



❖ CV-L108 CL

3 CCD RGB Line Scan Camera



- 3 CCD line scan camera with Camera Link output
- Dichroic RGB beam splitter prism with 3 sensors
- 3 sensors with 512 pixels, 14 μm x 14 μm
- 7.168 mm scanning width
- Video output in Camera Link: 24 bit in base configuration. 30 bit in medium
- Scan rate up to 70922 lines per second at 40 MHz pixel clock
- Edge pre-select and pulse width trigger modes
- One-push auto white balance
- Two point flat-field and shading correction
- Knee and binning functions for extended dynamic
- Built-in diagnostics
- Lens adapter for Nikon F-mount or P-mount (M42x1)
- Short ASCII commands set-up via RS 232C or Camera Link
- Setup by Windows NT/2000/XP software



Specifications for CV-L108 CL

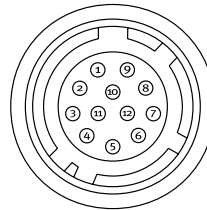
Specifications	CV-L108 CL
Scanning system	Line sensor with internal clock
Pixel clock	40.00 MHz
Sensor	3 line sensors mounted on RGB beam splitter prism
Sensor scanning width	7.168 mm
Cell size	14 (h) x 14 (v) μm
Active pixels	3 x 512 (h) 3 x 256 (h) with 2:1 binning
Sensitivity	Radiometric 7.5 mV/n/cm ² (Gain 0 dB, 600 μs exp., 100% video on G)
Sensitivity	Photometric 162 Lux (4000 K)
S/N ratio	58 dB on green with gain = -3 dB
Video output	24 bit in CL base configuration 30 bit in CL medium configuration
Gain	Master (G). -3 dB to +12 dB R and B. -6 dB to +6 dB
White balance	Manual, fixed or one-push Adjustable range 2800 K to 9000 K Fixed: 4000 K, 4600 K or 5600 K
Knee function	Individual RGB knee point and slope
Shading correction	Individual RGB flat or RB to G (One-push. Range -20%)
Flat-field correction	Two point pixel-to-pixel correction
Synchronization	Internal X-tal or external trigger
Trigger modes	No-shutter, shutter-select and pulse width control
Scan rate	Standard 14.1 μs (no shutter/internal trigger) Programmable 14.1 μs ~14.938ms (1024L), 25ns (internal trigger)
Programmable exposure	50 nsec. to 14.483 msec. in 25 ns increments
Functions controlled by RS 232C or CL	Trigger modes, scan rate, exposure time, gain/black level, shading correction, flat-field correction, white balance, knee-function, diagnostics
Diagnostics	Test pattern. (Color bar, gray pattern and white) LED for power
Lens mount	Nikon F-mount. (Standard) P-mount (M42x1) (Factory option)
Sensor alignment	Better than ± 0.1 pixel
Operating temperature	-5°C to +45°C
Humidity	20 – 80% non-condensing
Storage temp./humidity	-25°C to +60°C/20 – 80% non-condensing
Vibration	3G (20Hz to 200Hz, XYZ direction)
Shock	50G
Regulations	CE (EN61000-6-2 and EN61000-6-3) IEC61000-4-2 Conforming level 4 FCC Part15 Class B RoHS
Power	12V DC \pm 10%. 15W
Dimensions (H x W x D)	90 mm x 90 mm x 90 mm
Weight	830 g

Ordering Information

- CV-L108 CL 3 CCD RGB Line Scan Camera. F-mount.
CV-L108 CL 3 CCD RGB Line Scan Camera. P-mount (M42 x 1 thread).

Connection Pin-out

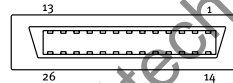
DC In / Trigger



HIROSE HR10A-10R-12PB-01

- Pin 1 Ground
2 +12V DC
3 Ground
4 Reserved
5 Ground
6 RXD RS 232C*
7 TXD RS 232C*
8 Ground
9 XEEN output
10 Trigger input (TTL)*
11 +12V DC
12 Ground

Camera Link Interface

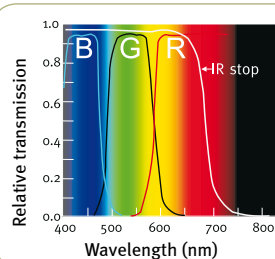


- | Pin | Signal | Function |
|-----|---------------------------------|-----------|
| 1 | 14 GND | |
| 2 | 15 X0-/X0+ | CL Data |
| 3 | 16 X1-/X1+ | CL Data |
| 4 | 17 X2-/X2+ | CL Data |
| 5 | 18 Xclk-/Xclk+ | CL Clk |
| 6 | 19 X3-/X3+ | CL Data |
| 7 | 20 SerTC+/SerTC- Serial in * | |
| 8 | 21 SerTFG-/SerTFG+ Serial out * | |
| 9 | 22 CC1-/CC1+ | Trigger * |
| 10 | 23 CC2-/CC2+ | Reserved |
| 11 | 24 CC3-/CC3+ | Not used |
| 12 | 25 CC4-/CC4+ | Not used |
| 13 | 26 GND | |

* In Camera Link or 12 pin Hirose

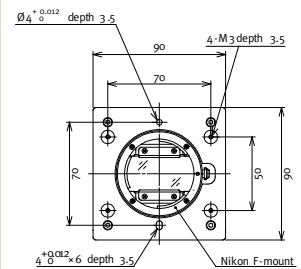
Note:
Camera Link base configuration shown.
For medium configuration refer to Camera Link specifications or operation manual.

Spectral Response

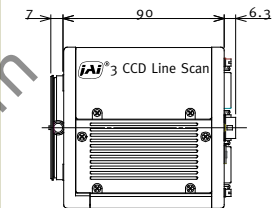


Dimensions

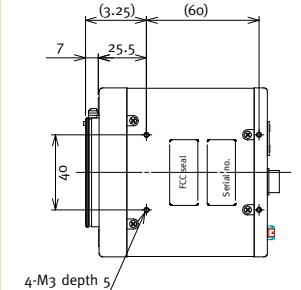
Front view



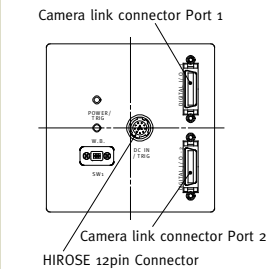
Side view



Bottom view



Rear view



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