

2048 x 2048 Imaging Array

24 µm Pixel Size

The Cobalt DC4320 offers an outstanding combination of high quantum efficiency, large dynamic range, deep full well capacity, excellent cooling and large imaging area.

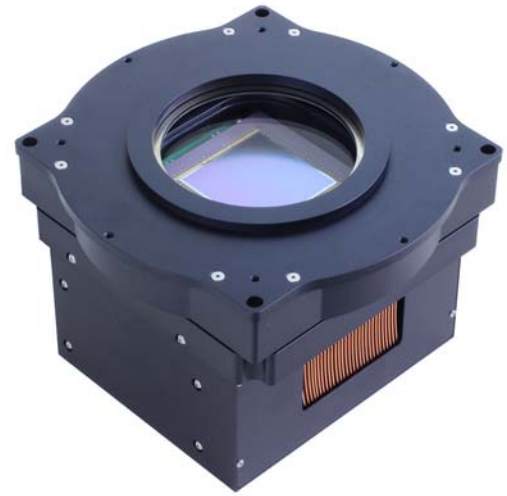
Multiple mounting options:

- M6 through-holes (4X) • M4 bolt circle (8X)

Optical Correction System (OCS): Every Cobalt camera includes our 4-point sensor tilt control system. OCS compensates for sensor packaging tolerances and/or optical path tilt, ensuring that your optics are never tilted relative to the camera's sensor.

Adjustment range: 1 degree tip/tilt

Sensor orthogonality: +/- 0.1mm as shipped



Also available with 90mm shutter

Applications

Digital Radiography
Astronomy

Satellite Imaging
Low Light Level Imaging

Features	Benefits
1.2 MHz and 3 MHz per channel digitization	Fast Image capture with full 16-bit resolution
2048 x 2048 Array with 24 µm pixels	Resolves fine detail
Flexible binning and readout	Increases frame rate
Thermoelectric Cooling to 65°C Below Ambient	Excellent low-noise imaging
Excellent quantum efficiency (72% peak)	High sensitivity for fast image acquisition
Medium format lens adapter available	No vignetting
Acquisition software included	Ease of integration with open source SDK
USB 2.0 interface	Industry standard connectivity; fast data transfer



Engineering Excellence

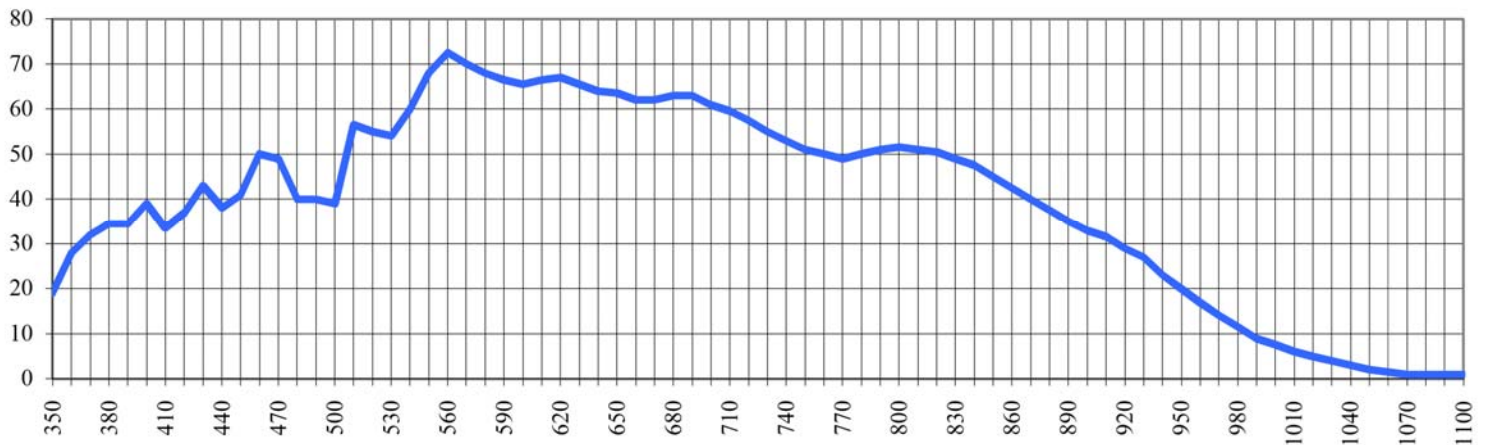
Because Your Image Depends On It.

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Sensor Specifications (from manufacturer)

Sensor	On Semi KAF-4320	Sensor Size	49.1 X 49.1 mm	Megapixels	4.3
Pixels	2048 x 2048	Sensor Diagonal	69.4 mm	Video Size (inch)	4.3
Pixel Size	24 µm	CCD Variants			
Full Well Capacity	500000 electrons	CCD Grades	1, 2		
Color Options	Monochrome	Anti-Blooming	None		
CCD Type	Front Illuminated				

Sensor Quantum Efficiency (Absolute)



Camera Performance

Typical Maximum Cooling	65°C below ambient	Dark Current (typical)	<0.2 electrons/pixel/sec at -45°C
Temperature Stability	0.1 C	Cooling Method	Air (Optional liquid)
Digitization Speed	1.2 MHz and 3 MHz per channel		
Typical System Noise	<25 e- RMS @ 3 MHz per channel	Non-Linearity	<1%
Housing Dimensions	6.2 X 6.2 X 4.86 inches (15.7 X 15.7 X 12.3 cm)	Weight	8 lbs (3.6 kg)
Focal Plane to Face Plate	20 mm (with no shutter)		
Lens Mounts	Medium Format Recommended		
Interface	USB 2.0	Camera Channels	4
Available Shutters	Optional 90 mm		
External Triggering	Standard		
Environment	-30°C to 45°C 10% - 90% Relative Humidity		
Power	TBD		



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