Veronte HWIL (Hardware In the Loop) simulator permits to perform RPAS flights in a safe environment. It creates a safe environment for pilot training and RPAS adjustment, saving time and money to RPAS operators.

Key Features
- RPAS operation in a reliable environment.
- Introduce custom aircrafts within the simulation.
- Preconfigure Veronte Autopilot in the office.
- Real aircraft actuator movement during the simulation.
- Compatible with fixed and rotary wing aircrafts.

Description

HWIL Simulation

Hardware In the Loop package integers Veronte Autopilot with X-Plane simulator permitting to operate the RPAS in a safe environment.

Any Veronte Autopilot can be attached to the simulator, avoiding extra hardware costs, running the simulation in the same hardware that is installed in the aircraft.

Provided wiring permits to connect Veronte Autopilot to the simulator PC without disconnecting it from the aircraft. When the UAV is connected, actuators move as if it were in the air. This powerful tool permits to test whole aircraft performance and detect any system failure.

This powerful simulation environment provides a real UAV flight feeling, operator will not even notice that the aircraft is on ground.
Customizable Aircrafts

Compatible with any aircraft architecture: fixed wing, helicopter, multicopter... Veronte HWIL Simulator will help to perform on the ground system features tests even before the first RPAS flight.

X-Plane has a large aircraft model database available and tools are provided to create custom RPAS models for simulation. If needed, Embention team can develop the aircraft model for you:

Any aircraft model

Operator Training

Veronte HWIL Simulator is the perfect tool for operator training. Flying the aircraft into the on the ground simulation environment provides the operator with experience to face any situation during real flight.

Operator will have the feeling of real RPAS flight, having all Veronte features available, even manual; arcade & automatic control switch.

Simulator permits to configure most flight parameters, including: weather conditions, runway properties, flight location... The application will even reproduce real aircraft damage.

Failure configuration panel is also available for programming risk situations that will permit to evaluate both the control system and the operator response. Main failures included are: engine, instruments, and control surfaces among others.

Motion Simulator

In order to get the most real flight experience, Veronte HWIL can be configured for motion simulators. Please ask our team for custom motion platforms control, they will advise with the architecture that best meets your needs.

Windows, Mac OS, Linux...

Compatibility

Veronte HWIL Simulator supports multiple display and multiple PC configurations. Connect any PC, running: Windows, Mac OS or Linux, to the network to have access to the simulation.