PUMA™ VNS VISUAL NAVIGATION SYSTEM

AeroVironment™

AeroVironment's Puma™ VNS is a visual-based navigation system for Puma 2 AE and Puma 3 AE small unmanned aircraft systems (SUAS). Puma VNS enables GPS-denied navigation across GPS-contested environments. The system performs Visual Inertial Odometry (VIO) through a suite of integrated sensors and an onboard compute module to determine the precise location of the aircraft during flight.

Designed to adapt to a continuously changing battlefield, Puma VNS will enable increasingly advanced navigation capabilities, features and functionality through future software and hardware updates. Available as an add-on option for new Puma 3 AE system orders and as a retrofit kit allowing existing Puma 2 AE and Puma 3 AE customers to upgrade fielded systems.

Visual-based Navigation System for Puma™ AE

PUMA™ VNS

DISTINCTIONS

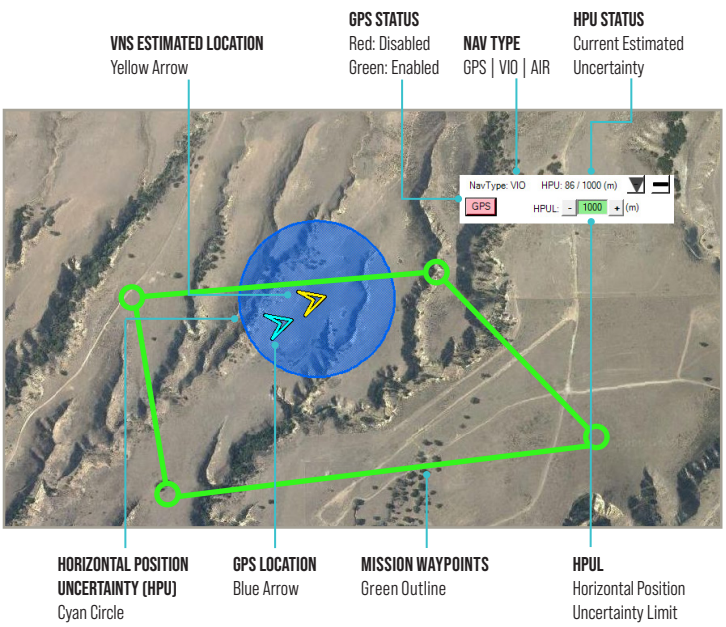
COMPATIBILITY
Puma™ 2 AE & Puma™ 3 AE

WEIGHT
Operational: 1.2 lb (0.54 kg)

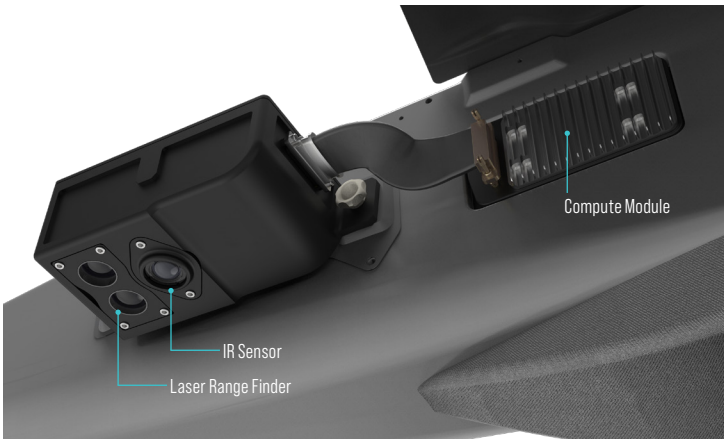
SPECIFICATIONS

ENDURANCE	2 hr with Puma™ Smart Battery* 2.4 hr with PS2500 Battery*
INSTALLATION	Initial factory or depot-level retrofit installation of external mounting pad then plug & play field installation & removal
ENVIRONMENTAL RATING	All-weather (excluding water landing)
OPERATING ALTITUDE	800 ft (244 m) AGL typical**

*Based on sea level mission with standard configuration and conditions
**Position accuracy reduced at higher altitude



KIT INCLUDES:



KEY FEATURES

- *Zero pilot input required for seamless mission continuity through GPS-contested environments*
- *Two-piece low-swap retrofit kit available for existing Puma 2 AE, Puma 3 AE & new Puma 3 AE systems*
- *Performs Visual Inertial Odometry (VIO) through onboard sensors to estimate true location without GPS*
- *Enables integration of future autonomy capabilities*
- *Minimal performance impact to Puma™ aircraft*
- *Compact—Fits into existing Puma™ case for mission packout*

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