

Quad Rotor UAV

DH-X4 is a man-packable, Vertical Takeoff and Landing UAS.

- ✿ It is a Portable, Reliable and Quiet Unmanned Aerial Platform
- ✿ Designed for front-line Day/Night Intelligence, Surveillance and Reconnaissance (ISR)
- ✿ Capable of being deployed by two operators
- ✿ DH-X4 Provides immediate and persistent ISR in High-density environments Including urban operations
- ✿ DH-X4 operates in hover, perch and stare mode, transmitting real-time persistent ISR to small unit commanders through common ground control system (GCS) via a digital data link.
- ✿ DH-X4's User Friendly GCS reduces the level of training required and decreasing the time and cost involved. DH-X4 modular payload bays support multiple missions, including aerial reconnaissance, surveillance, route clearance, counter IED, mapping, hover and payload delivery.



DH-X4 Quad Rotor UAV

AUTOPILOT

Miniature Autopilot for mini-UAVs, MAVs and Multi Rotor

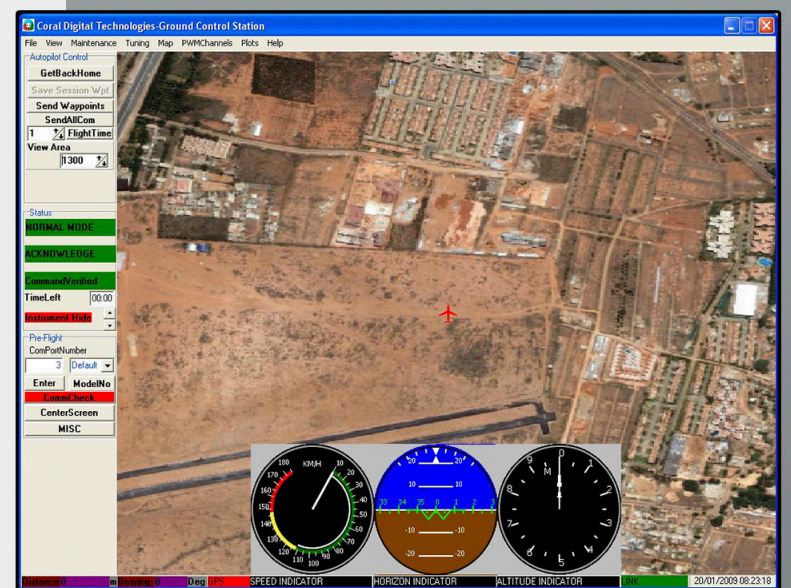
Weights less than 60 grams

It has on board accelerometer, rate gyros, GPS and pressure sensors for speed and altitude to provide stabilization, altitude reference, altitude and speed and hold functions besides autonomous waypoint navigation

It has a large storage capacity of up to 2GB on a SD card to allow flight data recording at 30-100Hz frame rate suitable for research and development applications

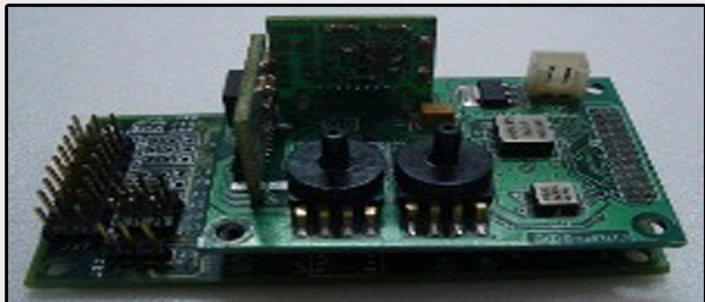
The autopilot has a manual takeover switch on the RC transmitter that allows the ground safety pilot to take control and fly the UAV manually during deployment

The autopilot code is validated using Matlab/Simulink and target code can be automatically generated using Real Time Workshop. This approach allows rapid development of autopilot algorithms for new platforms



SALIENT FEATURES

- Modular Design
- Extremely Portable
- Hand Held GCS with Video Telemetry
- Indigenous Design
- Full Composite 3K carbon fiber frame
- Flight Time Max of 60 Mins without Payload
- Custom built High efficient power system (Brushless Motor, Propeller, Battery)



AUTOPILOT FEATURES

- Rugged aluminum casing.
- External Reset Button.
- Normal and power saving mode.
- LED to indicate GPS and power status.
- Firewall update via configuration software and via server.
- Internal Geo-Fence in the device (circle or a polygon fence).

High-End Professional Four-Rotor UAV Performance Parameters

Endurance	:	60 minutes
Maximum Takeoff Weight	:	5Kg
Safe load	:	1.5Kg
Shaft	:	1.3M
Total Height	:	45CM



ANTENNA TRACKER

- Tripod stand.
- Optional interface to RC receiver.
- Windows XP,7,8 SDK to interface with user GCS.
- Interface with Ground Control Station through USB or RS 232.
- Wide range of DC input (8-40V) with reverse polarity protection, optional DC Input voltage indication.
- Heavy duty pan servo can rotate 0-360 degrees at 1.4 sec/60 degrees.
- Heavy duty tilt servo can rotate +/- 90 degrees at 1.0 sec/60 degrees.



OPERATION AND DEPLOYMENT

- Police & Security
- Maritime Patrol
- Search and Rescue
- Scientific Research
- Sports Events
- Surveyors
- Commercial Aerial Surveillance
- Oil, Gas and Mineral Exploration & Production



TARGET GROUPS

- Police
- Government & Military
- Research Institutes
- Universities
- Media
- Fire Fighters

