

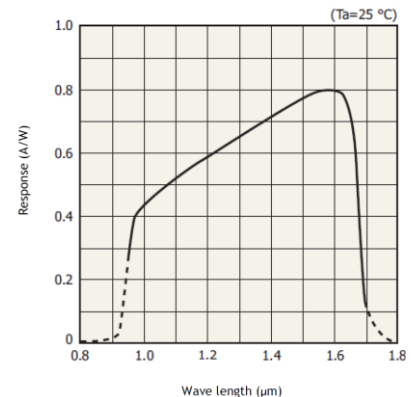


## BV-C2903 SWIR (Short Wave Infrared) QVGA Camera

BV-C2903 is SWIR (Short Wave Infrared) camera using one InGaAs QVGA sensor having the sensitivity from 950nm to 1700nm.



The used sensor is QVGA resolution, 20 micron pixel size and has the sensitivity from 950nm to 1700nm. The interface is Camera Link or Gigabit Ethernet (1000BASE-T). Lens mount is conventional C mount and lenses of more than 2/3-inch format should be used. Bluevision SWIR series lenses, 20mm, 24mm, 28mm, 35mm, 50mm and 105mm C mount type are available.



Spectral response

Specifications	BV-C2903-CL	BV-C2903-GE
Image sensor	2 step Peltier cooling InGaAs sensor x 1 Effective pixel: 320(H) x 256(V), Pixel size: 20μm x 20μm Effective image size: 6.4 mm x 5.12 mm	
Wave length	950nm ~1700nm	
Conversion efficiency	1μV/e-	
Synchronization	Internal / External trigger	
Pixel clock interval	25MHz	
Frame rate	Exposure time =1 clock (1μsec): 226 fps (maximum)	
S/N	55dB	
Video output	8/10/12/14-bit	
Electronic shutter	Global shutter system	
Gain	0dB ~ +12dB	
Black level	0LSB ~ 127LSB (at 10-bit output)	
Blemish compensation	Built in circuit	
Shading compensation	Flat shading compensation ON/OFF	
PRNU	Compensate non uniformity of luminance level between pixels	
DSNU	Compensate non uniformity of dark level between pixels	
Communication interface	Camera Link (Base configuration)	Gigabit Ethernet (1000BASE-T) SDK-TransFlyer(Aval Data) is included
Lens mount	C mount (Applicable C mount is 2/3 inch type or larger)	
Regulation	RoHS, CE	
Power	DC +12V ± V, TBD	
Operation Temperature/humidity	0°C to +45°C/ 20 to 80% (Non-condensing)	
Storage Temperature/Humidity	-15°C to +65°C/ 20 to 80% (Non-condensing)	
Dimensions (WxHxD)	58(W) x 58(H) x 95(D) mm (excluding protrusion)	
Weight	570 g	560 g

- Specifications are subject to change without prior notice
- This product is in the scope of Export Trade Control Order and required Export license.
- This product is developed jointly with Aval Data.

## Optional Unit

### ■ BVA-AC06P AC Power adaptor



BV-AC06P is an AC power adaptor for BV-C2903.

Input: AC100V to AC240V, 50Hz/60Hz  
Output: DC12V  $\pm$  3%, 1A  
Weight: 120 g

### ■ SWIR lenses



This is for SWIR C mount lens for BV-C2903. 20mm, 24mm, 28mm, 35mm, 50mm and 105 mm are available.  
Applicable image size: 15mm (H)

### ■ BVA-TB03 Tripod base

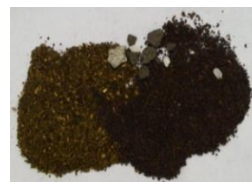


This is a tripod base and used when BV-C2903 is attached to a tripod.  
(2 screws are used)

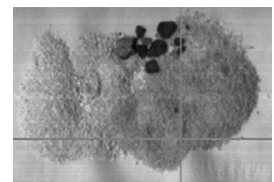
## Sample images

Images on the right side are tea and green tea including foreign materials taken by visible camera and BV-C2903.

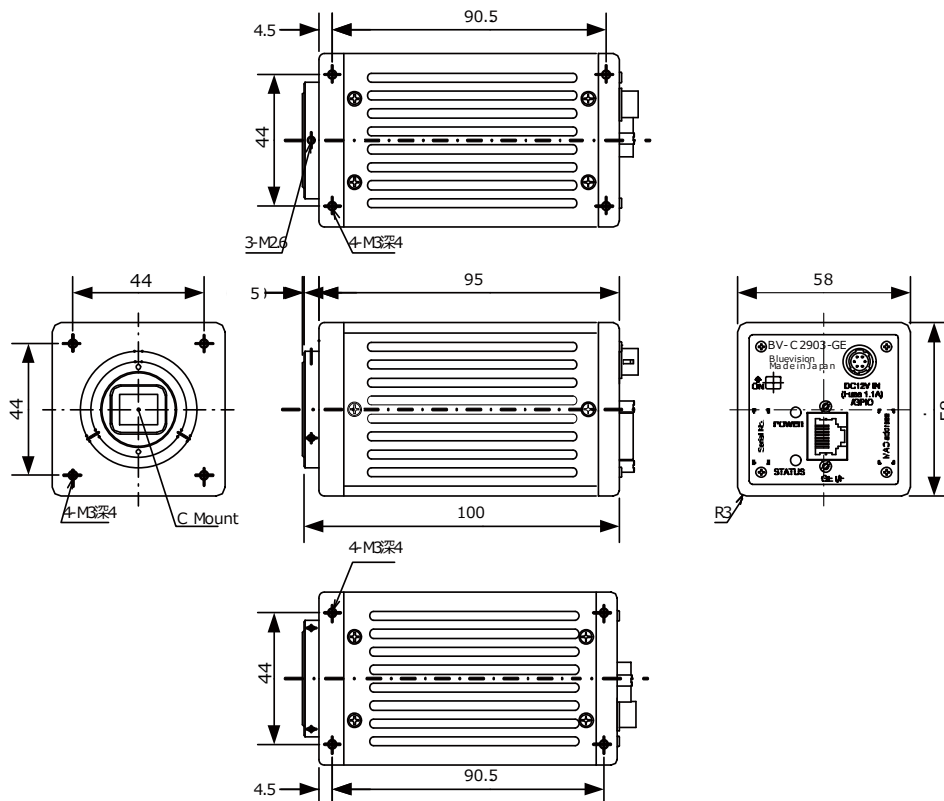
### Visible light



### SWIR light



## Outlook Dimensions (BV-C2903-GE)



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