

# 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 Tomahawk 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

12.4 mi (20 km) standard, 24.8 mi (40 km) with ERA  
37.3 mi (60 km) with LRTA



### WEIGHT

15.6 lb (7.1 kg)



### ENDURANCE

2.5 hr with Puma™ Smart Battery\*  
3 hr with PS2500 Battery\*



### TOTAL PAYLOAD CAPACITY

4 lb (1.8 kg), 6.5 lb (2.9 kg) with Heavy Lift Software

## SPECIFICATIONS

<b>PAYLOADS</b>	Mantis™ i45: Dual 15 MP EO/IR Mantis™ i45 N: Dual LWIR/5 MP Low Light
<b>SPEED</b>	Cruise: 49 km/hr (26 kts), Dash: 76 km/h (41 kts)
<b>OPERATING ALTITUDE</b>	300-3000 ft (91-914 m) AGL, typical Max. launch 10K ft (3,048 m) MSL Max Flight Altitude 10.5K ft (3,200 m) MSL
<b>WINGSPAN</b>	9.2 ft (2.8 m)
<b>LENGTH</b>	4.6 ft (1.4 m)
<b>GCS</b>	Tomahawk, Crystalis™, or Legacy GCS
<b>LAUNCH METHOD</b>	Hand-launched, optional bungee launch or VTOL kit
<b>RECOVERY METHOD</b>	Autonomous or manual precision deep-stall landing or VTOL kit

\*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



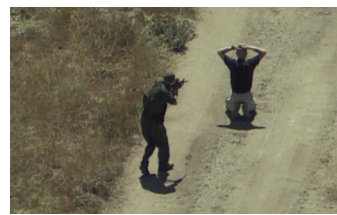
UBC



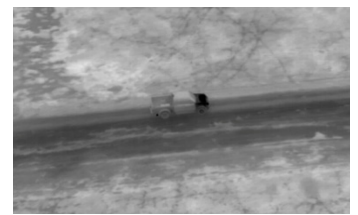
Laptop

## KEY FEATURES

- » All-environment rated, including landing in water
- » 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

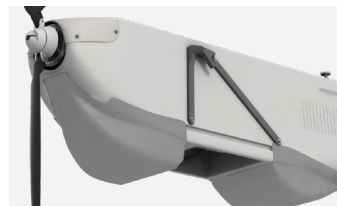
### OPTIONAL ADD-ONS



Puma™ VTOL Kit



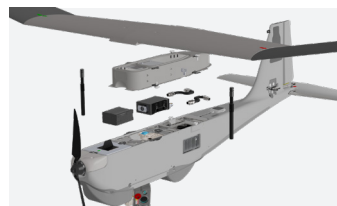
Puma™ Universal Transit Bay



Puma™ Bungee Launch System



Puma™ VNS (Visual Navigation System)



Puma™ 3 Comms Relay