THE CYPRUS INSTITUTE

RESEARCH • TECHNOLOGY • INNOVATION

UNMANNED SYSTEMS RESEARCH LABORATORY

USRL AUTOPILOT SYSTEM

INTELLIGENT CONTROL SYSTEM

- Multi-Platform Control
- User-friendly
- Aviation Standards
- Intuitive User Interface
- Customizable Firmware
- Proven 2000 flight hours
- Reliable
- End User Connectivity
- Hardware in the Loop (HIL) Simulator
- Multiple OS support
- Voice Alerts & Notifications
- Advanced Navigation
- Compatibility with Crisis Management System

USRL AUTOPILOT SYSTEM

Key Features

- Multi-Platform support: Fixed-Wing, Multi-rotor, Helicopter, VTOL
- Intuitive User-Interface with audible & visual critical info announcements
- Multiple OS compatibility (Linux, Mac, Windows)
- Robust real-time Control and Monitoring
- Low-Latency real-time Video Feed with On-Screen-Display (OSD)
- In-flight Tuning and Configuration for optimal flying performance
- Miniaturized reliable hardware increases payload capacity
- Tailor-Made firmware adapted to end-user requirements
- Operation in GNSS denied environment
- Operation from mobile platforms (marine, ground)
- Seamless Transition from Manual to Auto modes
- Advanced Flying Modes: Automated Procedural landing, Anti-stall controller, Course mode, Airspeed boost, Acrobatic Limited mode, Headless Navigation, Throttle kill – Incognito surveillance mode, Controlled Automated Release
- Automated Battery Management System (BMS)
- Smart architecture for reliable and safe sensor and payload interface
- Supports operation from remote location
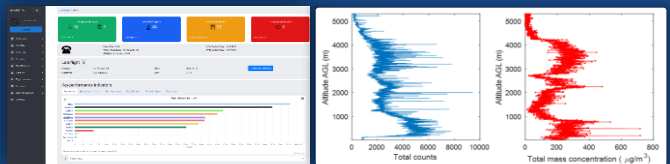- Supports connectivity with Crisis Management Systems (C2)

Hardware-In-the-Loop (HIL) Simulator

- Safe autopilot configuration
- Convenient flight preparation
- Fast & safe development
- Payload operation validation
- Safe real-scenario training

End-User remote connectivity

- Web-based Interface
- Fleet & Human Resource Management
- Automated Flight & Weather Logging
- Fleet Maintenance & Inventory History
- Remote access of 3D position & sensor data
- Real-time visualization of selected data

More information

THE CYPRUS INSTITUTE
RESEARCH·TECHNOLOGY·INNOVATION

UNMANNED SYSTEMS RESEARCH LABORATORY

https://usrl.cyi.ac.cy

Contact

The Cyprus Institute
20 Konstantinou Kavafi Street
2121, Aglantzia, Nicosia, Cyprus
Tel. +357 22208710 · +357 22208601
email: usrl@cyi.ac.cy, info@cyi.ac.cy