*New Product*
*Preliminary*

BlueVision

# BVC8350LC 5M RGB CMOS Prism Area Scan Camera

**BVC8350LC is 3CMOS "RGB" area scan camera which equips our original designed "3 spectroscopic prism" and 1/ 1.8inch, 5megapixel global shutter CMOS area sensors to cover visible wavelength range for high quality image capturing. Full size readout is 33.85fps. By using binning and partial readout (ROI) mode, faster frame rate up to 231fps for VGA size is accomplished. C mount and Camera Link interface are featured. (GigE I/F is under development)**

## Key Features

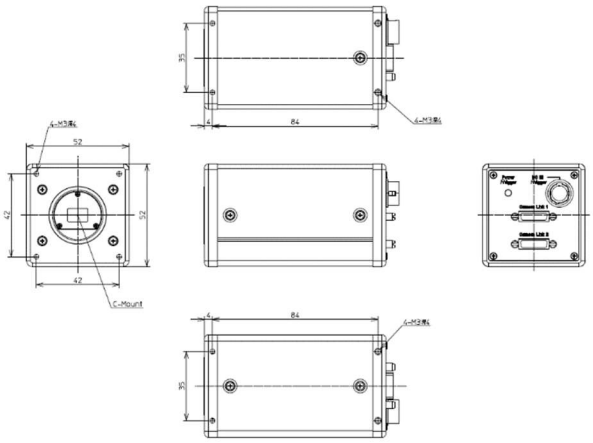
- Newly developed prism optics
- Fastest-class prismatic RGB camera at 5 megapixels
- 3 x 2448(H) x 2048(V) pixels, 2.74µm size, Global shutter CMOS are used
- Full resolution readout (33.85fps), binning mode (129fps)
- Small size and light weight, Compact enclosure
- Precise shutter setting of 1µsec unit (10µs ~ "frame rate-603µs")
- Gain adjustment from 0dB to 24dB
- Partial scan readout (ROI) is available for faster capturing
  (by using binning + ROI, Max. 231fps at VGA size readout)
- Shading compensation, Image enhancement and LUT
- Internal mode or external trigger mode
- Three electronic shutter modes
  (No Shutter mode, Shutter Select mode, Pulse width)
- Camera Link Base Configuration (8bit x 3), Medium Configuration (10/12bit x 3)
- BV camera control tool is available

## Specifications

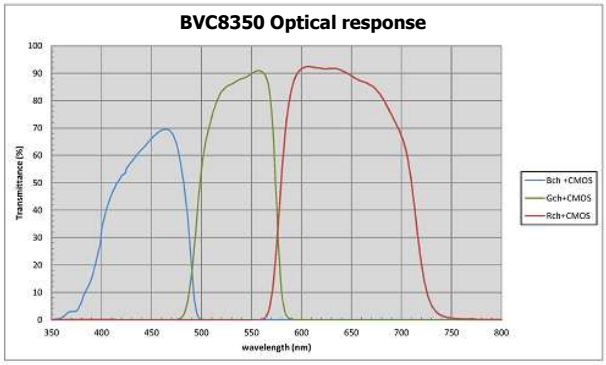
| Item & Function | BVC8350LC |
|---|---|
| Optical system | RGB dichroic prism |
| Image sensor | 1/1.8-inch Global shutter, 2.74μm, Progressive scan CMOS |
| Sensor effective pixel | 2448(H) x 2048(V), Pixel size 2.74μm square pixel |
| Synchronization | Internal or External trigger |
| Pixel clock cycle | 84MHz |
| Frame rate | Full pixels mode : 2448(H) x 1840(V) 33.85fps<br>Binning mode : 1224(H) x 920(V) 129fps<br>Binning+Partial mode : 640(H) x 480(V) 231fps |
| Image output | Camera Link Base config (8bit x 3) Medium config (10/12bit x3) |
| Standard sensitivity | Full readout: 2000lx (F8.0, Shutter 1/45s, Gain 0dB, G ch) |
| S/N | 8bit gradation (More than 48dB) |
| Partial scan (ROI) | Full readout: Width 8 ～ 2448 / Offset X: 8 ～ 2440<br>Height 8 ～ 1840 / Offset Y: 0 ～ 1832 |
| Electronic shutter | Range: 10μs～framerate-603μs, 1μsec unit |
| Gain | G: 0dB～+24dB, R/B: -6dB～+30dB |
| Auto white balance | One push, R/B gain adjustment range: -6dB～+30dB |
| Black level | R/G/B 0LSB ～ 127LSB (corresponds to 8bit) |
| LUT | Arbitrary setting by customer (LUT)<br>Gamma by control tool 1.0/0.6/0.45 |
| Image enhancement | 1)Edge enhancement 2)High Frequency MTF compensation<br>3)Edge enhancement & High Frequency MTF compensation |
| Trigger input | Camera Link LVDS (CC1) / GPIO Trigger in |
| Electronic shutter mode (Exposure Mode) | 1. No Shutter mode (Internal trigger)<br>2. Shutter Select mode (Internal/External trigger)<br>3. Pulse Width Control (External trigger) |
| Shading Compensation | ON/OFF function: RGB Flat shading compensation |
| Communication interface | Camera Link EIA644<br>Baud rate (bps, selectable) 115200/38400/19200/9600 |
| Lens mount | C mount |
| IR cut filter | Not built-in (※1) |
| Power supply | DCIN（Hirose12pin）or PoCL |
| Input voltage / Current consumption | DC 10V～26.4V, Typical 0.4A / Max. 0.5A (at DC12V input), PoCL Compatible |
| Operating temperature / humidity | -5℃ ～ +45℃ / 20%～80% (non-condensing) |
| Storage temperature / humidity | -25℃ ～ +60℃ / 20%～80% (non-condensing) |
| Dimensions (W x H x D) | 52 x 52 x 92 mm (excluding protrusion) |
| Weight | 295g |

(※1) As this camera is designed based on LED illumination, if Halogen lamp or etc. are used, it is recommended to use IR cut filter.

## Dimensions



## Optical Response




*Specifications are subject to change without prior notice.*

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