



Mantis™ i23 is an imaging payload system designed for Raven™ small unmanned aircraft systems (SUAS). The gimbaled payload system features a 5 MP daylight camera and 640×512 px IR thermal camera with four zoom levels. The payload maintains a lightweight and compact design at 3.1 inches ball-in and weighs only 13.6 oz (385 g). Ideal for low-altitude intelligence, surveillance and reconnaissance (ISR), the payload uses two levels of stabilization—electro-mechanical (gyro) and electronic (image stabilization), allowing operators to keep the target in sight regardless of the aircraft attitude or flight path.

SPECIFICATIONS

ELECTRO/OPTICAL (EO)	Resolution: 5 MP HFOV: 31.5° to 6.7° Zoom: 4 levels; 4.8x
THERMAL IR	Resolution: 640x512 px HFOV: 31.5° to 14.1° Zoom: 3 levels; 2.3x
LASER ILLUMINATOR	Yes
VIDEO	SD @30 fps
WEIGHT	13.6 oz (385 g)
BALL DIAMETER	3.1 in (7.9 cm)
OPERATING TEMPERATURE	-29 to 49 °C
WEATHERIZATION	Water resistant
PAN	360° rotation, continuous
TILT	-95° to +10°

KEY FEATURES

- » *EO & LWIR sensors for high-performance daylight & thermal imaging*
- » *Integrated laser illuminator for use with NVGs*
- » *Lightweight & compact design*
- » *Field swappable for quick & simple change-out*



Wide-view from EO Camera



Downlink imagery from IR camera

