FUSIONFLIGHT

QUAD TURBINE
VTOL DRONE

JETQUAD

The world's smallest and most powerful jet-powered drone with vertical take-off and landing capabilities

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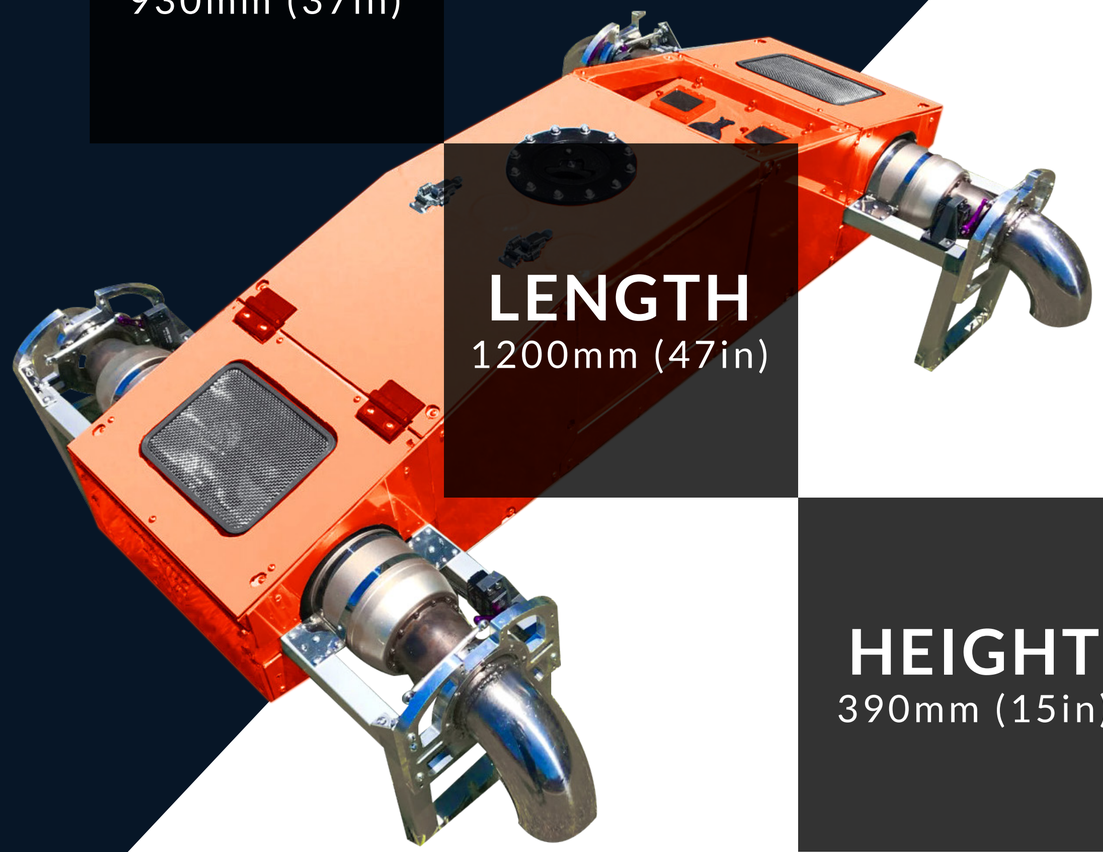
AB6 JETQUAD

An unmanned, scaled-down version of the Harrier Jump-Jet.

JetQuad is a drone, also known as UAV or UAS . However, the JetQuad relies on new type of propulsion - it is not a quadcopter, nor a helicopter, nor an airplane. Four microturbine jet-engines produce a combined 200-Horsepower at full throttle and are all coupled with proprietary Thrust Vectoring Systems. We refer to this design as the "H-Configuration" - this is the first ever configuration in which the jet-engines alone provide the power for both vertical and horizontal flight as well as complete attitude control of the vehicle. The result is a compact, fully-autonomous, all-diesel drone, that can take-off and land virtually from any surface and capable of high speeds and payload capacity.

WIDTH
930mm (37in)



LENGTH
1200mm (47in)

HEIGHT
390mm (15in)

COMPACT
AND LIGHTWEIGHT

The JetQuad base version is specifically designed so that it can easily be carried by a single person.

Empty and unloaded, the drone weighs 24kg (52lb) and has convenient rails to hold onto. In addition, the incredibly small footprint of the drone means it can be transported using most common ground vehicles. It also means that the drone can navigate and land in tight environments normally inaccessible by open-rotor drone technology such as helicopters and quadcopters. FusionFlight will offer optional upgrade package to the JetQuad - retractable landing gear equipped with shock-spring systems. This upgrade will provide the aircraft with less wind resistance during flight and additional flexibility for landing on uneven terrain.

JET-ENGINE VTOL UAV

BASE VERSION CAPABILITIES

Single Point Precision Altitude Hold

High-speed Forward/Reverse Cruise

Fast vertical ascent and descent

All Terrain Vertical Take-off and Landing

Weather Resilience / High Altitude

Fully Customizable Platform

Autonomous Payload Delivery

No assembly required, ready to fly

Chose from variety of exterior colors

SPECIFICATIONS

Mass
Maximum Takeoff Mass: 60kg (132lb)
Dry Mass: 24kg (52lb)

Performance
Cruise Speed: 110 m/s (246mph)
Cruise Altitude: 120m (400ft)
Max Altitude: 10km (33,000ft)
Vertical Ascent: 30m/s (67mph)

Fuel Level	Payload Capability	Flight Time	Range One-way
10L (2.5 gal)	28 kg (60 lb)	8 min	50km (30 mi)
20L (5.0 gal)	18 kg (40 lb)	16 min	100km (60 mi)

Operation Modes
·Autonomous Waypoint Navigation
·Manual Position Control
·Fully Manual Mode (System-check Only)

Propulsion
Type: 4x Microturbine Jet-Engine
Fuel Type: Heavy (Diesel/Jet-A/Kerosene)
Control: 4x Thrust Vectoring System (TVS)
Maintenance Interval: 25Hrs
Start-up Time: 1min
Re-Fuel Time: 2min

Control Station (Included in Package)
·Shoulder Strap Combination Unit
·Long-Range Transmitter (Control)
·8” Tablet (Telemetry / Mission Planning)
·Wireless Fuel Gauge
·Wired Engine Monitoring Terminal
·Leather Case
Mass: 1.2kg (2.6lb)
Range: 40km (25mi)
Uplink/Control: 2.4GHz
Download Telemetry: 980MHz

Payload Bay
·Undercarriage External Mounting
·2x Internal Bays (Forward and Aft)
Length: 0.20m (8in)
Width: 0.30m (12in)
Height: 0.15m (6in)
Power Supply: 360W
Voltage/Current: 12V/30A
Battery Capacity: 10,400mAh

Base Package Cost
$100,000 USD (Excludes S&H)

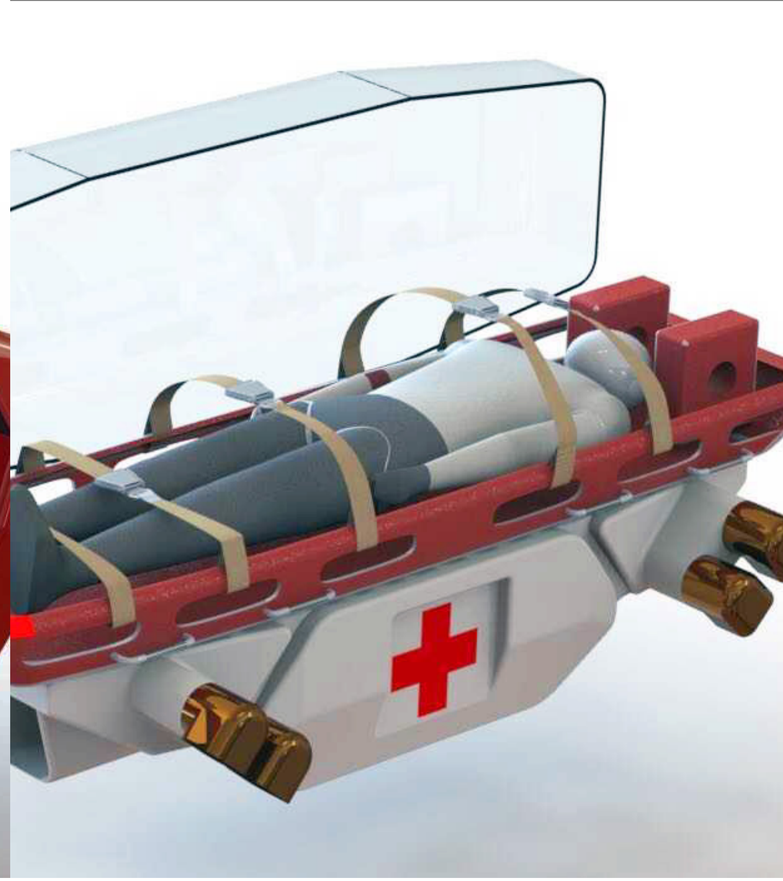
Optional Upgrades (Ask for price)
Aerodynamic Package
Extra fuel tanks
Ground Station Range Upgrade
Companion Computer

EXTENSIVE APPLICATIONS

A large advantage of the JetQuad technology is that it is readily scalable. As the overall mass of the vehicle increases, the mass penalty related to avionics, fuel systems, and structures greatly decreases which results in a very efficient airframe design. For this reason, upon successful production and deployment of the AB6 JetQuad, FusionFlight will focus on the next generation vehicle - the AB7 JetQuad. The AB7 JetQuad will have larger engines and fuel tanks and be capable of easily lifting a single person into the air.

High-Speed Urban Aerial Mobility

The AB7 Urban Air Mobility (UAM) configuration, or “Flying Car” in simpler terms, will position a single person in an ergonomic seat on top of the platform. The resulting transport will have great advantages over similar single-person eVTOL transports currently under development. Besides the obvious top-speed advantage, the AB7 UAM will be capable of refueling in minutes with ordinary diesel fuel, and be easily transportable through the city by standard size truck.



High-Speed Medical Evacuation

Other notable application of the AB7 is Emergency Medical Evacuation. In this configuration, a person is positioned in horizontal within a standard aerial stretcher (as often used by helicopters). However, unlike helicopters, the AB7 is incredibly compact and will be capable of reaching patients trapped in terrain inaccessible by helicopters.

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For all other inquiries please contact us by email:
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