

Puma™ 3AE ALL ENVIRONMENT



Building on a legacy of continuous improvement, the Puma™ 3AE offers system level enhancements for use in land and maritime operations. The Puma 3AE 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 3AE while gaining real-time situational awareness and actionable intelligence through AV'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.

Puma™ All-Environment Family

PUMA™ 3AE

_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

3 hr in
standard ISR
config

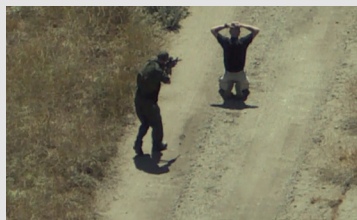


TOTAL PAYLOAD CAPACITY

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

_Specifications

PAYLOADS	Mantis™ i45: Dual 15 MP EO/IR Mantis™ i45 N: Dual LWIR/5 MP Low Light
SPEED	Cruise: 47 km/hr (25 kts) Dash: 76 km/h (41 kts)
OPERATING ALTITUDE	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
MISSION DURATION	10 km Mission: Time to Target: 13 min; Loiter Time: 2.6 hours 20 km Mission: Time to Target: 26 min; Loiter Time: 2.1 hours 30 km Mission: Time to Target: 38 min; Loiter Time: 1.7 hours
WINGSPAN	9.2 ft (2.8 m)
LENGTH	4.6 ft (1.4 m)
GCS	Tomahawk, Crystals™, or Legacy GCS
LAUNCH METHOD	Hand-launched, optional bungee launch or VTOL kit
RECOVERY METHOD	Autonomous or manual precision deep-stall landing or VTOL kit



DOWNLINK IMAGERY FROM
MANTIS™ i45



DOWNLINK IMAGERY FROM
MANTIS™ i45 N

[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.



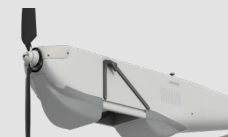
[OPTIONAL ADD-ONS]



PUMA™ VTOL KIT



PUMA™ UNIVERSAL
TRANSIT BAY



PUMA™ BUNGEE
LAUNCH SYSTEM



PUMA™ VNS (VISUAL
NAVIGATION SYSTEM)



PUMA™ 3 COMMS
RELAY

_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