

CHEETAH

INTELLIGENT CAMERA SERIES

SDI-C2010 CMOS 2 MP



Imperx: SDI-C2010

The SDI-C2010 incorporates the Sony IMX-265 CMOS image sensor in a 1/2" optical format delivering up to 1080p resolution at 60 frames per second with selectable 3G-SDI (SMPTE 424-1) or HD-SDI (SMPTE 292M) output. The Imperx Cheetah C2010 provides excellent sensitivity and amazing dynamic range, making it suitable for a broad range of diverse and demanding applications, but "one size doesn't fit all," and Imperx can help optimize the camera to your exact requirements.

Specifications

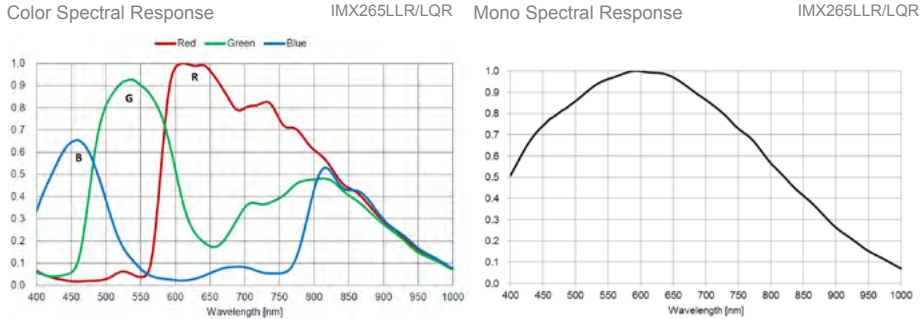
Feature	Description	Feature	Description
Video Output	HD-SDI (SMPTE 292M), 3G-SDI (SMPTE-424-1)	Power Consumption	3.6W
Resolution	1920 (H) x 1080 (V)	Camera Current	Typical: 300mA/12V
Sensor	IMX-265 CMOS	Size - Width/Height/Length	37mm (W), 37mm (H), 48.6mm (L)
Sensor Format	1/2", 7.7mm diagonal	Weight	91.8g
Pixel Size	3.45 microns square	Vibration, Shock	TBD
Lens Mount	C-Mount	Environmental	-40°C to +85°C Operating, -50°C to +90°C Storage
Frame Rates	24p, 25p, 30p, 50p, 60p	Humidity	10% to 90% non-condensing
Digitization	12-bit	MTBF	>406,000 hours @ 40°C (Telcordia SR-332)
Output Format	10-bit, 4:2:2 (YCrCb)	Military Standard	MIL-STD-810F
Dynamic Range	71dB	Regulatory	FCC Part 15 Class A, CE, RoHS
Gain Control	Manual, Automatic: 0 - 48dB, 480 steps		
Black Level Offset	0-511		
Shutter	Global Shutter		
Exposure Range	29 µs to 16.1 ms / 60 fps		
Exposure Control	Manual, Automatic		
Inputs	External tri-level sync		
Outputs	Strobe, 2 nd strobe (optional), P-Iris (optional)		
Camera Control	RS-232		
Image Overlay	Optical center, programmable H & V lines		
Image Enhancement	Threshold, contrast enhancement, knee correction		
LUT (Look Up Tables)	4 user LUTs, 8 Gamma LUTs, and 8 Black Gamma LUTs		
Minimum Illumination	0.2 Lux, F1.2		
Test Image	HD SMPTE color bars, static/moving ramp		
White Balance	Auto, once, manual, 3200k, 5600k		
P-Iris Control (optional)	Auto, programmable		
Supply Voltage Range	12VDC (8V-30V), 1.5 A inrush		

Imperx: SDI-C2010 Applications

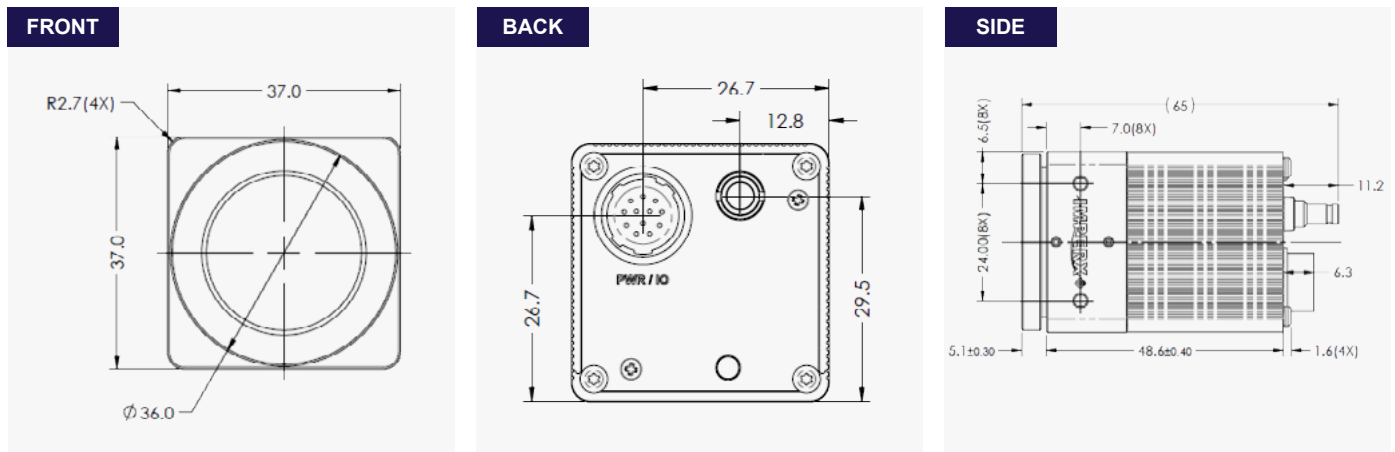
The C2010 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

Aerospace • Satellites • Surveillance • Military and Non-Military Ground Vehicles • Ball Grid Array • Printed Circuit Board Inspection • Motion Analysis • Broadcast Television • Telepresence • Unmanned Aerial Vehicles • Machine Vision • Reconnaissance • Aerospace • Intelligent Traffic Systems • Aerial Imaging • Open Road Tolling Systems • Situational Awareness

Relative Quantum Efficiency



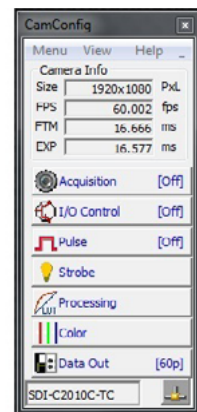
Dimensions



Ordering Information

Interface Available 3G-SDI / HD-SDI Selectable (SMPTE 425-1/292 Selectable)	Lens Mounts C-Mount
Sensor Types available Color Monochrome	Accessories (Sold separately) PS12V06A - Power Supply w/1 input and 1 output

Software/Drivers/Interface



Hirose Connectors

Power and I/O Interface

1. 12V DC Return	7. Strobe1 (TTL)
2. +12 VDC	8. Tri-Level Sync In (TTL)
3. RS232 RX	9. GPIO_2A (LVTTTL)
4. RS232 TX	10. TLS/OUT1 RTN
5. GPIO_1B (LVTTTL)	11. GPIO_2B (LVTTTL)
6. RS232 RTN	12. GPIO_1A (LVTTTL)



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