

# Mako G

## G-032



- Ultra-compact (60.5 × 29 × 29 mm)
- Affordable
- PoE
- High frame rate

## Description

GigE camera with Sony ICX424 CCD sensor

Mako G-032B/C is an industrial GigE camera with Sony's ICX424 sensor. Mako cameras have the same compact form factor and the same mounting positions as many analog cameras. All models include PoE, three optocoupled outputs, and a 64 MB image buffer. The image quality profits from the precisely aligned sensors.

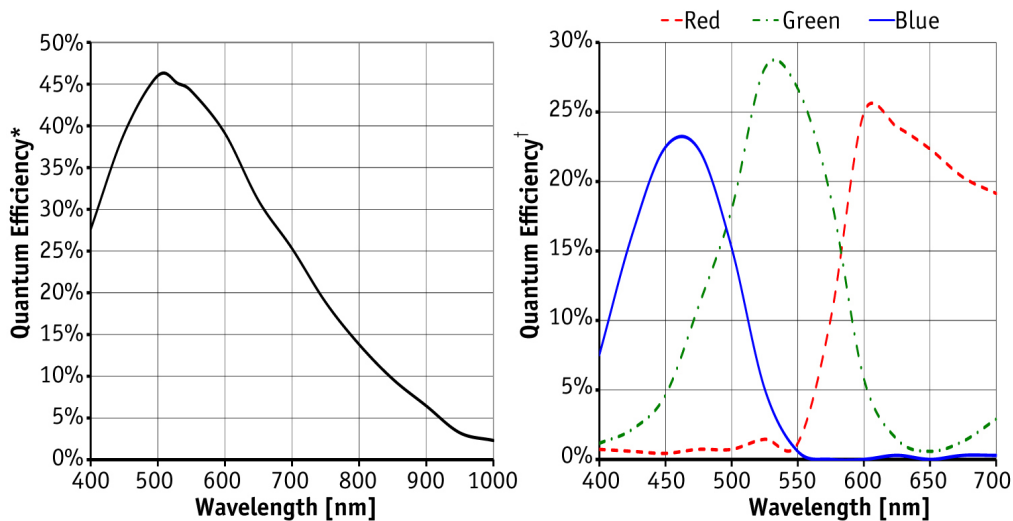
Options

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

## Specifications

Mako G	G-032
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	658 × 492
Sensor	Sony ICX424
Sensor type	CCD Progressive
Sensor size	Type 1/3
Cell size	7.4 μm
Lens mount	C/CS-Mount
Max frame rate at full resolution	102 fps
ADC	14 bit
On-board FIFO	64
	<b>Output</b>
Bit depth	8/12 bit

Mako G	G-032
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12, BayerRG12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
TTL I/Os	
Opto-isolated I/Os	1 input, 3 outputs
<b>Operating conditions/dimensions</b>	
Operating temperature	+5°C to +45°C (housing temperature)
Power requirements (DC)	PoE /12 V - 24 V
Power consumption (@12 V)	2.8 W (PoE) / 2.4 W (non-PoE)
Mass	80 g
Body dimensions (L × W × H in mm)	60.5 × 29 × 29 mm, incl. connectors
Regulations	CE, FCC Class B, RoHS



\*QE measured without protection glass or filters. With glass or filters, quantum efficiency decreases by approximately 10%.

†QE measured with IR cut filter. Without IR cut filter, quantum efficiency increases by approximately 10%.

## Features

- Camera temperature monitoring
- ROI, separate ROI for auto features
- Binning
- Auto gain (manual gain control: 0 to 30 dB)
- Auto exposure (manual exposure control: 10 μs to 93 s)
- Auto white balance



- LUTs (look-up tables)
- Gamma
- Hue, saturation, color correction
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Event channel
- Chunk data
- Storable user sets

## Technical drawing





## Applications

Mako 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