ACE™

AeroVironment™

ACE™ (Autonomous Control Engine) delivers precision launch and landing from confined spaces, moving vehicles, or vessels in motion with seamless vision-based navigation. ACE provides automated, centimeter-level precision landings in dynamic environments, without relying on GPS, for any UAS.

SPECIFICATIONS

AUTONOMOUS LANDING ACCURACY	< 10 cm on stationary or moving platforms
VEHICLE/VESSEL SPEED	Depends on host UAS maximum speed
SEA STATE TOLERANCE	3 (for autonomous landing) Accounts for 6 DoF vessel motion
SECURITY	Jam resistent Encrypted file system
OPERATING SYSTEM	Linux
INTERFACE PROTOCOL	MAVLink (standard) and custom interfaces available

KEY FEATURES

» *Suitable for any VTOL UAS that needs to operate from moving vehicles and vessels on land or at sea*

» *Autonomous high-precision takeoff, landing, and position-hold relative to stationary or moving platforms*

» *GPS-optional operation*

» *Minimal operator training*

» *Minimal installed hardware*

» *Standard open interfaces for compatibility with third-party and legacy systems*

» *Enables mobile tethered UAS for long duration missions*

INTEGRATIONS

ACE™ precision navigation system is a software-hardware solution for existing UAS. ACE™ has been integrated into UAS of various sizes and configurations.

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