

Mantis i45



AeroVironment's Mantis i45 gimbal delivers lightweight, compact and powerful visual awareness to the Puma AE™ small unmanned aircraft system (UAS) operator and supports an advanced suite of sensors, including ultra high-resolution EO and IR imagers. The Mantis i45 gimbal is backward compatible, fully waterproof and provides nighttime and low light capabilities ranging from Near-Infrared (NIR) to Long Wave Infrared (LWIR) imagery. During flight operations, the i45 gimbal provides full lower hemisphere coverage, continuous pan and is packaged to provide reliable operation in extreme environments.

SPECIFICATIONS

ELECTRO/OPTICAL	
-Resolution	Dual 15 megapixel color
-FOV	56 – 1.2 degrees
-Zoom	50x (lossless)
LOW LIGHT	
-Resolution	1.2 megapixel
-FOV	17 – 8.4 degrees
THERMAL IR	
-Resolution	640 x 512 pixels
-FOV	32 degrees
LASER ILLUMINATOR	
-Beam Power	650 mW
-Wavelength	860 nm
VIDEO	Standard definition streaming, optional high definition on board
WEIGHT	850 grams
BALL DIAMETER	4.2 inches
OPERATING TEMPERATURE	-20C to 50C
WEATHERIZATION	All Environment (waterproof)
PAN	360 rotation, continuous
TILT	+30 to -90 degrees



KEY FEATURES

- Daylight, low light and thermal imaging
- Dual 15 megapixel high resolution color cameras (wide and narrow views)
- LWIR camera
- 1.2 MP low light camera
- High-power 860 nm laser illuminator
- Optional on-board storage of HD video and high resolution stills
- HD video over Ethernet
- Dedicated on-board image processor
- All environment, ruggedized, waterproof design
- Backward compatible with Puma AE UAS