

# Puma™ LE

TRILLIUM HD59  
LASER DESIGNATOR PAYLOAD



The Puma LE, equipped with the Trillium HD59 Laser Designator, delivers unmatched tactical ISR and precision targeting in a compact, man-portable Group 2 UAS. This powerful combination provides high-definition electro-optical and infrared imagery alongside an integrated laser designator, enabling operators to not only detect and identify threats but also mark them for precision-guided munitions. The HD59's superior stabilization and multi-sensor performance ensure clear, reliable imagery in day, night, and low-visibility conditions. With its lightweight, rugged airframe, long endurance, and enhanced targeting capability, Puma LE becomes a true force multiplier – allowing small units to conduct organic target designation missions previously reserved for larger, more costly platforms.

# See, identify, and designate targets with one system



## Puma LE Specifications

PAYLOADS	HD59-MLVS-LD
WINGSPAN & LENGTH	15.0 ft (4.6 m) 7.3 ft (2.2 m)
AIRCRAFT WEIGHT	28 lb with HD59 (12.7 kg)
LINK RANGE	20 km Standard GCS; 40 km with ERA 60 km with LRTA
ENDURANCE	3.5+ hr
SPEED	Cruise: 47 km/h, 25 kts, 29 mph Dash: 76 km/h, 41 kts, 47.2 mph
OPERATING ALTITUDE	300-3000 ft (91-914m) AGL, typical Max launch 10k ft (3,048m) MSL Max flight Alt. 10.5K ft (3,200m) DA
ENVIRONMENTAL RATING	All Weather with HD59 (IP 64)

## HD59-MLVS-LD Specifications

CAMERAS	EO Visible 1920×1080 [16.9°-3.5°] MWIR 1280×1024 [5.6° to 1.4°] LWIR 640×512 [18.2° to 9.1°] SWIR 640×512 LD See Spot/30Hz [5.7° to 2.9°]
LASER DESIGNATOR	2+km targeting slant range, 50mJ/pulse power, 1064nm laser, Supports PRF codes, STANAG 3733 compliant Class IV
LASER POINTER	850nm laser, Class IIIB
LASER RANGE FINDER	1550nm laser Class I, eye safe 3km+ slant range (2.3m NATO)
VIDEO	720P HD Digital Video Fully digital h.264/h 265 compliant
DIMENSIONS	5.8 in (14.7 cm) 7.9 in (20.2 cm)
WEIGHT	Gimbal Weight: 4.5 lb ( 2.1 kg)

## Key Features

- › All-in-One ISR & Targeting - Small units can laser designate threats without waiting for other assets
- › Force Multiplier - Seamlessly pairs with precision munitions and manned aircraft
- › Rapid CAS Integration - JTACs can track, confirm and designate targets directly
- › Speed up Find, Fix, Engage - plus BDA after engagement
- › Covert Operations - Designate from standoff ranges without exposing ground teams.
- › Long Endurance - 3.5+ hr multi-mission flexibility with added targeting capability in harsh environments
- › Small Footprint - Group 2 capabilities in group 1 footprint (1-2 person operation)

## Key Features

- › Integrated Laser Designator - real-time target designation for guided munitions
- › Multi-Sensor HD Imaging - EO/IR stabilized imagery for day or night operations
- › Compact and Portable - launchable by 1 or 2-person teams in minutes
- › Accurate Target Designation - precise geo-location for fires integration
- › All-in-One ISR & Targeting - Maintain Puma LE's long endurance and multi-mission flexibility with added targeting capability.