

AeroVironment's New Mantis i45 N Multi-Sensor Imaging Payload Delivers Advanced ISR for Night Ops



AeroVironment's new Mantis i45N imaging payload, intended for nighttime imaging. *AEROVIRONMENT*

ARLINGTON, Va. – AeroVironment Inc. introduced the Mantis i45 N, a multi-sensor nighttime imaging payload compatible with Puma2 AE, Puma3 AE and Puma LE small unmanned aircraft systems (UAS), the company said Nov. 16.

Lightweight (905 grams) and compact, the new Mantis i45 N joins AeroVironment's expansive Mantis product line of micro-gimbals delivering high-quality video and imagery downlink to UAS operators.

Mantis i45 N is a dual-axis, gyro-stabilized, 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 with narrow-angle 32 mm and wide-angle 9.2 mm IR with 7.6x electronic zoom, allowing operators to capture high-resolution video at extended range. Designed for both superior night and low-light performance, the new imaging system also includes 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 Puma UAS operators to extend aircraft standoff distance for covert operations.

"Today's battlefield is dynamic and UAS operators increasingly rely on multiple payloads to successfully complete their

missions,” said Charles Dean, AeroVironment vice president for global business development and sales of UAS. “The new Mantis i45 N is a game changer during low-light or nighttime ISR operations, delivering increased situational awareness and advanced threat detection in any environment.”

Built on the trusted and battlefield proven Mantis i45, the enhanced night variant Mantis i45 N maintains the same housing form-factor, allowing for a quick and simple change-out of payloads between day and night operations. Plug and play operational, no software updates are required for Puma UAS avionics or ground control stations for legacy system compatibility. Mantis i45 N is also natively compatible with AeroVironment’s Crysalis next-generation ground control solution.