



BV-C8321 3 Sensor RGB CMOS Video Camera

BV-C8321 is a compact sized 3CMOS “RGB” area scan camera which is equipped with our original designed “3 spectroscopic prism” and 1/ 2.9 inch, 1.58M pixels global shutter CMOS area sensors to cover visible wavelength range for high quality image capturing. Also, BV-C8321 is smaller, lighter than the current model of BV-C8320 (40% compact in capacity, 20% light in weight), faster frame rate up to 51fps (Full size readout), 226fps for VGA size. C mount and Camera Link interface are featured. (GigE is scheduled)



Key Features

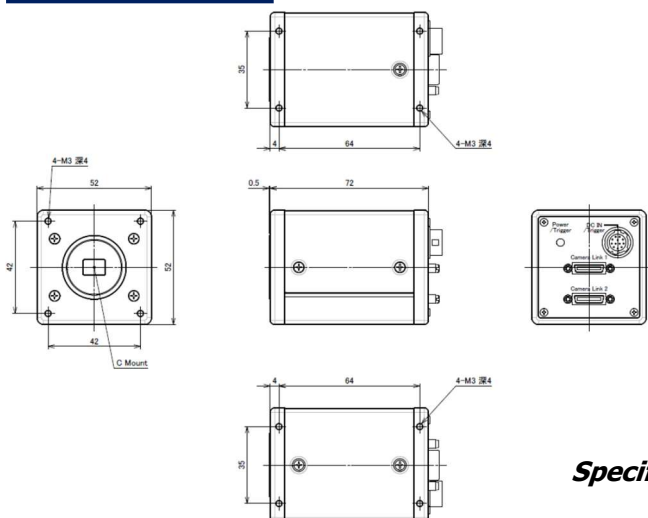
- ◆ Newly developed 1/3-inch prism optics
- ◆ 3×1440(H)×1080(V) pixels, 3.45μm size, Global shutter CMOS are used
- ◆ Full resolution readout (51fps), binning mode (226fps)
- ◆ Small size (40% smaller) and light weight (20% lighter) vs BV-C8320
- ◆ Precise shutter setting of 1μsec unit (10μs ~ “frame rate-603μs”)
- ◆ Gain adjustment from 0dB to 24dB
- ◆ Partial scan readout (ROI) is available for faster capturing (By using binning + ROI, Max. 226fps at VGA size readout)
- ◆ Shading compensation, Image enhancement and LUT
- ◆ Internal mode or external trigger mode
- ◆ Three operation modes (No Shutter mode, Shutter Select mode, Pulse width)
- ◆ Camera Link Base Configuration (8bit ×3), Medium Configuration (10/12bit ×3)
- ◆ BV camera control tool is available

Specifications

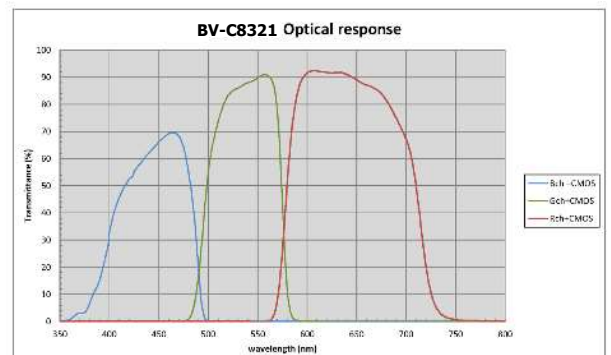
Item & Function	BV-C8321
Optical system	1/3-inch RGB dichroic prism
Image sensor	1/2.9-inch Global shutter, 3.45 μ m, Progressive scan CMOS
Effective output image pixel	1440(H) x 1080(V), Pixel size 3.45 μ m square pixel
Synchronization	Internal or External trigger
Pixel clock cycle	84MHz
Frame rate	Full pixels readout: 1440(H) x 1080(V) 51fps~1fps VGA mode: 640(H) x 480(V) 226fps
Image output	Camera Link Base config (8bit x 3) Medium config (10/12bit x3)
Standard illumination	Full readout: 2000lx (F8.0, Shutter 1/45s, Gain 0dB, G ch) VGA mode: 1000lx (F8.0, Shutter 1/45s, Gain 0dB G ch)
S/N	8bit gradation (More than 48dB)
Partial scan (ROI)	Full readout: Height 8 ~ 1080 / Offset Y: 0 ~ 1072 VGA mode: Height 8 ~ 480 / Offset Y: 0 ~ 472
Electronic shutter	Range: 10 μ s~framerate-603 μ s, 1 μ sec unit
Gain	R/G/B 0dB ~ +24dB
Auto white balance	One push, R/B gain adjustment range: -6dB ~ +12dB
Black level	R/G/B 0LSB ~ 31LSB
LUT	Arbitrary setting by customer (LUT) Gamma by control tool 1.0/0.6/0.45
Image enhancement	1)Edge enhancement 2)High Frequency MTF compensation 3)Edge enhancement & High Frequency MTF compensation
Trigger input	Camera Link LVDS (CC1) DCIN/Trigger
Operation mode (Exposure Mode)	1. No Shutter mode (Internal trigger) 2. Shutter Select mode (Internal/External trigger) 3. Pulse Width Control (External trigger)
Shading Compensation	ON/OFF function: RGB Flat shading compensation
Communication interface	Camera Link EIA644, Baud rate 115200bps
Lens mount	C mount
IR cut filter	Not built-in (※1)
Input voltage / Current consumption	DC 10V~26.4V, Typical 0.4A / Max. 0.5A (at DC12V input)
Operating temperature / humidity	-5 $^{\circ}$ C ~ +45 $^{\circ}$ C / 20%~80% (non-condensing)
Storage temperature / humidity	-25 $^{\circ}$ C ~ +60 $^{\circ}$ C / 20%~80% (non-condensing)
Dimensions (W x H x D)	52 x 52 x 72 mm (excluding protrusion)
Weight	270g

(※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

BlueVision Co., Ltd.

3-17-2 Shin-Yokohama, Kohoku-ku
Yokohama, Kanagawa 222-0033 JAPAN
TEL: +81-(0)45-471-4595 / FAX: +81-(0)45-471-4598
URL: <https://www.bluevision.jp>
Contact: sales@bluevision.jp

