

❖ AM-201 CL/AB-201 CL

2-megapixel Progressive Scan

 **Camera Suite**
Unlimited
Digital
Switchability



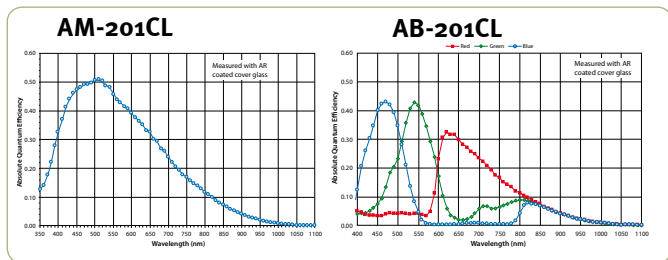
- 2-megapixel 2/3-inch progressive scan CCD
- 1920 (h) x 1080 (v) pixel resolution (HD format)
- 5.5 μ m x 5.5 μ m square pixels
- 64 fps at full resolution (32 fps for RGB output)
- Programmable exposure to 1/100,000 sec. (10 μ s)
- Manual or auto gain control from -3 dB to +24 dB (0 to +24 dB for color)
- User programmable partial scanning
- Vertical and horizontal binning (monochrome only)
- 256-point look-up table (LUT) for gamma control
- Pixel blemish and flat-field compensation
- Camera Link interface with 8, 10, or 12-bit monochrome/Bayer output or 8-bit RGB
- Supports C-mount lenses



Specifications for AM-201 CL/AB-201 CL

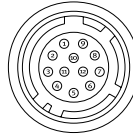
Specifications	AM-201 CL/AB-201 CL
Sensor	2/3" progressive scan CCD (KAI-02150)
Pixel Clock	40 MHz
Frame rate, full frame	64 frames/sec.
Active area	10.56 mm (h) x 5.94 mm (v), 12.12 mm diagonal
Cell size	5.5 μm (h) x 5.5 μm (v)
Active pixels	1920 (h) x 1080 (v)
Horizontal output freq.	34.6 KHz (1H = 28.875 μs, 80 MHz clock)
Read-out modes	Full 1920 (h) x 1080 (v) 64 fps In-camera interpolation 1920 (h) x 1080 (v) 32 fps (AB-201CL) Variable partial scan Any start line, any height, in 1L steps Binning (HxV) 1 x 2, 2 x 1, 2 x 2 (monochrome only)
Sensitivity (AM-201CL)	0.21 Lux (On sensor, max. gain, 50% video)
Sensitivity (AB-201CL)	0.42 Lux (On sensor, max. gain, 50% green)
S/N ratio	>57 dB. (0 dB gain)
Video signal output (80 MHz data clock)	Camera Link 8-bit/10-bit/12-bit (monochrome, Bayer) Camera Link 8-bit (RGB)
Auto-iris lens video	0.7Vp-p, with 0.3V horiz. sync
Gain	Monochrome Manual/automatic -3 dB to +24 dB Color Manual/automatic 0 dB to +24 dB
White balance (AB-201CL)	Manual or one-push auto (3200K to 9000K)
Gamma	0.45 to 1.0 or 256-point LUT
Synchronization	Internal
Inputs	Camera Link, TTL/75 Ω
Outputs	Camera Link LVAL, FVAL, DVAL, EEN TTL (Hirose 12-pin) XEEN
Trigger modes	Timed (EPS), trigger width (PWC), edge dump (RCT), PIV, sequence (up to 16X)
Electronic shutter	Timed/PWC exposure 10 μs to 2 sec in 1 μs steps Auto shutter 1/95 to 1/10,000 sec. Exposure sequence Up to 16 different settings
Pre-processing functions	Flat field compensation, pixel blemish compensation, 3 x 3 color interpolation (AB-201CL only)
Control interface	Camera Link serial communication
Operating temperature	-5° C to +50° C
Humidity (operation)	20 - 80% non-condensing
Storage temp./humidity	-25° C to 60° C / 20% - 80% non-condensing
Vibration	10G (20 Hz to 200 Hz XYZ)
Shock	70 G
Regulations	CE (EN 61000-6-2, EN 61000-6-3), FCC part 15 class B, RoHS/WEEE
Power	12V to 24V DC ± 10%. 7.8W typical (full frame @ 12V)
Lens mount	C-mount
Dimensions (H x W x L)	C-mount 55 mm x 55 mm x 69 mm
Weight	C-mount 280 g

Spectral Response



Connector pin-out

DC In / Trigger

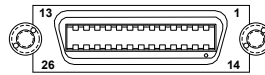


HIROSE HR10A-10R-12PB-01

- | | | |
|-----|----|-----------------------|
| Pin | 1 | Ground |
| | 2 | +12V - +24V DC In |
| | 3 | Ground |
| | 4 | Iris video Out |
| | 5 | Ground |
| | 6 | NC |
| | 7 | NC |
| | 8 | Ground |
| | 9 | XEEN Out (TTL) |
| | 10 | Ext. Trigger In (TTL) |
| | 11 | +12V - +24V DC In |
| | 12 | Ground |

Camera Link Interface

26 pin MDR connector
3M 10226-1A10L



Port 1 (24bit/30bit/36bit)
8bit (RGB)

Pin	Signal	Function	
1	14	GND	
2	15	-/+ TX0	CL Data out
3	16	-/+ TX1	CL Data out
4	17	-/+ TX2	CL Data out
5	18	-/+ TXclk	CL Clk
6	19	-/+ TX3	CL Data out
7	20	+/- RXD input	
8	21	-/+ TXD output	
9	22	-/+ Trig input*	
10	23	NC	
11	24	NC	
12	25	NC	
13	26	GND	

* Selectable via Camera Link or Hirose 12-pin by internal switch. Factory default is trigger via Camera Link.

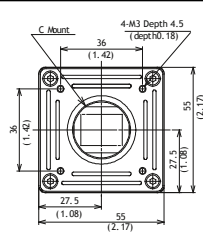
Ordering Information

- | | |
|------------|---|
| AM-201CL-C | Monochrome progressive scan camera with C-mount |
| AB-201CL-C | Color progressive scan camera with C-mount |

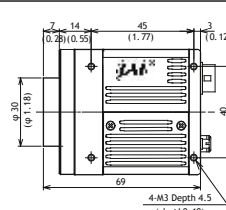
Dimensions

C-Mount

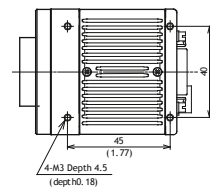
Front view



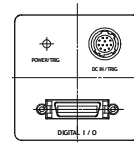
Side view



Bottom view



Rear view



Europe, Middle East & Africa
Phone +45 4457 8888
Fax +45 4491 3252

Asia Pacific
Phone +81 45 440 0154
Fax +81 45 440 0166

Americas
Phone (Toll-Free) 1 800 445 5444
Phone +1 408 383 0300

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