

PUMA™ 3 AE ALL ENVIRONMENT

AV
AeroVironment™



Building on a legacy of continuous improvement, the Puma™ 3 AE offers system level enhancements for use in land and maritime operations. The Puma 3 AE has operational flexibility never before available in the small unmanned aircraft systems (SUAS) class including upgrades for secondary payloads and third-party applications. The multi-mission capable system allows operators to swap between Mantis™ i45 and the enhanced Mantis i45 N nighttime payload for day, night and low-light operations in extreme environments. Operators can also manually or autonomously navigate the Puma 3 AE while gaining real-time situational awareness and actionable intelligence through AeroVironment's common GCS. Available Puma™ VTOL Kit and Puma™ VNS (Visual Navigation System) expand the operational capabilities by providing vertical take-off and landing in urban environments and GPS-denied navigation in contested environments.

DISTINCTIONS



» **LINK RANGE**
20 km, 60 km with LRTA



» **WINGSPAN** | » **LENGTH**
9.2 ft (2.8 m) | 4.6 ft (1.4 m)



» **WEIGHT**
15.4 lb (7 kg)



» **ENDURANCE**
2.5 hr with Puma™ Smart Battery*
3 hr with PS2500 Battery*

SPECIFICATIONS

PAYLOADS	Mantis™ i45: Dual 15 MP EO/IR Mantis™ i45 N: Dual LWIR/5 MP Low Light
TOTAL PAYLOAD CAPACITY	4 lb (1.8 kg)
SPEED	Cruise: 49 km/hr (26 kts), Dash: 76 km/h (41 kts)
OPERATING ALTITUDE	300-500 ft (91-152 m) AGL, typical Max. launch 10K ft (3,048 m) MSL
GCS	Crysalis™ & legacy common GCS
LAUNCH METHOD	Hand-launched, optional bungee launch or VTOL kit
RECOVERY METHOD	Autonomous or manual precision deep-stall landing

*with Mantis™ i45

PUMA™ 3 AE USES PLUG AND PLAY INTEROPERABLE COMPONENTS

Puma™ AE users can leverage existing line-replaceable units (LRUs) to easily upgrade or repair fielded systems. This interoperability builds on a legacy of Puma baselines with hundreds of thousands of operational flight hours. The Puma AE product line provides the warfighter with intelligence, surveillance and reconnaissance (ISR) during day and night operations in all-environment conditions.



Mantis™
i45/i45 N



Motor/Props



Avionics



GPS/INS



DDL™ Radio



GCS



Servo



Batteries



UBC



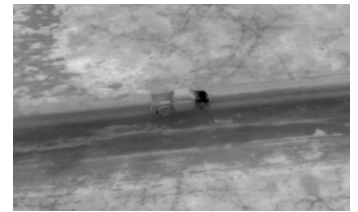
Laptop

KEY FEATURES

- » All-environment rated
- » Enhanced Digital Data Link™ covering more frequencies & supporting AES-256-bit encryption
- » Reinforced fuselage & center wing accommodates heavier configurations
- » Reduced packaging fits a flyable configuration in a single case
- » Upgraded motor providing up to 26% increased climb rate in heavier configurations for overall mission performance
- » Field-swappable Mantis™ payloads for day & night operations

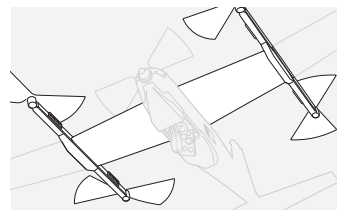


Downlink imagery from Mantis™ i45

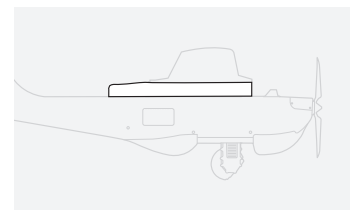


Downlink imagery from Mantis™ i45 N

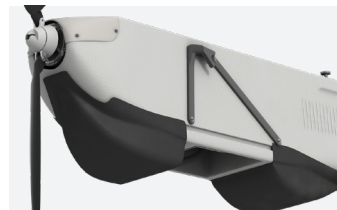
OPTIONAL ADD-ONS



Puma™ VTOL Kit



Puma™ Universal Transit Bay



Puma™ Bungee Launch System



Puma™ VNS (Visual Navigation System)