

MANTIS™ i23 D

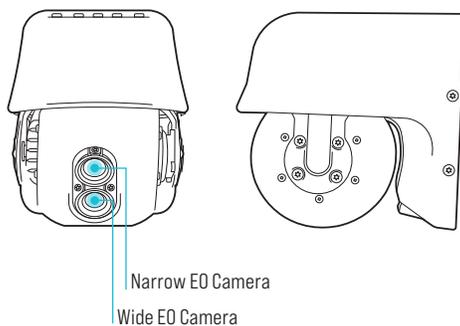
Mantis™ i23 D is a compact, high-performance daytime imaging payload system for intelligence, surveillance and reconnaissance (ISR) operations at an extended range. At just 13.4 ounces (380 grams), the ultralight imaging system features dual 18 MP EO sensors for superior image quality and class-leading 24x digital zoom, providing unmatched daytime surveillance performance in a 3-inch payload. Through its advanced suite of sensors, extended zoom capability, onboard processing and digital stabilization, the Mantis i23 D payload allows operators to extend aircraft standoff distance without compromising image quality.

SPECIFICATIONS

ELECTRO-OPTICAL (EO)	Resolution: Dual 18 MP color HFOV: 53.1° to 2.4° Zoom: 6 levels; 24x
VIDEO	SD @ 30 fps
WEIGHT	13.4 oz (380 g)
BALL DIAMETER	3.15 in (8 cm)
OPERATING TEMPERATURE	-29 to 50 °C
WEATHERIZATION	Water resistant
PAN	360° rotation, continuous
TILT	-90° to +30°
PROCESSING	Onboard; electronic image stabilization

KEY FEATURES

- » *Dual EO sensors & 24x digital zoom for class-leading daytime performance*
- » *Greater standoff distance without compromising image quality*
- » *Lightweight & compact design*
- » *No software updates to avionics or ground control systems required*
- » *MIL-STD-810H certified—water & dust resistant for maximum mission flexibility*



Wide-view: 58.3° HFOV



Narrow-view: 24x zoom

MANTIS™ i23

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

