



Falcon Hover

Capabilities

Falcon Hover (or Hover) is a tactical, quadcopter, unmanned aerial vehicle (UAV) with a top mounted fuselage capable of front mounted and bottom mounted payload options. Falcon Hover is designed around a modular payload and airframe design concept allowing for multi-mission capabilities, easy setup, and simple logistics for long term support. Hover is a single person portable system which may be operated by a single individual and is stored in a custom soft bag with hand holds for easy transport. Falcon and Falcon Hover utilize interoperable components including shared payloads, shared batteries, and a shared ground control station.

Falcon Hover is a Vertical Take Off and Landing (VTOL) aircraft. The VTOL launch and recovery of the aircraft allow for operations in tightly constrained locations including forested area, narrow paths, roadways, parks, parking lots, etc. Takeoffs and landings can be conducted in areas smaller than 8ft x 8ft.



Photo Credit: Falcon Unmanned

DOI UAS Specifications

Communications: Secure Digital Datalink (Up to 256 bit AES encryption)

Autopilot: Pixhawk Autopilot by 3D Robotics

Sensor Suite: Ublox GPS, Barometric Pressure Sensor, Dynamic Pressure Sensor, Redundant 3 Axis Accelerometers, Redundant 3 Axis Rate Gyros

Control Modes: GPS Waypoint Navigation and Multiple Semi-Autonomous Flight Modes

Launch Method: Vertical Takeoff

Recovery Method: Vertical Landing

Endurance: 20-25+ min @ 5,800' MSL (operations/mission dependent)

Assembly: Less than 2 minutes

Ready to Launch: Less than 5 min

Take Off Weight: Up to 7.5 lb (Payload Dependent)

Payload Weight: Up to 2.5 lbs

Flight Endurance Range: 2+ Miles

Communications Range: 6+ Miles (terrain / antenna dependent)

Speed: 0 to 15 knots

Operating Altitude: Up to 1000 ft AGL

Service Ceiling: Tested to 10,000 ft, estimated maximum altitude of 15,000 ft MSL

Assembled Dimensions: 48" maximum tip to tip / 6" tall (without modular legs)

Packed Dimensions: 9" wide x 7" height x 24" length

[For more information](#)