Allied Vision

Mako G

G-503

- Ultra-compact (60.5 × 29 × 29 mm)
- OnSemi CMOS sensor
- 14 fps @ 5 Megapixel
- Switchable shutter modes

Description

Gigabit Ethernet camera with OnSemi CMOS sensor

Mako G-503B/C is an industrial GigE camera with the#OnSemi MT9P031 (monochrome) / MT9P006 (color)#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 FIFO image buffer. The image quality profits from the precisely aligned sensors.#
Options:

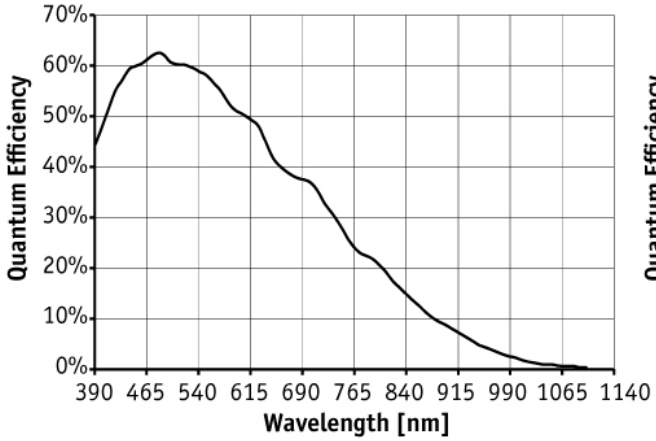
- Various IR cut/pass filters, protection glass, various lens mounts
- White medical housing

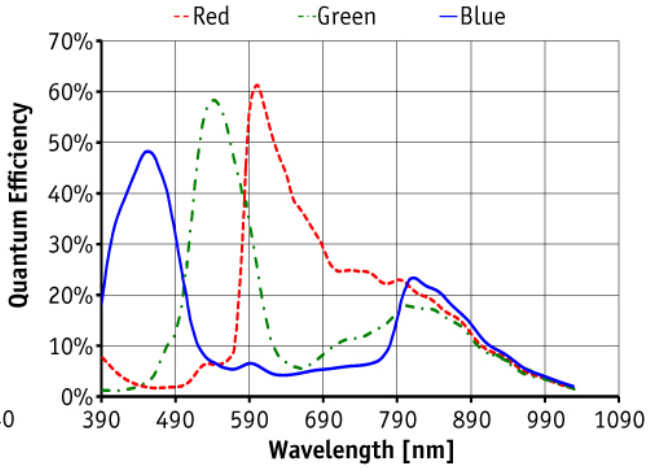
See the#Modular Concept#for lens mount, optical filter, and case design options.

Specifications

Mako G	G-503
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	2592 (H) × 1944 (V)
Sensor	OnSemi MT9P031 / MT9P006
Sensor type	CMOS Progressive
Cell size	2.2 µm x 2.2 µm
Lens mount	C-Mount
Max frame rate at full resolution	14 fps
ADC	12 bit
Image buffer (RAM)	64 Mbyte
Non-volatile memory (Flash)	1024 KByte
Output	

Mako G	G-503
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerGR8, BayerGR12Packed, BayerGR12
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)	2.0 W @ 12 VDC; 2.2 W (PoE)
Mass	80 g
Body dimensions (L × W × H in mm)	60.5 × 29 × 29 (including connectors)
Regulations	CE (2004/108/EC), RoHS (2011/65/EU), WEEE (2002/96/EC), FCC Class B





Features

Mako G features include:

- Camera temperature monitoring
- Switchable Rolling/GlobalReset shutter modes
- Pixel defect masking

- ROI, separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 24 dB)
- Auto exposure
- Auto white balance
- LUTs (look-up tables)
- Gamma
- Hue, saturation, color correction
- ReverseX/Y
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Event channel
- Chunk data
- Storable user sets

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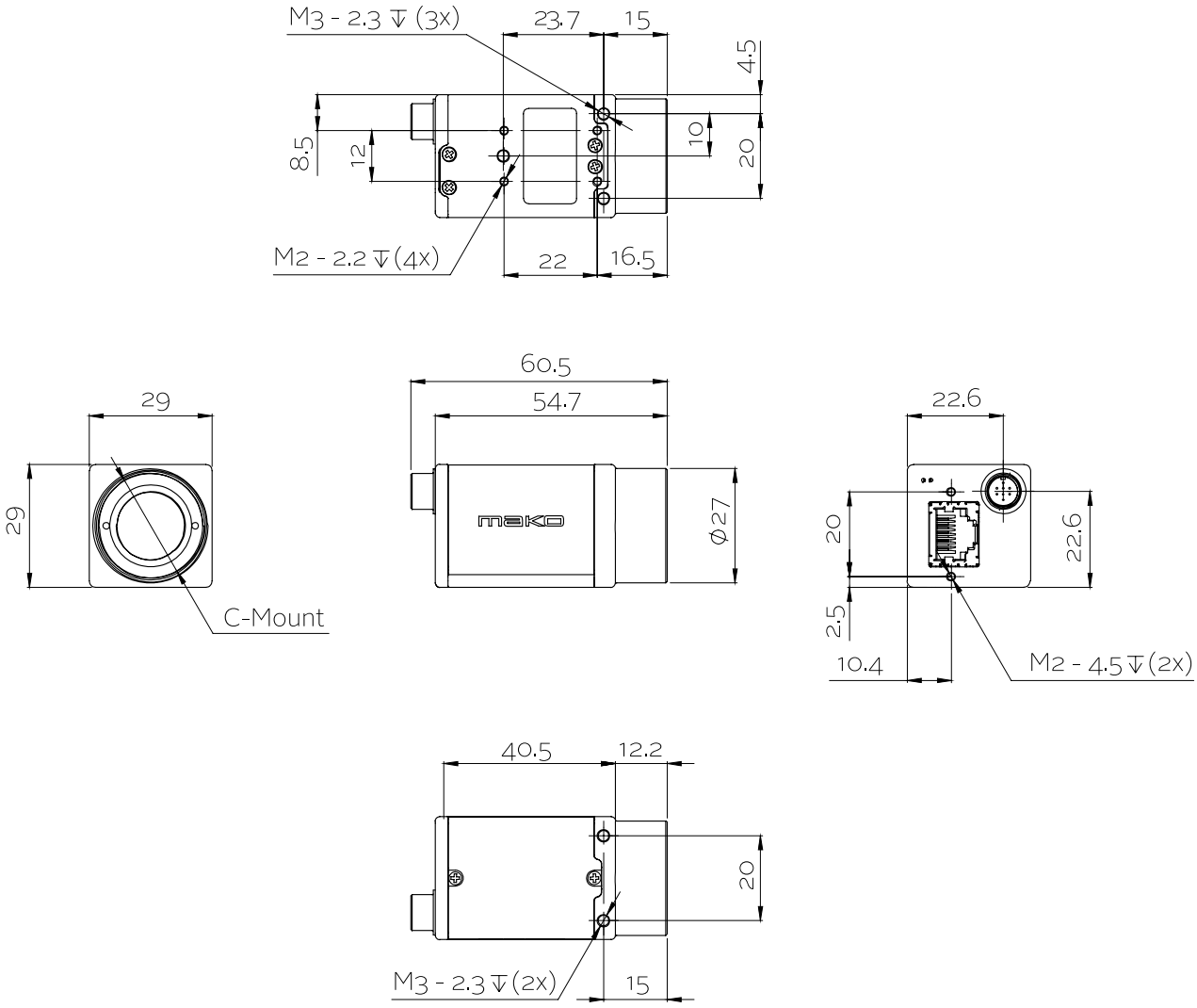
Technical drawing



Applications

Mako G 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