

❖ AD-o80 CL

2 CCD Multi-spectral camera



PRELIMINARY

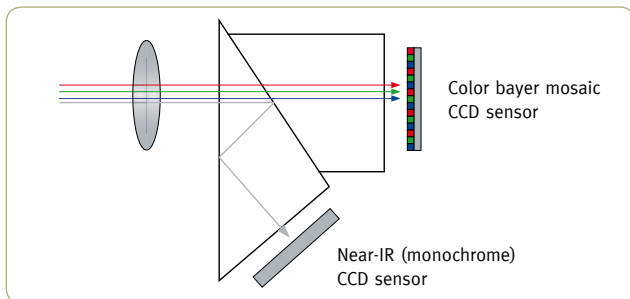
- **Multi-spectral 2-channel CCD camera**
- **Advanced series 2 x 1/3" progressive scan camera**
- **Simultaneously captures Visible and Near-IR through the same optical path**
- **1024 (h) x 768 (v) active pixels per channel**
- **4.65 μm square pixels**
- **30 frames/second with full resolution**
- **Up to 86 frames/second with partial scan**
- **Programmable exposure from 21 μs to 33ms**
- **Pre-select, Puls width and Reset-continuous trigger modes**
- **LVAL Synchronous/-asynchronous operation (auto-detect)**
- **Auto-iris lens video output allows a wider range of light**
- **RGB 24-bit or Raw Bayer 10 or 8-bit output for visible**
- **10 or 8-bit output for Near-IR**
- **Setup by Windows NT/2000/XP via serial communication**

Specifications for AD-o8o CL

PRELIMINARY

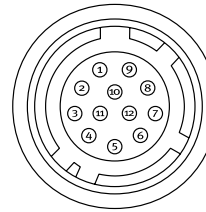
Specifications		AD-o8o CL
Sensor	Visible Near-IR	1/3" color Bayer mosaic IT CCD 1/3" Monochrome interline transfer CCD
Pixel Clock		33.75 MHz
Frame rate full frame		30 frames/sec.
Active area		5.8 (h) x 4.92 (v) mm
Cell size		4.65 (h) x 4.65 (v) μm
Active pixels		1024 (h) x 768 (v)
Color visible		Raw Bayer output, host-based interpolation
Read-out modes	Full 1/2 partial scan 1/4 partial scan 1/8 partial scan	1024 (h) x 768 (v) 30 fps 1024 (h) x 384 (v) 48 fps 1024 (h) x 192 (v) 68 fps 1024 (h) x 96 (v) 86 fps
	Vertical binning	[as applicable]
Sensitivity	visible	TBD
Sensitivity	Near-IR	
S/N ratio		>54dB (Gain 0 dB, shutter off)
Video output	Visible Near-IR	24 bit 8 or 10 bit
Auto-iris lens video		0.7 Vp-p
Gain		-3dB to +12dB
Synchronization		Int. X-tal or ext. trigger
Inputs	Camera Link TTL	Ext. trigger, LVDS, (CC 1) Ext. Trigger 4V ±2V
Outputs	Camera Link TTL	Clk., FVAL, LVAL, Data, EEN XEEN
Trigger modes		EPS (Edge Pre Select), PWC (Pulse Width Control), RCT (Reset Continuous Trigger)
Electronic shutter	Pre-set shutter Programmable exposure Pulse Width Control	TBD
Control interface		Camera Link
Functions controlled by serial communication		Gain, shutter, trigger modes, read-out modes, bit depth
Indicators on rear panel		LED for power and trigger input
Operating Temperature		-5°C to +45°C
Humidity (operation)		20 - 90% non-condensing
Storage temp./humidity		-25°C to +60°C / 20 to 90%
Vibration		3 G (15Hz to 200 Hz XYZ)
Shock		50G
Regulations		CE (EN 61000-6-2, EN-61000-6-3), FCC part 15 class B, RoHS/WEEE
Power		12V DC ± 10% 4 W
Lens mount		C-mount
Dimensions (H x W x L)		55(H) x 55(W) x 80(D) mm
Weight		400 g

2CCD Prism



Connector pin-out

DC In / Trigger

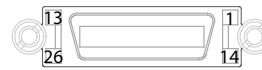


HIROSE HR10A-10R-12PB-01

- Pin 1 Ground
- 2 +12V DC
- 3 Ground
- 4 Auto Iris lens video output
- 5 Ground
- 6 XEEN 1 out
- 7 XEEN 2 out
- 8 Ground
- 9 Ground
- 10 Trigger 1 in
- 11 Trigger 1 in
- 12 Ground

Camera Link Interface

26 pin MDR connector 3M 10226-1A10JL

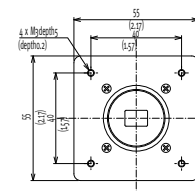


- | Pin | Signal | Function |
|-----|--------|-----------------|
| 1 | 14 | GND |
| 2 | 15 | +/-Tx0 |
| 3 | 16 | +/-Tx1 |
| 4 | 17 | +/-Tx2 |
| 5 | 18 | +/-Txclk |
| 6 | 19 | +/-Tx3 |
| 7 | 20 | SerTC+/SerTC- |
| 8 | 21 | SerTFG+/SerTFG- |
| 9 | 22 | CC1-/CC1+ |
| 10 | 23 | CC2-/CC2+ |
| 11 | 24 | CC3-/CC3+ |
| 12 | 25 | CC4-/CC4+ |
| 13 | 26 | GND |

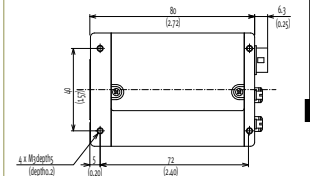
Camera Link base configuration.
*) In 12 pin Hirose or Camera Link

Dimensions

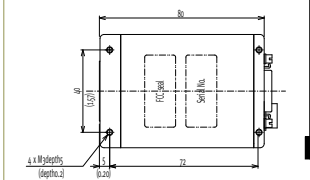
Front view



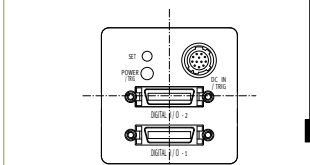
Side view



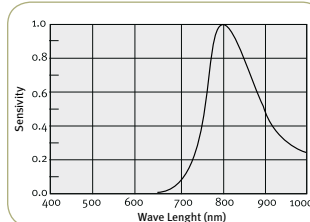
Bottom view



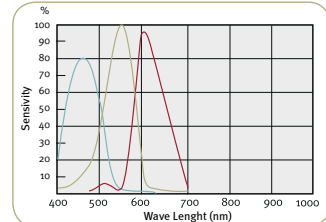
Rear view



NIR Response AD-o8o CL



Visible Response AD-o8o CL



Ordering Information

AD-o8oCL Digital 2CCD Progressive Scan Multi-Spectral Camera

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