



Mini Unmanned Vehicle



Aircraft characteristics:

• Service altitude	500 m
• Wing span	2.8 m
• Length	1.94 m
• Maximum weight	5.5 kg
• Payload weight up to	1.3 kg

Performances:

• Optimum cruise speed (500 m)	61.0 km/h
• Loiter speed (500 m)	57.0 km/h
• Maximum speed (0 m)	92.0 km/h
• Stall speed	31.0 km/h
• Max. rate of climb (0 m)	2.5 m/sec
• Operational endurance	1 h+

Payload:

Reconnaissance and surveillance by remotely controlled stabilized platform with exchangeable:

- day CCD camera: 40x zoom ratio (optical zoom 10x, digital zoom 4x), min illumination 1lx
- day CCD camera: 72x zoom ratio (optical zoom 18x, digital zoom 4x), min illumination 1.5lx
- night thermal camera: 32 mm focus, monochromatic image 384x288 resolution, sensitivity <50 mK

Control system:

- Way Point Tracking (256 points)
- Autonomous flight (heading, velocity, altitude Autopilots)
- Pitch, Yaw, Roll stabilization
- Autonomous inertial navigational system coupled with GPS
- Emergency modes (return home)
- Manual control (take off, landing)
- Command-communication systems
- Primary VHF Data Link (Up-Down) (12Km)
- Secondary RC Data Link (Up)
- Analog UHF Video Data Tranceiver (Down)

Ground Control Station:

- Mission preparation & flight guidance
- C4I Command-Information system
- Monitoring & Visualization system
- Mission debriefing
- Two member crew
- Pilot – navigator & flight operator
- Flight technician

Aircraft:

- Surveillance (Day/Night remotely controlled)
- CCD Camera)
- Control system:
- Way Point Tracking (256 points)
- Autonomous flight (heading, velocity, altitude Autopilots)
- Pitch, Yaw, Roll stabilization
- Emergency modes (return home)
- Manual control (take off, landing)
- Command-communication systems
- Primary VHF Data Link (Up-Down) (12Km)
- Secondary RC Data Link (Up)
- Analog UHF Video Data Tranceiver (Down)