



PUMA™ LE LONG ENDURANCE

The all-environment Puma LE delivers Group 2 capabilities in a Group 1 optimized, two-case mission packout. This ultra-lightweight Group 2 aircraft features 6.5 hours of flight endurance and a 60 kilometer range when used with the optional Long Range Tracking Antenna (LRTA) and Puma Smart 2500 Battery. Designed with mission efficiency in mind, operators can swap between the battlefield proven Mantis™ i45 and the enhanced Mantis i45 N nighttime sensor suite, allowing for a quick change-out of payloads between day and night operations. This multi-mission capable aircraft has a secondary payload bay with dedicated power supply and Ethernet. Puma LE is hand or bungee launchable and utilizes a precise, waypoint-controlled skid landing and does not require additional equipment for recovery.

Group 2 Capabilities Group 1 Footprint

PUMA™ LE

DISTINCTIONS



»» LINK RANGE
20 km, 60 km with LRTA



»» WEIGHT
23.5 lb with Mantis i45/i45 N (10.7 kg)



»» ENDURANCE
6.5 hr with Puma Smart 2500 Battery***



»» TOTAL PAYLOAD CAPACITY
5.5 lb (2.5 kg)**

SPECIFICATIONS

PAYLOADS	Mantis i45: Dual 15 MP EO/IR Mantis i45 N: LWIR/5 MP Low Light
ENDURANCE	5.5 hr with Mantis i45/i45 N 6.5 hr with Mantis i45/i45 N and optional Puma Smart 2500 Battery***
SPEED	Cruise: 47 km/h (25 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
WINGSPAN	15 ft (4.6 m)
LENGTH	7.3 ft (2.2 m)
WEIGHT	23.5 lb with Mantis i45/i45 N (10.7 kg) 27 lb MGTOW* (12.2 kg)
GCS	Crysalis™ and legacy common GCS
LAUNCH METHOD	Hand-launched, bungee or vehicle launch
RECOVERY METHOD	Autonomous or manual skid landing

PUMA LE USES PLUG AND PLAY INTEROPERABLE COMPONENTS

By leveraging the existing Puma RQ-20B and Puma 3 AE line-replaceable units (LRUs), Puma LE allows any current Puma AE user to easily upgrade fielded systems. This interoperability builds on a legacy of Puma baselines with hundreds of thousands of operational flight hours. The Puma 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



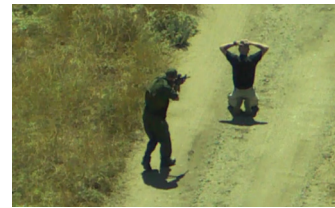
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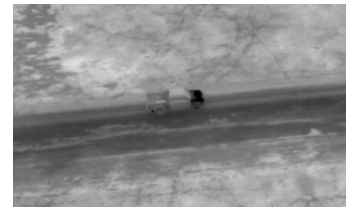
Laptop

KEY FEATURES

- » All-environment capability
- » Field-swappable Mantis payloads for day and night operations
- » Dedicated secondary payload bay with power supply and Ethernet
- » Puma LRU component interoperability
- » Enhanced Digital Data Link™ covering more frequencies and supporting AES-256 bit encryption
- » Inaudible at 500 ft



Downlink imagery from Mantis i45



Downlink imagery from Mantis i45 N

MISSION FLEXIBILITY THROUGH FIELD SWAPPABLE PAYLOADS

Operators can swap between the Mantis i45 and the enhanced Mantis i45 N nighttime payload for quick and simple change-out of payloads between day and night operations.



OPTIMIZED PACKOUT FOR MISSION FLEXIBILITY

2 CASES/2 MISSIONS: Support two full endurance flights with a simple two-case packout. Puma LE uses the same cases as Puma 3 AE with custom foam inserts.
57.4 in x 18.5 in x 11.2 in (145.8 cm x 47 cm x 28 cm)

DEDICATED INTERNAL SECONDARY PAYLOAD BAY

Every Puma LE features an internal secondary payload bay with a dedicated power supply and an Ethernet communication port. This provides 3.4 lb of secondary payload capacity for expanded mission capability.

12.25 in x 4.75 in x 5 in (31.1 cm x 12.1 cm x 12.7 cm) *approximate dimensions*
18-24 V at up to 5 A (90 W) for full flight duration

PUMA SMART 2500 BATTERY***

This optional battery extends Puma LE's flight time up to 6.5 hours, providing greater time on station and maximizing Puma LE's multi-mission capabilities. The high density, lithium-ion battery pack features an improved 24.5 Ah (amp-hours) capacity.

Total Incremental Weight (2 battery packs): 0.3 lb (140 g)**

* MGTOW - Maximum Gross Takeoff Weight

** Payload capacity is reduced by 0.3 lb (140 g) with Puma Smart 2500 Battery

*** Puma Smart 2500 Battery is not compatible with other Puma AE aircraft