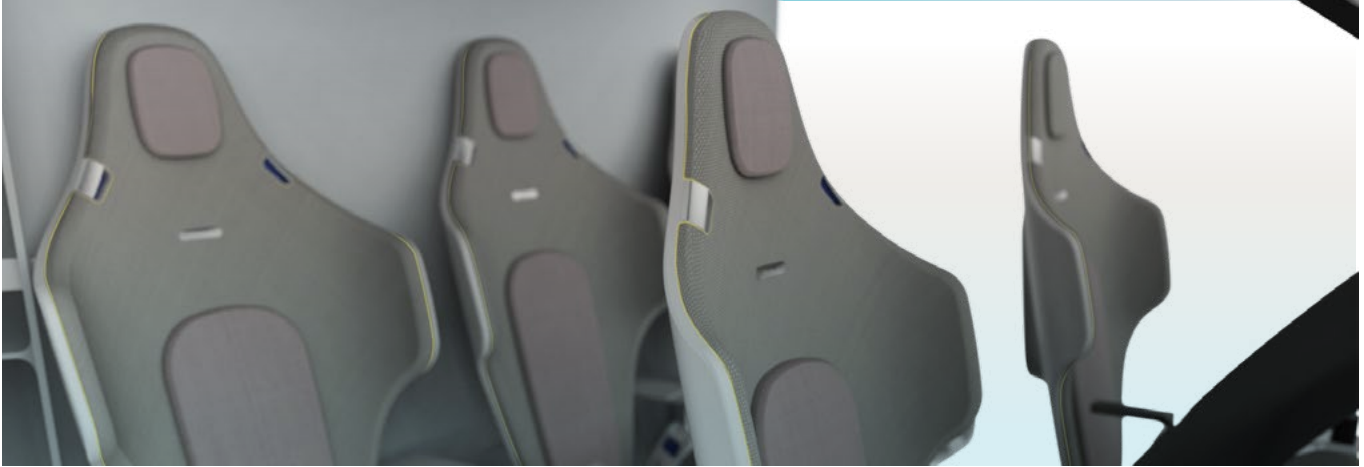
- Fully electric, aviation certified motors.
- Dual 700 Kw hydrogen fuel cell stacks, generating clean electric power.
- Hydrogen fuel tank, with fast refilling and quick release safety mechanism system.

TECHNICAL SPECIFICATIONS



	Metric	Imperial	Notes
Weights			
Empty Weight (EW)	1170 Kg	2580 lb	
Max Take Off Weight (MTOW)	1930 Kg	4250 lb	
Useful load (Fuel and Cargo)	760 Kg	1670 lb	
Performance			
Max Cruise Speed	130 Knots	234 Km/h	
Range	90 Miles	150 Km	at sea level (ISA)
Noise Level	70 dBA		at 720 ft / 200 meters
Service Ceiling	18,000 ft		
Propulsion			
Hydrogen Tank	265 gallons	1,000 liters	
Dual Fuel Cell Stack	938 HP	700 Kw	each
Dual Redundant Electric Motors	938 HP	700 Kw	each

UNPARRALLELED PASSENGER EXPERIENCE



- Large cabin area, over 190 cubic feet (5,500 liters).
- Five seater: pilot + four passengers.
- Dual sided, wide doors for fast embarking / disembarking.
- Lowering (Kneeling) mechanism.
- Disabled access friendly.
- Comfortable and adjustable crashworthy seats.
- Quiet cabin, no hearing protection required.
- Electronic charging stations, personal multimedia screens, and WiFi access.
- Climate control.
- Wide glass roof offering panoramic view over the city skyline.
- Dedicated luggage compartments.



SIMPLIFIED, SAFE PILOTING

- Large control screen.
- Head-up Primary Flight Display (PFD).
- Self propelled ground maneuverability.
- Superior handling systems: fly-by-wire, high automation, and unified one stick controls.
- Touch-screen integrated Secondary Flight Display (iSFD) for mission planning and in-flight management.
- Powerplant Indicating and Crew Alerting System (EICAS) display with automated malfunction assistance.
- Simplified power-up and preflight procedures. Auto-startup sequence.
- Peripheral enhanced spheric vision with augmented reality (AR) flight path.
- Fully electronic flight data layers for urban flight operations.



COMMUNICATION AND NAVIGATION

- Cyber protected electrical, communication and avionics systems.
- Secured International standard communication.
- Immune navigation system.
- Standard aviation communications (including ATC and UTM).



COMPLETE SYSTEMS AND SENSORS SUITE



- Precision landing systems.
- Enhanced Flight Vision System (EVS) for low visibility operations, takeoff, and landing.
- Ground Proximity Warning System (GPWS).
- Traffic Collision and Avoidance System (TCAS).
- Flight path and landing zone obstacle avoidance.



SIMULATOR AND TRAINING

- AR flight simulator and training curriculum.
- Embedded training modes.



SAFETY SYSTEMS

- Fuselage Design
 - > Composite structure to optimize weight to strength ratio.
 - > Flight Data Recorder.
- Fire Protection
 - > Auto/manual fire extinguishing control from the cockpit.
 - > Refueling safety mechanisms.
 - > Emergency evacuation systems.
 - > Hydrogen emergency quick release safety valve.
- Ditching & Water Landing
 - > Aircraft structure has been designed to float in case of emergency landing on water.
 - > Location beacon and external lights.
 - > Emergency life vests.
- Emergency Ballistic Parachute
 - > Auto deploy on activation.
 - > Allowing for safe steering to a landing site.
- Main Redundant Systems
 - > Back-up electrical power battery.
 - > Flight computer and major instruments.
 - > Triple redundant flight control actuation systems.
- Shell compartment for passenger protection



MAINTANANCE

- Occupies a 'car-sized' parking space.
- Advanced maintenance concepts:
 - > Easy access equipment and systems.
 - > Certified over-the-air software upgrades.
 - > Predictive maintenance data analytics.
 - > Health and Usage Monitoring System (HUMS).