

Quadcopter

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1 Introduction

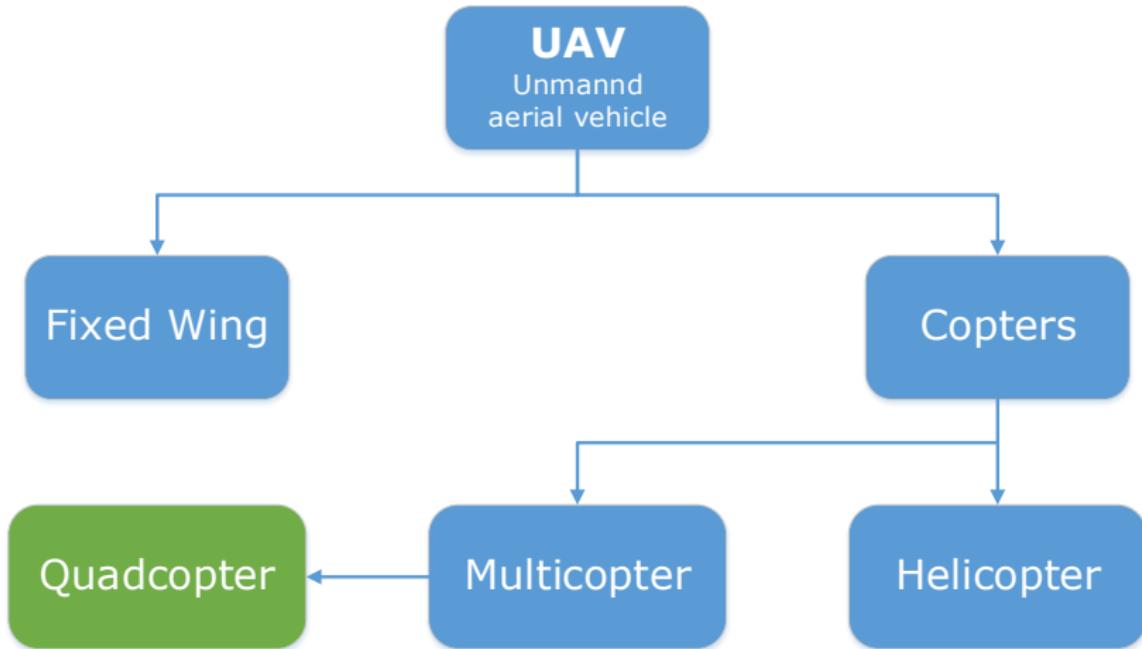
2 How it works

3 Dji 450

4 Usage

5 Outlook

Video



1 Introduction

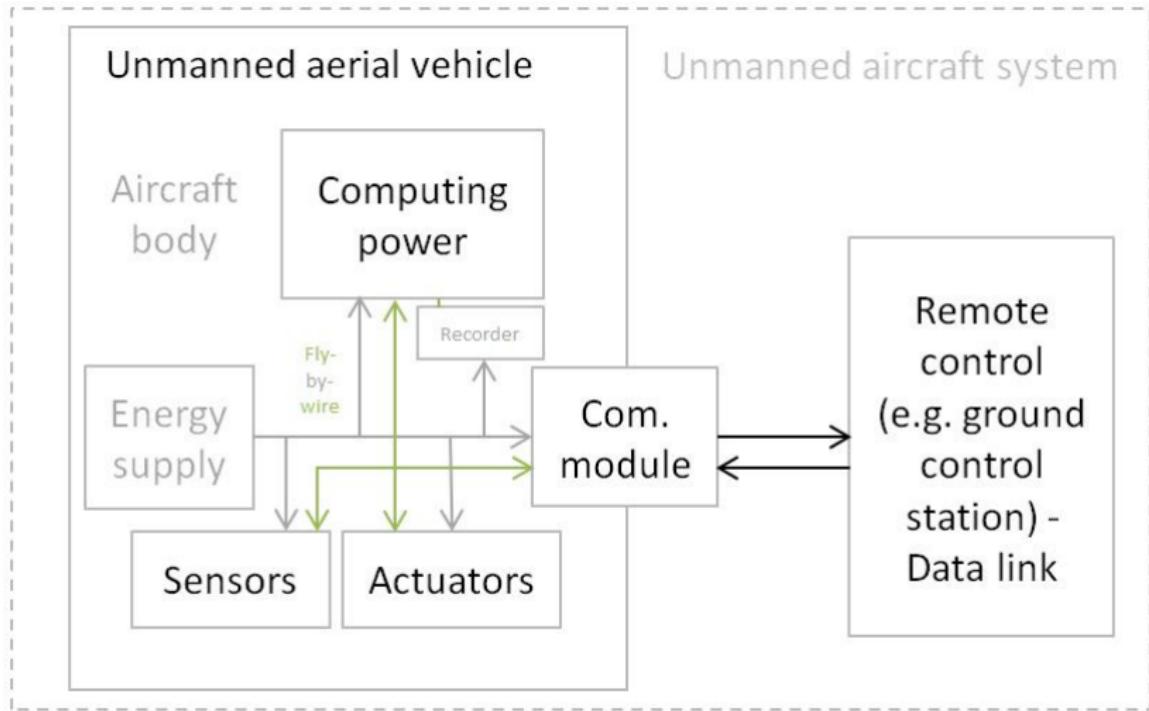
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Physical structure



Components



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Compromise between:

- Flight time
- Agility
- Durability
- Control
- (Money)

Self build kit

- No special knowledge required
- Very sturdy
- A lot of auxiliary
- Payload
- Price-Performance ratio

Payload

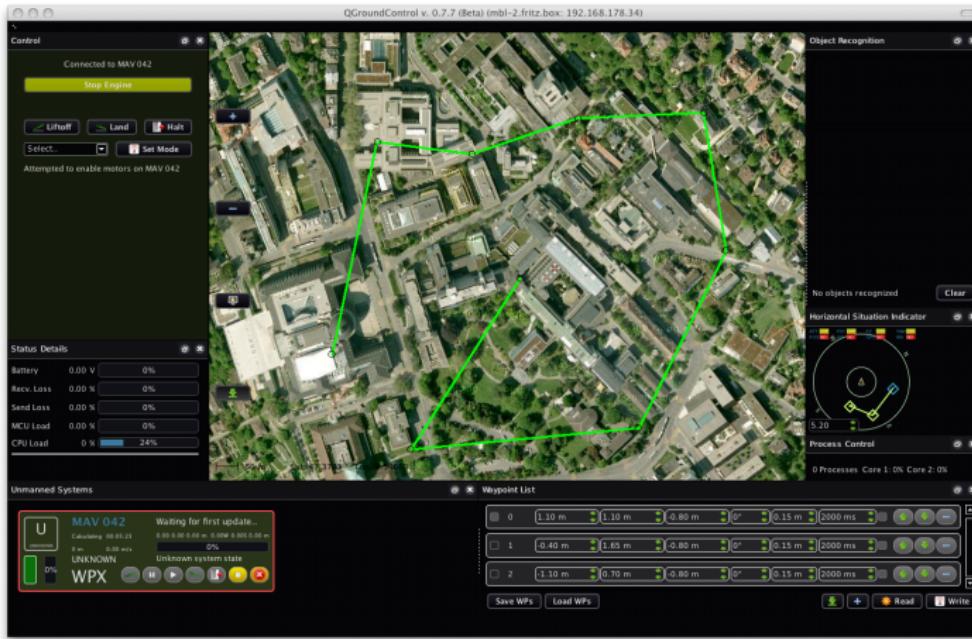


Controller, modes

- Manual
- Stabilize
- Follow + obstacle avoidance
- Acrobat
- Way-points
- 6 additional modes

Tools, way-point

Configure and calibration



Gimbal



- Goggle with receiver
- Camera with transmitter
- Black & white picture
- Noise

Out of the box



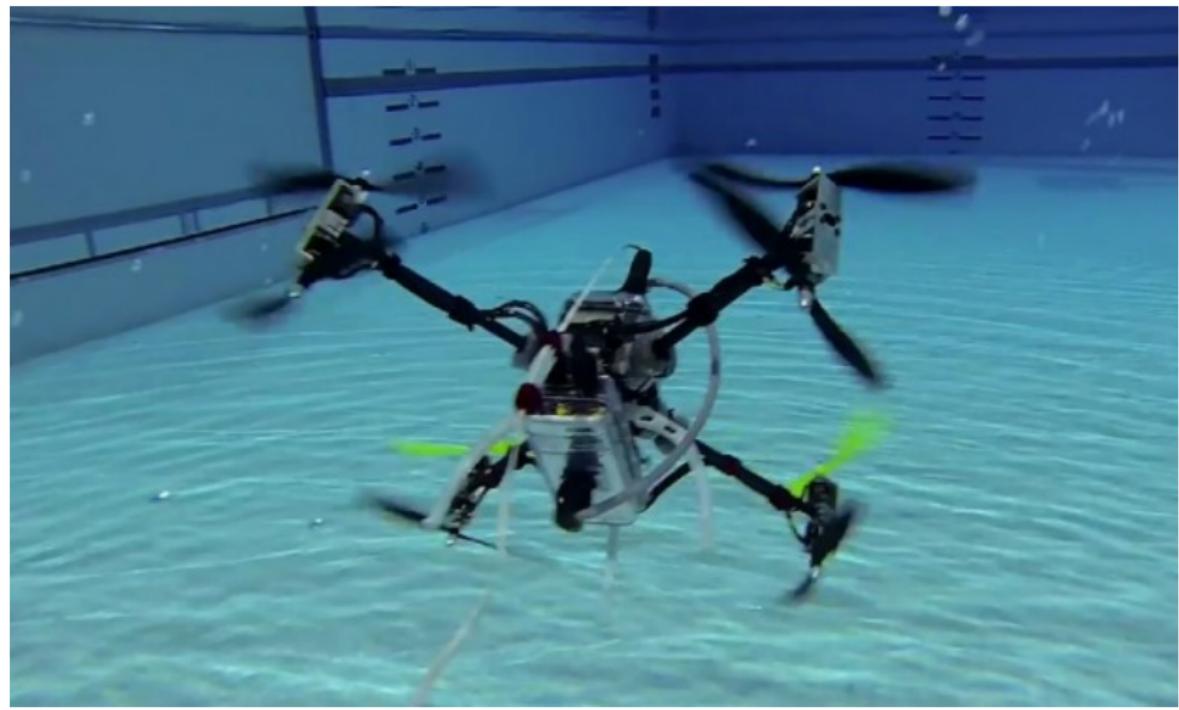
Disturbance, hazards

- Wind - Light weight
- Electronic Fields - 2.5 GHz band
- Water

Disturbance



Disturbance



Power supply

- Li-Po Battery: 14V, 5Ah → 0.055 kWh
- Flight time: 5min - 20min
- Charge time: about 2 hours

- Aviation training and certificate
- Register devices
- Fish drones from sky

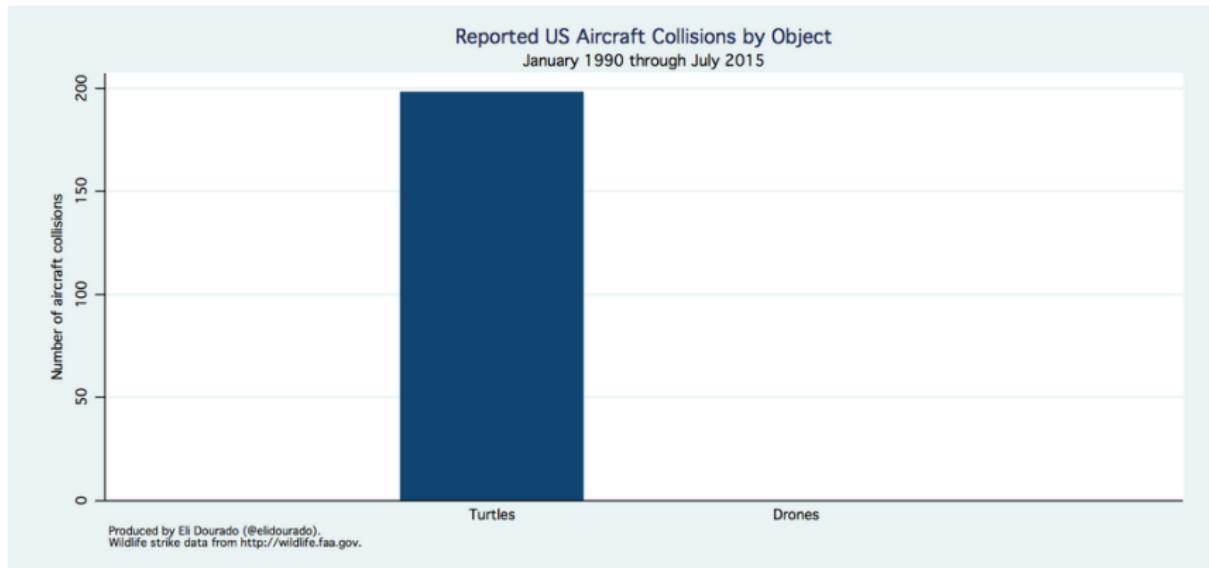
Law, Risk towards others



Law, Risk towards others



Law, Risk towards others



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Learning the basics

- Software
- Hardware
- Away from Flight Simulator -> Real flight behaviour
- Education

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- Easy to fly
- Cheap, without camera 60 CHF; with camera 150 CHF
- Problem with privacy
- Drones near the airport

- Rescue Drones
- Package delivery (Amazon)

Video