CHCM-500M

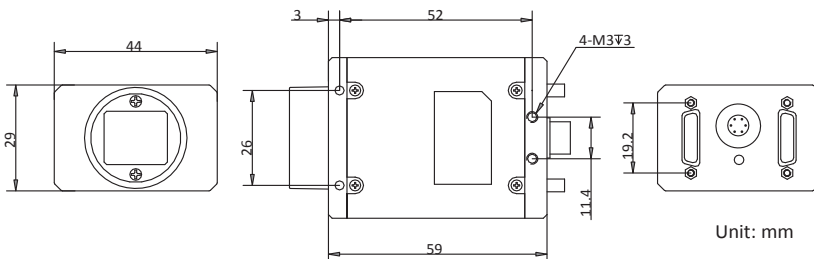## 5 MP 2/3" CMOS CameraLink Area Scan Camera

GEN<i>CAM

CAMERA Link

Introduction

CHCM-500M camera adopts Sony IMX250 sensor to provide high-quality image. It uses CameraLink interface to transmit non-compressed images in real time with max. frame rate reaching 140 fps.

Key Feature

- Adopts global shutter CMOS sensor providing high signal-to-noise ratio, wide dynamic range, and high-quality image
- Resolution of 2432 × 2048 and pixel size of 3.45 μm × 3.45 μm
- Supports configuration modes of Base, Medium, Full and 80-bit via the CameraLink interface
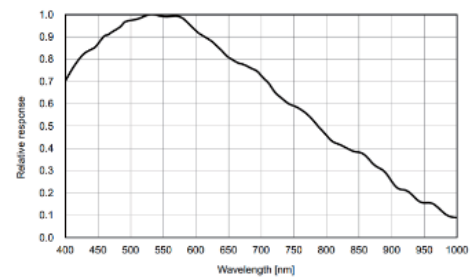- Adopts compact design with mounting holes for flexible mounting

Dimension

Unit: mm

Available Model

Mono camera: CHCM-500M

Applicable Industry

SMT/ PCB AOI, FPD, railway related applications, high-accuracy measurement, etc.

Sensor Quantum Efficiency

Specification

Model	CHCM-500M			
Parameters	5 MP 2/3" CMOS CameraLink Area Scan Camera			
Camera				
Sensor type	CMOS, global shutter			
Sensor model	Sony IMX250			
Pixel size	3.45 μm × 3.45 μm			
Sensor size	2/3"			
Resolution	2432 × 2048			
Pixel clock	60 MHz, 70 MHz, 85 MHz			
Configuration mode	Base	Medium	Full	80-bit
Sensor combination	1X2_1Y	1X4_1Y	1X8_1Y	1X10_1Y
Tap number	2 Taps	4 Taps	8 Taps	10 Taps
Max. frame rate	140 fps @2432 × 2048			
Pixel format	Mono 8/10/12			
Dynamic range	75.4 dB			
SNR	40 dB			
Gain	0 dB to 20 dB			
Exposure time	15 μs to 10 s			
Shutter mode	Off/Once/Continuous exposure mode			
Binning	Supports 1 × 1, 1 × 2, 1 × 4, 2 × 1, 2 × 2, 2 × 4, 4 × 1, 4 × 2, 4 × 4			
Reverse image	Supports horizontal and vertical reverse image output			
Electrical features				
Data interface	CameraLink with SDR interface			
Digital I/O	6-pin Hirose connector provides power and I/O, including opto-isolated input x 1, opto-isolated output x 1, and bi-directional non-isolated I/O x 1			
Power supply	9 VDC to 24 VDC			
Power consumption	Approx. 3.25 W@12 VDC			
Structure				
Lens mount	C-mount			
Dimension	44 mm × 29 mm × 59 mm (1.7" × 1.1" × 2.3")			
Weight	Approx. 100 g (0.2 lb.)			
Ingress protection	IP30 (under proper lens installation and wiring)			
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F)			
	Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)			
Humidity	20% to 80% RH, without condensation			
General				
Client software	MVS or frame grabber software meeting with CameraLink V2.0, GenlCam Protocol			
Operating system	32/64-bit Windows XP/7/10			
Compatibility	CameraLink, GenlCam			
Certification	CE, FCC, RoHS, KC			

CHCM-500C

5 MP 2/3" CMOS CameraLink Area Scan Camera
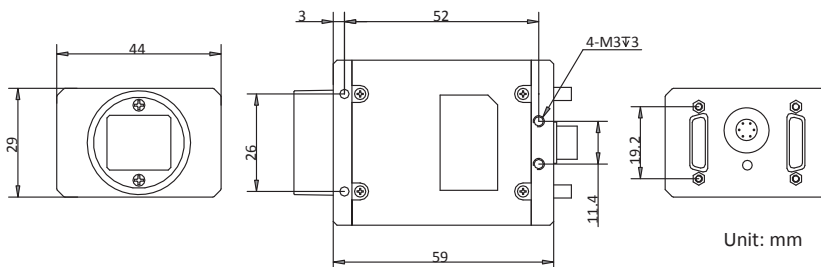
GEN<i>CAM

CAMERA Link

Introduction

CHCM-500C camera adopts Sony IMX250 sensor to provide high-quality image. It uses CameraLink interface to transmit non-compressed images in real time with max. frame rate reaching 140 fps.

Key Feature

- Adopts global shutter CMOS sensor providing high signal-to-noise ratio, wide dynamic range, and high-quality image
- Resolution of 2432 × 2048 and pixel size of 3.45 μm × 3.45 μm
- Supports configuration modes of Base, Medium, Full and 80-bit via the CameraLink interface
- Adopts compact design with mounting holes for flexible mounting

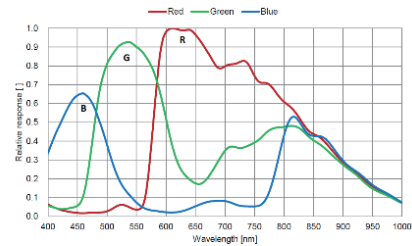## Available Model

Color camera: CHCM-500C

Applicable Industry

SMT/ PCB AOI, FPD, railway related applications, high-accuracy measurement, etc.

Sensor Quantum Efficiency

Dimension

Unit: mm

HOURS
www.hours-web.com

Specification

Model	CHCM-500C			
Parameters	**5 MP 2/3" CMOS CameraLink Area Scan Camera**			
Camera				
Sensor type	CMOS, global shutter			
Sensor model	Sony IMX250			
Pixel size	3.45 μm × 3.45 μm			
Sensor size	2/3"			
Resolution	2432 × 2048			
Pixel clock	60 MHz, 70 MHz, 85 MHz			
Configuration mode	Base	Medium	Full	80-bit
Sensor combination	1X2_1Y	1X4_1Y	1X8_1Y	1X10_1Y
Tap number	2 Taps	4 Taps	8 Taps	10 Taps
Max. frame rate	140 fps@2432 × 2048			
Pixel format	Bayer RG 8/10/12, RGB 8			
Dynamic range	75.4 dB			
SNR	40 dB			
Gain	0 dB to 17 dB			
Exposure time	4 μs to 10 s			
Shutter mode	Off/Once/Continuous exposure mode			
Binning	Not support			
Reverse image	Supports horizontal and vertical reverse image output			
Electrical features				
Data interface	CameraLink with SDR interface			
Digital I/O	6-pin Hirose connector provides power and I/O, including opto-isolated input x 1, opto-isolated output x 1, and bi-directional non-isolated I/O x 1			
Power supply	9 VDC to 24 VDC			
Power consumption	Approx. 3.25 W@12 VDC			
Structure				
Lens mount	C-mount			
Dimension	44 mm × 29 mm × 59 mm (1.7" × 1.1" × 2.3")			
Weight	Approx. 100 g (0.2 lb.)			
Ingress protection	IP30 (under proper lens installation and wiring)			
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F)			
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Humidity	20% to 80% RH, without condensation			
General				
Client software	MVS or frame grabber software meeting with CameraLink V2.0, GenlCam Protocol			
Operating system	32/64-bit Windows XP/7/10			
Compatibility	CameraLink, GenlCam			
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