

Peryton

Peryton is a versatile mini UAS with a silent electrical propulsion system. Its small size allows performing a great variety of mission ideal for video surveillance. It is a small, portable, reliable and rugged unmanned aerial platform.

- ★ It requires no auxiliary equipment for launch or recovery operations.
- ★ Designed for front-line day/night reconnaissance and surveillance.
- ★ The system operates autonomously which provides
 - ◆ Persistent Intelligence, Surveillance,
 - ◆ Reconnaissance and Targeting data(ISRT).
- ★ It carries electro optical and thermal camera on a light weight gimbaled payload



AUTOPILOT

- ✦ The miniature autopilot weighs less than 60 grams.
- ✦ It has onboard accelerometers, rate gyros, GPS and pressure sensors for speed and altitude.
- ✦ It provides stabilization, altitude reference, speed hold functions besides autonomous waypoint navigation.
- ✦ The autopilot has a manual takeover switch in RC transmitter it allows the ground safety pilot to take control of the UAV.
- ✦ The autopilot code is written using Matlab/Simulink & large codes can be automatically generated using real time workshop.

GROUND CONTROL STATION (GCS)



Displays flight parameters of UAV, Critical Signal indications, Video telemetry, Object tracking, GIS for waypoint navigation. GCS can render wide variety of vector and raster file formats like DGN, DVD, geoTIFF, DTED, DEM, Google maps, Autopilot commands, Control loop gains etc. Waypoints can be altered from the GCS on the fly. The GCS software is a cross platform application; it is scalable and could be adapted or modified to meet specific requirements.



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Advanced Light Mini
- UAS

PAYLOAD

- ★ FLIR/Thermal Camera
- ★ Electro Optic Camera with Electro Optic Zoom
- ★ Three Axis Retractable Stabilized Gimbal with Electro Optic Camera Stabilization

MAJOR FEATURES

- ★ Simple, Compact lightweight modular with rugged design.
- ★ No acoustic signature beyond 100m altitude.
- ★ Real time video and data transfer from on-board platform to the GCS.
- ★ Recording of video in high resolution for post flight analysis.
- ★ Customized power management unit.
- ★ System deployment, turn around & packing time within 10 minutes with a team of two men.
- ★ Fitment, removal & replacement of sensors are simple, quick and easily executable in all field conditions.

Telemetry Datalink

- ◆ Analog Downlink
- ◆ Digital Downlink COFDM

Telemetry Data Downlink

- ◆ Full Duplex Digital Data Link

ANTENNA TRACKER

- ★ Wide range of DC Input (8 – 40V) with reverse polarity protection.
- ★ Optional Interface to RC receiver.
- ★ Optional 900 Mhz/2.4Ghz wireless modem.
- ★ Tripod Stand.
- ★ Optional DC input voltage indication.
- ★ Interface with wireless modem through RS232.
- ★ Windows XP, 7 and 8 SDK to interface with user GCS.
- ★ Interface with Ground Control Station through USB or RS232.
- ★ Heavy duty tilt servo can rotate +/-90 degrees at 1.0 sec/60 degrees.
- ★ Heavy duty pan servo can rotate 0-360 degrees at 1.4 sec/60 degrees.

SPECIFICATIONS

- ➔ Wing Span : 1.8 m
- ➔ Length : 1.4 m
- ➔ Range : 6 km
- ➔ Endurance : 75 mins
- ➔ Ceiling : 6000 m
- ➔ Max Speed : 60 knots
- ➔ Takeoff Weight : 3.5 kg
- ➔ Motor : 600 W
- ➔ Propeller : 14" × 8"

