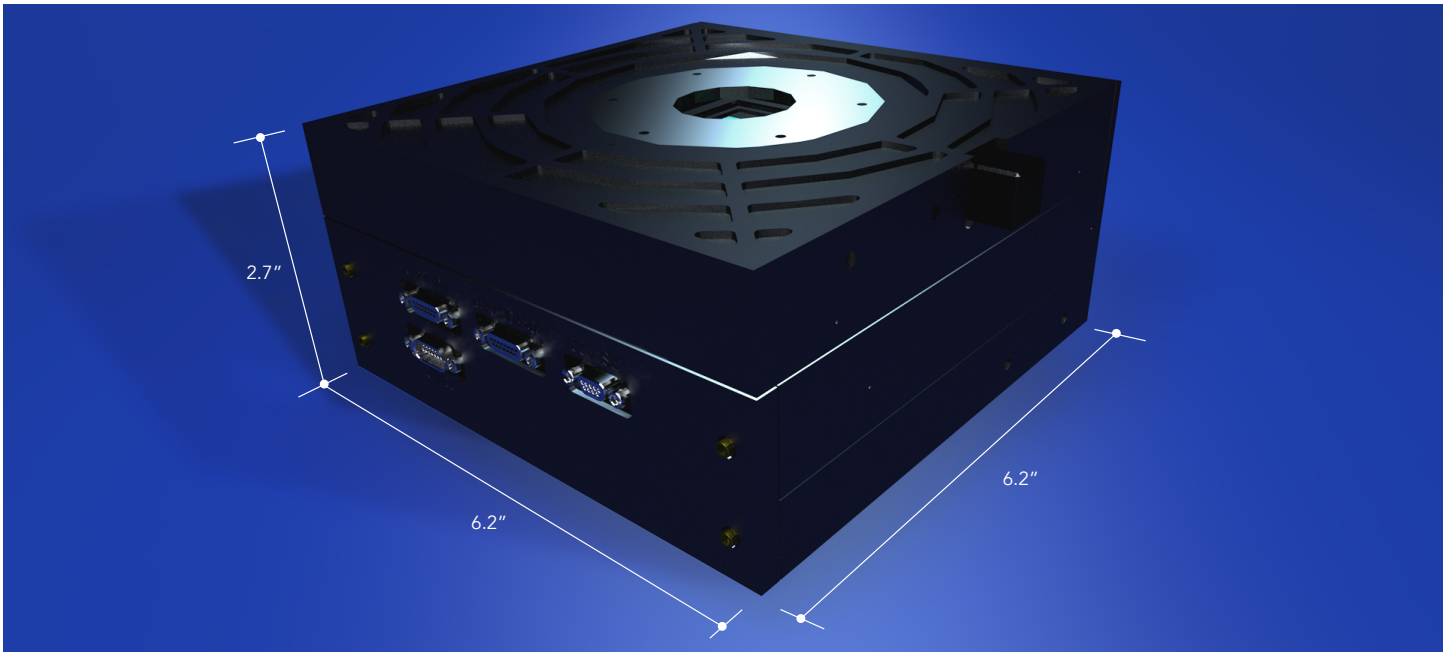
DISC 5.5+

Digital Imaging Space Camera



DISC 5.5+ configuration

The Space Dynamics Laboratory's (SDL) Digital Imaging Space Camera (DISC) 5.5+ is a CMOS radiation-tolerant visible camera. DISC 5.5+ features highly flexible on-orbit image control, including windowing, binning, adjustable frame rates, and adjustable integration times. Additional features include up to 20 (10 top/10 bottom) regions of interest (ROI), onboard dark frame subtraction, and onboard frame stacking.

The BAE Systems® CIS2521F sensor features very low read noise (<1.4e-) and dark current (<6.5 e-/pix/s) at 20°C when using rolling shutter.

DISC 5.5+ is designed entirely of radiation-tolerant components and is suitable for LEO, MEO, and GEO orbits.

SPECIFICATIONS	
MASS	~4 kg
SIZE	6.2″ x 2.7″ x 6.2″
RESOLUTION	2560 x 2160
READ NOISE @ 20°C	<1.4e-
DARK CURRENT @ 20°C	<6.5 e-/pix/s
SHUTTER MODE	Rolling
FRAME RATE	Up to 20 FPS
MEMORY	12 GB, including EDAC
POWER	6–13 W
ENVIRONMENT	Operational: -40° to +40°C 30 krad(Si) with 100 mil housing Survivability: -40° to +85°C
INTERFACES	Data: 21:3 SERDES (Camera Link-like) Telemetry & Control: RS-422

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