



❖ WA-1000D CL

Dual SWIR Line Scan Camera

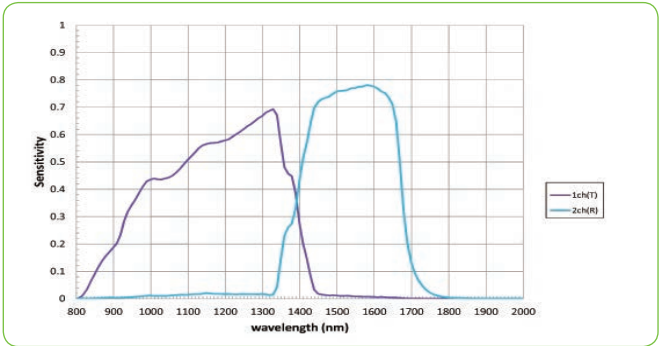


- **Simultaneous dual-band imaging in the Short Wave InfraRed (SWIR) light spectrum**
- **Wavelength band : 900 nm to 1700 nm**
- **Enables you to acquire images that R-G-B and NIR will not be able to identify**
- **Active pixels : 1024 pixels x 2**
- **Line rate : 39 kHz (39,230 line/second)**
- **Cell size : 25.0 μm x 25.0 μm**
- **Video output : 2 x 8-bit, 2 x 10-bit, 2 x 12-bit through Camera Link interface (available with Dual-Base configuration or 2-tap Medium configuration)**
- **Pixel gain correction, Flat-field correction, LUT/Gamma function**
- **M52 lens mount**

Specifications for WA-1000D CL

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Sensor	2 InGaAs Line sensors
Active pixels	1024 pixels x 2
Cell size	25.0 μm x 25.0 μm
Pixel clock	6.67 MHz
Line rate (max)	39kHz (39,230 line/sec)
Sensor sensitivity	280nV/e- (conversion gain)
Sensor width	25.6 mm
Synchronization	Internal X-tal or external trigger
S/N ratio	>50 dB on green with gain = 0 dB
Digital video output	Dual Base Configuration: 2x8-bit, 2x10-bit, 2x12-bit 2-Tap Medium Configuration: 2x8-bit, 2x10-bit, 2x12-bit
Input signal	Trigger (Camera Link, TTL/75 Ω)
Output signal	Camera Link: LVAL - DVAL - EEN Hirose 12-pin: XEEN
Gain	Master mode: 1ch: 0dB to +11dB 2ch: -3dB to +3dB Individual mode: 1ch/2ch: 0dB to +11dB
Correction	Pixel gain correction, Flat shading correction, LUT/Gamma correction
Trigger modes	Pulse width control, No-Shutter, Shutter select
Programmable exposure	20.38 μs to 1.995ms in 149.9ns increments
Pulse width control	20.38μs to 1 s (Camera Link) 50μs to 1 s (12-Pin connector)
Lens mount	M52 Mount
Operating temperature	-5°C to +45°C
Operating humidity	+20 to +80% non-condensing
Vibration	3G (20Hz to 200Hz, XYZ direction)
Shock	50G
Regulations	CE (EN61000-6-2, EN61000-6-3), RoHS/WEEE, IEC/EN61000-4-3 FCC Part15 Class B IEC61000-4-2 Level 4 (contact discharge = 8 kV, air discharge = 15 kV)
Power	DC+12V to 24V ± 10% 820 mA ±10% +12V
Dimensions (H x W x D)	90 mm x 90 mm x 117 mm (without connector and lens mount protrusion)
Weight	910 g

Spectral Response



Connection Pin-out

DC In / Trigger

12-pin Connector

Pin	1 Ground	7 TXD out RS232C*
	2 +12V DC in	8 Ground
	3 Ground	9 XEEN out
	4 Reserved	10 Trigger IN (TTL)*
	5 Ground	11 +12V DC IN
	6 RXD in RS232C*	12 Ground

* In Camera Link or 12 pin Hirose

Camera Link Interface

Camera Link Interface

Port 1 (24bit, 30bit)

Pin No	In/Out	Name	Note
1,14		Shield	GND
2(-),15(+)	O	TxOUTo	Data out
3(-),16(+)	O	TxOUT1	
4(-),17(+)	O	TxOUT2	
5(-),18(+)	O	TxCk	CL clock
6(-),19(+)	O	TxOUT3	Data out
7(+),20(-)	I	SerTC (Rx/D)	LVDS Serial Control
8(-),21(+)	O	SerTFG (Tx/D)	
9(-),22(+)	I	CC1 (Trigger)	Trigger
10(+),23(-)	I	CC2(Reserved)	
11,24		N.C	
12,25		N.C	
13,26		Shield	GND

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

Dimensions

Front view M52 Mount

Side view

Bottom view

Rear view

U4-40: Fixed screw
Camera Link Connector Port 1
12pin Connector
Camera Link Connector Port 2

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