

## **BV-C3101** Short Wave Infrared(SWIR) Line scan camera





The BV-C3101 is a dedicated camera for SWIR wavelength using InGaAs sensor with the sensitivity from 1,200nm to 2,600nm. As the wavelength extends further longer wavelength, it is possible to detect more materials. BV-3101 has two types due to using sensor, one is BV-C3101R and the other is BV-C3101S. The interface is Camera Link and the lens mount can be selected from M52 mount or C mount. The BV-C3101 is BTO product.

Specifications	BV-C3101R	BV-C3101S NEW
Line sensor	Effective pixel:512 pixels Pixel size : 25µm x	Effective pixel:512 pixels、 Pixel size : 25µm x
	250µm、	25µm、Peltier element built-in
Sensor wavelength range	1,200 nm to 2,600 nm (Maximum sensitivity at 2,300 nm)	
Synchronization	Internal, External trigger	
Pixel clock	4 MHz (250 ns)	5 MH z (200ns)
Total clock number	2064 clocks ((16 + (8x256)) clocks): excluding exposure time	
Line rate	516 µs: excluding exposure time	72µs: excluding exposure time
	Variable range: 526 µs to 100 ms	
Line frequency	1,938 KHz: in case the exposure time is not	13.88KHz: in case the exposure time is not
	included	included
	659.6 Hz: in case the exposure time is 1 ms	9.328KHz: in case the exposure time is 1 ms
Conversion efficiency	16nV/e <sup></sup> (Standard) / 320nV/e <sup>-</sup>	160nV/e <sup>-</sup>
Signal to noise ratio	50dB (Gain=0dB)	
Electronic shutter	Variable range:10 $\mu$ s $\sim$ 10ms (Variable step unit : 12.5ns)	
Gain	0dB to +24dB (x1 to x16、1/16 step)	0dB to +12dB
Black level	-127 to 127LSB (10bit output)	-127 to 127LSB (10bit output)
Peltier temperature setting	_	-10°C Fixed (Room temperature)
Blemish compensation	Blemish compensation (Black) : ON/OFF	
Shading compensation	Flat shading compensation	
Video output	Camera Link , Base Configuration, 10 bit x 1	
Operation mode	Shutter select mode (Internal/External)	
Trigger input	Hirose12P: TTL(Max: Power Voltage), Camera Link: LVDS(CC1,CC2)	
Sync output	XEEN(Hirose12P), LVAL,DVAL,EEN(Camera Link)	
Communication interface	Camera Link 9600bps or 115200bps selectable	
Lens mount	M52 mount, C mount	
Power supply	DC12V ± 10%	
Operating ambient	-5°C $\sim$ +45°C / 20% $\sim$ 80% (No-condensing)	
Dimensions (WxHxD)	95 x 95 x 115mm (excluding protrusion)	
Weight	960g 960g	

## **Associated product:**

Lenses 20mm,24mm, 28mm, 35mm, 50mm, 105mm (M52 mount / C mount)

- This product is in the scope of Export Trade Control and required the export license to export.
- Specifications are subject to change without prior notice.

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