

## ► 2 Megapixel 3-CCD Colour Camera

The 3-CCD colour camera AT-200 CL, a member of JAI's C3 Advanced series, is a unique prism-based 3-CCD camera, incorporating three 1/1.8" sensors that are mounted to a special dichroic prism. This design enables a single optical path to be split across the CCDs, while maintaining an alignment to within one-quarter pixel accuracy. Perfect resolution and light gathering for best image quality is guaranteed. At full resolution of 1628 x 1236 pixel, the camera captures 20 fps. Using partial scan or binning higher frame rates are possible.

The camera contains a wide range of image pre-processing functions such as programmable shutter and exposure modes. Perfect image quality and high colour fidelity is secured by the full 36-bit RGB colour output. Dual CameraLink interfaces allow to choose between 8, 10, or 12-bit output per channel using a CameraLink base or medium configuration.

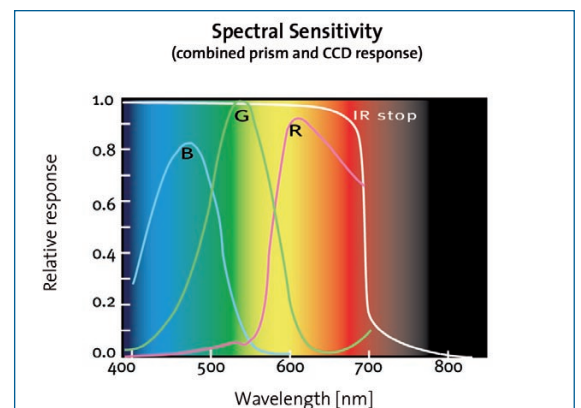


## ► Examples of possible applications

- Printing industry
- Electronics and semiconductor manufacturing
- Food inspection
- Biomedical screening/classification

## ► Technical highlights

- 3x 1/1.8" progressive scan CCD-sensors
- 1628 (H) x 1236 (V) effective pixels for each CCD (4.4  $\mu\text{m}$  square)
- Compact RGB prism for C-mount lenses
- Chromatic shading reduction
- 20 frames/s with full resolution, 79 frames/s with partial scan (1628x155), programmable
- 24-bit RGB output via single port CameraLink base configuration
- 30-bit or 36-bit output via dual port CameraLink medium configuration
- Linear matrix circuit with manual control or sRGB or Adobe RGB pre-sets
- Knee function available for knee-point and knee-slope settings
- Edge pre-select or pulse width control trigger modes
- Pre-set shutter from Off (1/20) to 1/51,000 in 12 steps
- Individually programmable shutter/exposure for R, G and B
- Manual, continuous, one-push auto, or pre-set white balance

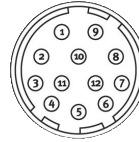




► Technical Data

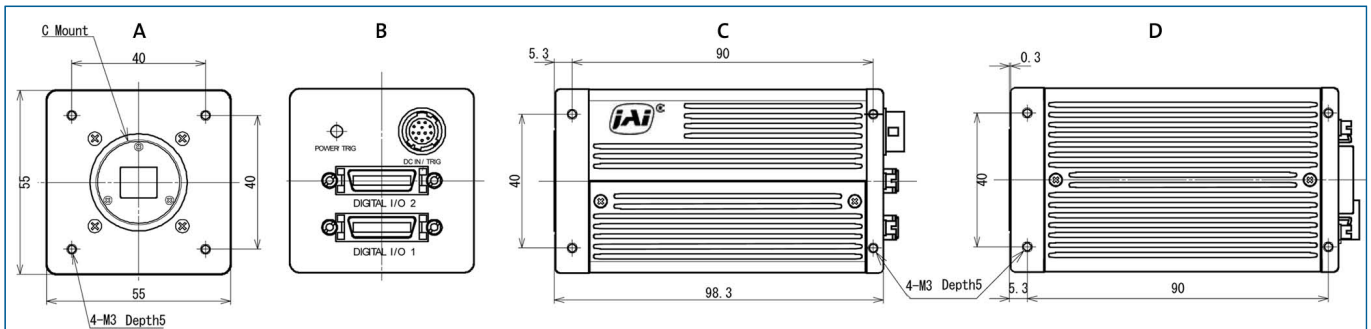
Specification	JAI AT-200 CL
Camera class	Area scan camera, Colour
Sensor class	1/1.8"-CCD, Non Interlaced (Progressive Scan)
Sensor type	Sony 3 x ICX274AL
Colour technology	RGB prism
Sensing area	7.16 x 5.43 (W x H in mm)
Resolution (effective)	1,628 x 1,236 (H x V)
Pixel size	4.4 x 4.4 (W x H in $\mu\text{m}$ )
Frame rate (max.)	20.31 Hz
Pixel clock (max.)	50 MHz
Shutter	1/60 - 1/51,000 s 11 steps
Sensitivity	1.00 lx (max. gain, 50% video)
S/N ratio	-3 to 12 dB (R +B: -6 to + 6dB)
Gain	50 dB (on green)
Output format	8 (single port), 10 or 12 bit (dual port) RGB
Trigger modes	Frame-Delay readout, Edge Pre-Select, Pulse Width Control, Reset Continuous
Digital interface	CameraLink-Base, CameraLink-Medium
Supply voltage	12 - 24 V
Power consumption	6.8 (12V) W
Connectors	CameraLink, Hirose (12 pins)
Features	Partial Scan, Binning, Knee function, Shading correction, White Balance, Look up tables
Dimensions	55 x 55 x 98.3 (W x H x L in mm)
Weight	320 g
Operating temperature	-5 - +45 °C
Humidity	20 - 80 % (non-condensing)
Shock resistance	50 G
Vibration stress	3 (15 Hz - 200 Hz in XYZ) G
Regulations	CE, FCC part 15 class B, RoHS

12 pin Hirose



- | Pin | Signal     |
|-----|------------|
| 1   | Ground     |
| 2   | +12 VDC    |
| 3   | Ground     |
| 4   | Iris Video |
| 5   | Ground     |
| 6   | NC         |
| 7   | NC         |
| 8   | Ground     |
| 9   | XEEN out   |
| 10  | Trigger in |
| 11  | NC         |
| 12  | Ground     |

► Dimensions



Front view (A), rear view (B), side view (C), bottom view (D), all dimensions in mm

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