

Mantis™ i45 N

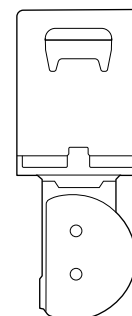
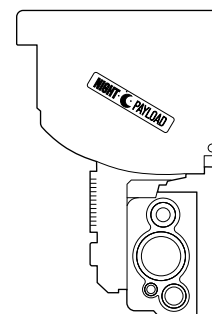
NIGHT
PAYLOAD



AV's Mantis™ i45 N is a multi-sensor nighttime imaging payload designed for maximum visibility during low light or nighttime intelligence, surveillance and reconnaissance (ISR) operations. The next-generation imaging system features improved long-wave IR (LWIR) thermal cameras, an upgraded 5 megapixel monochrome low-light camera sensor and high-powered 860 nm laser illuminator. Through its advanced suite of sensors, the Mantis i45 N payload allows operators to extend aircraft standoff distance for covert operations.

_Specifications

THERMAL IR	Resolution: Dual LWIR 640×512 px HFOV: 40° to 5.3° Zoom: 6 Levels; 7.6x
LOW LIGHT (LL)	Resolution: 5 MP HFOV: 17.8° to 2.3° Zoom: 6 Levels; 7.6x
LASER ILLUMINATOR	Beam power: 450 mW Wavelength: 860 nm Class: 4 laser
VIDEO	SD @30 fps
WEIGHT	32 oz (905 g)
BALL DIAMETER	4.2 in (10.7 cm)
OPERATING TEMPERATURE	-29 to 50 °C
WEATHERIZATION	All environment (waterproof)
PAN	360° rotation, continuous
TILT	-90° to +30°



_Key Features

- › Enhanced night and low-light performance
- › Improved long-wave IR (LWIR) thermal camera imagers; wide-angle 9.2 mm and narrow-angle 32 mm IR
- › Upgraded 5 MP monochrome low-light camera sensor and optics
- › Enhanced laser illuminator 7.4x stronger beam intensity
- › Compatible with Puma™ 2AE, Puma™ 3AE and Puma™ LE
- › Field-swappable for quick and simple change-out of payloads between day and night operations



**NARROW-VIEW FROM
LWIR THERMAL**



**WIDE-VIEW FROM
LWIR THERMAL**



**HIGH-RESOLUTION,
LOW-LIGHT**



**LASER ILLUMINATOR
AT 250 M SLANT
RANGE**

