Imperx: **SDI-C2010**

The SDI-C2010 incorporates the Sony IMX-265 CMOS image sensor in a 1/1.8” 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**
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Video Output | HD-SDI (SMPTE 292M), 3G-SDI (SMPTE-424-1)
Resolution | 1920 (H) x 1080 (V)
Sensor | IMX-265 CMOS
Sensor Format | 1/1.8”, 7.7mm diagonal
Pixel Size | 3.45 microns square
Lens Mount | C-Mount
Frame Rates | 23.98p, 24p, 25p, 29.97p, 30p, 50p, 59.94p, 60p
Digitization | 12-bit
Output Format | 10-bit, 4:2:2 (YCrCb)
Dynamic Range | 71dB
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, 2nd 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 (6V-30V), 1.5 A inrush

Power Consumption | 3.6W
Camera Current | Typical: 300mA/12V
Size - Width/Height/Length | 37mm (W), 37mm (H), 48.6mm (L)
Weight | 91.8g
Vibration, Shock | TBD
Environmental | 1.5G: -40°C to +75°C
| 3.0G: -30°C to +75°C
| Storage: -40°C to +85°C
Humidity | 10% to 90% non-condensing
MTBF | >406,000 hours @ 40°C (Telcordia SR-332)
Military Standard | MIL-STD-810F
Regulatory | FCC Part 15 Class A, CE, RoHS
**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.


**Relative Quantum Efficiency**

![Relative Quantum Efficiency Graph]

**Dimensions**

![Dimensions Diagram]

**Ordering Information**

**Interface Available**

- 3G-SDI / HD-SDI Selectable (SMPTE 425-1/292 Selectable)

**Sensor Types available**

- Color
- Monochrome

**Accessories (Sold separately)**

- PS12V06A - Power Supply w/1 input and 1 output

**Hirose Connectors**

**Power and I/O Interface**

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

**Software/Drivers/Interface**

![Software/Drivers/Interface Diagram]