

MV-CL161-41CM

16384 P Camera Link Line Scan Camera



GEN< i >CAM



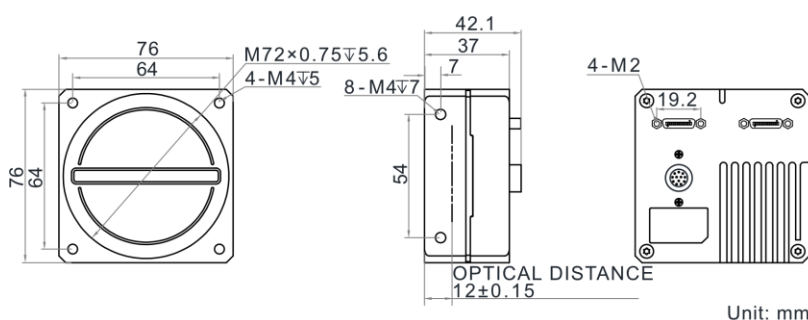
Introduction

MV-CL161-41CM adopts 16384 × 1 CMOS sensor, uses Camera Link interface to transmit images, and its max. line rate reaches 50 kHz. It integrates multiple ISP technologies, and supports different trigger modes like line trigger, frame trigger, and trigger-width exposure.

Key Feature

- Integrates multiple ISP technologies, and supports manual adjustment of Gamma correction, FFC correction, LUT, black level, etc.
- Supports multiple exposure and acquisition modes.
- Adopts configurable bi-directional I/O hardware design.
- Compact design and flexible installation.
- Compatible with Camera Link Protocol and GenICam Standard.

Dimension



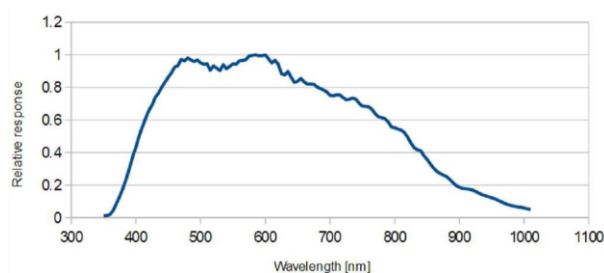
Available Model

MV-CL161-41CM

Applicable Industry

New energy, screen detection, 3C, metallurgy, etc.

Sensor Quantum Efficiency



Specification

Model	MV-CL161-41CM
Camera	
Sensor type	CMOS
Pixel size	3.5 μm
Resolution	16384 $\times$ 1
Image mode	1-line
Max. line rate	10 kHz (Base), 20 kHz (Medium), 40 kHz (Full), and 50 kHz (80-bit)
Configuration mode	Base, Medium, Full, 80-bit
Tap geometry	1 $\times$ 2, 1 $\times$ 4, 1 $\times$ 8, 1 $\times$ 10
Tap number	2 Taps, 4 Taps, 8 Taps, 10 Taps
Pixel clock	40 MHz, 66 MHz, 80 MHz, 85 MHz
Dynamic range	64.7 dB
SNR	44.3 dB
Gain	Supports 1 $\times$, 2 $\times$, 4 $\times$, 8 $\times$
Exposure time	2 μs to 10 ms
Exposure mode	Off/ Once/ Continuous exposure mode; supports fixed exposure time, trigger-width exposure
Mono/color	Mono
Pixel format	Mono 8/10/12
Binning	Supports 1 $\times$ 1, 2 $\times$ 2, 4 $\times$ 4
Reverse image	Supports horizontal reverse image output
Trigger mode	External trigger, internal trigger
External trigger mode	Line trigger, frame trigger, line + frame trigger
Electrical features	
Data interface	Camera Link (SDR connector); USB interface for updating firmware
Digital I/O	12-pin P10 connector provides power and I/O: configurable input and output $\times$ 4 (Line 0/1/3/4), and support single-end/differential. Camera Link provides I/O (CC1/CC2/CC3/CC4).
Power supply	12 VDC to 24 VDC
Power consumption	Typ. 7.2 W @ 12 VDC
Mechanical	
Lens mount	M72*0.75, flange back length 12 mm, applicable to F-mount via lens adapter
Dimension	76 mm $\times$ 76 mm $\times$ 42.1 mm (3.0" $\times$ 3.0" $\times$ 1.7")
Weight	Approx. 320 g (0.7 lb.)
Ingress protection	IP40 (under proper lens installation and wiring)
Temperature	Working temperature: 0 $^{\circ}\text{C}$ to 55 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 131 $^{\circ}\text{F}$) Storage temperature: -30 $^{\circ}\text{C}$ to 80 $^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to 176 $^{\circ}\text{F}$)
Humidity	5% RH to 90% RH (no condensation)
General	
Client software	MVS and frame grabber software meeting with Camera Link Protocol
Operating system	32/64-bit Windows 7/10, 64-bit Windows 11
Compatibility	Camera Link V1.2, GenICam
Certification	CE, RoHS, KC