

Linköping University MAV Team

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MAV Requirements

- Simple design
- Crash worthiness
- Good turbulence characteristics
- Easy customization/modification

→ Ping Wing





PW Characteristics

• Span 41cm

• Weight 435g

• Cruise speed 19m/s

• Endurance 25 min

Weights

Airframe	108	g
Propulsion	122	g
Servo/receiver	31	g
Video system (inc. Pantilt)	62	g
Data link	25	g
Flight computer	86	g
Total	434	g



Flight computer

Micropilot mp2028

- 3 gyros, 3 axis acc.
- Ublox 4hz gps
- Stat and dyn pressure.
- Compass



Aerocom 866mhz datalink



Video Equipment

Videotronik VTQ-56 Black Widow AV video transmitter Black Widow AV video receiver









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Image sensor: 1/4" CCD

Pixel: 765 x 582

Resolution: 490 TV lines

Sensitivity: 1 lux

Lens: f=3.6 mm (53° FOV) Dimensions: 26 x 25 x 22mm Output power: 200mw Model:

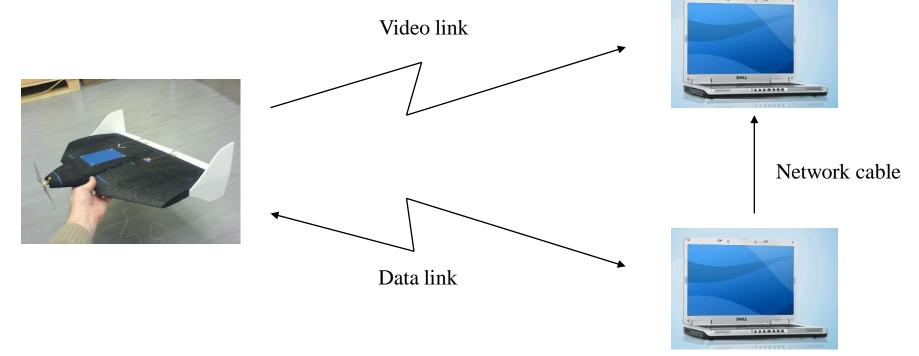
Frequency band: 2.4ghz Antennas: 2x 8db circular polarized

Model: diversity receiver



Video System Configuration

Image processing computer



Micropilot Horizon computer



Thank you!