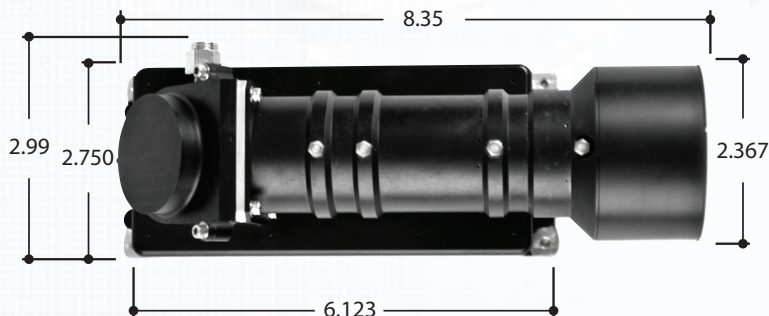




DIGITAL IMAGING SPACE CAMERA

SDL's Digital Imaging Space Camera (DISC) is a one mega-pixel visible, monochromatic imager that uses less than 1.5 watts of power. DISC includes highly flexible image control, including such features as windowing, adjustable frame rates, and adjustable integration times. It is designed entirely of radiation-hardened components and suitable for LEO, MEO, and GEO orbits. DISC is based on a radiation-hardened CMOS image sensor with a wide, adjustable dynamic range, fixed-pattern noise (FPN) correction and dual-slope integration.

Also available to interface with DISC is SDL's Modular Avionics System (MODAS). Weighing approximately 1.2 kg, MODAS is a standalone power conditioning and processing system in a 3.2" x 3.9" x 6.8" envelope. MODAS will acquire DISC images and process compression, centroiding, and tracking algorithms. Multiple processor options available depending on system requirements.



SPECIFICATIONS

MASS: 0.7 kg (as shown)

SIZE: 2.75" x 3.36" x 8.35" (as shown)

POWER: <1.5 watts (regulated +12VDC and +5VDC)

ENVIRONMENT: -40° to +85° C

100 Krad(si) @ component level

100 mil electronics housing thickness

HIGHLY FLEXIBLE

IMAGE CONTROL: 65,000+ available integration times

65,000+ available frame rates

IMAGE REDUCTION OPTIONS:

* window size from 1 pixel up to full frame

* ep-wise pixel decimation in any direction

Serialized LVDS data @ 24 MHz

INTERFACE: (Camera Link compatible for ground-based testing)

Full duplex serial communications

link for command and monitor

MAX FRAME RATES: 1024 x 1024 : 10.43 fps

512 x 512 : 37.63 fps

(1 ms integration time)

256 x 256 : 120.05 fps

64 x 64 : 553.93 fps



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