Allied Vision

Mako G
G-223

- Ultra-compact (60.5 × 29 × 29 mm)
- Affordable
- PoE
- CMOS CMV2000 sensor

Description

GigE camera with CMOSIS CMV2000 sensor, global shutter; 49.5 frames per second

Mako G-223B/G-223C is an industrial GigE camera with the CMOSIS CMV2000 CMOS sensor. Mako G cameras have the same compact form factor and the same mounting positions as many analog cameras. All models include PoE, three opto-isolated outputs, and a 64 MB image buffer. The image quality profits from the precisely aligned sensors.#
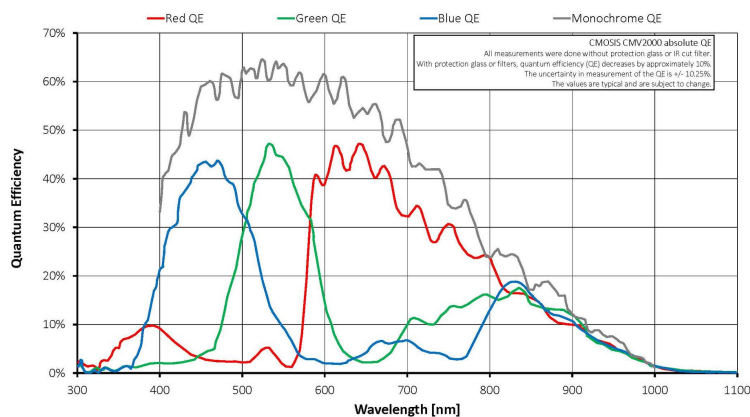
Options:

- Various optical filters and lens mounts
- White medical housing

See the#Modular Concept#for lens mount, optical filter, and case design options.

Specifications

Mako G	G-223
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	2048 (H) × 1088 (V)
Sensor	CMOSIS CMV2000
Sensor type	CMOS
Cell size	5.5 µm x 5.5 µm
Lens mount	C-Mount
Max frame rate at full resolution	49.5 fps
ADC	12 bit
Image buffer (RAM)	64 MByte
Output	
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed

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Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerGB8, BayerGB12, BayerGB12Packed
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	1 input, 3 outputs
Operating conditions/dimensions	
Operating temperature	+5 °C to +45 °C housing temperature
Power requirements (DC)	12 to 24 VDC; PoE
Power consumption (@12 V)	2.4 W @ 12 VDC; 2.8 W PoE
Mass	80 g
Body dimensions (L × W × H in mm)	60.5 × 29 × 29 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES

Features

Image optimization features:

- Auto gain (manual gain control: 0 to 26 dB)
- Auto exposure (manual exposure control:#21 #s to 153 s)
- Auto white balance
- Color correction, hue, saturation (color models only)

- Column defect masking
- Gamma correction
- Look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features

Camera control features:

- Event channel
- Image chunk data
- Storable user sets
- StreamBytesPerSecond (easy bandwidth control)
- StreamHold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Temperature monitoring

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Technical drawing

M3 - 2.3 ▽ (3x)
23.7
15
4.5
8.5
12
10
20
M2 - 2.2 ▽ (4x)
22
16.5

29
29
C-Mount

60.5
54.7
mako
Ø 27

22.6
20
22.6
2.5
10.4
M2 - 4.5 ▽ (2x)

40.5
12.2
20
M3 - 2.3 ▽ (2x)
15

Applications

Mako G-223B/G-223C is an inexpensive industrial GigE camera with a compact form factor. It is suitable for all typical machine vision applications:

- Robotics
- Quality control
- Inspection, surveillance
- Industrial imaging
- Machine vision
- Logistics