

# Mako G

## G-050



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

## GigE camera with Sony ICX693 sensor

Mako G-050 is an industrial GigE camera with Sony's ICX693 sensor. Mako cameras have the same 29 x 29 mm form factor and the same mounting positions as many analog cameras. All models include Power over Ethernet, three opto-isolated outputs, and a 64 MB image buffer. The image quality profits from the precisely aligned sensors.

### Benefits and features:

- Monochrome (G-050B) and color (G-050C) models
- GigE Vision interface with Power over Ethernet
- Screw mount RJ45 Ethernet connector for secure operation in industrial environments
- Supports cable lengths up to 100 meters (CAT-6 recommended)
- Comprehensive I/O functionality for simplified system integration
- Popular C-Mount lens mount
- Easy camera mounting via standard M3 threads on top and bottom of housing or optional tripod adapter
- Easy software integration with Allied Vision's [Vimba Suite](#) and compatibility to the most popular [third party image-processing libraries](#).

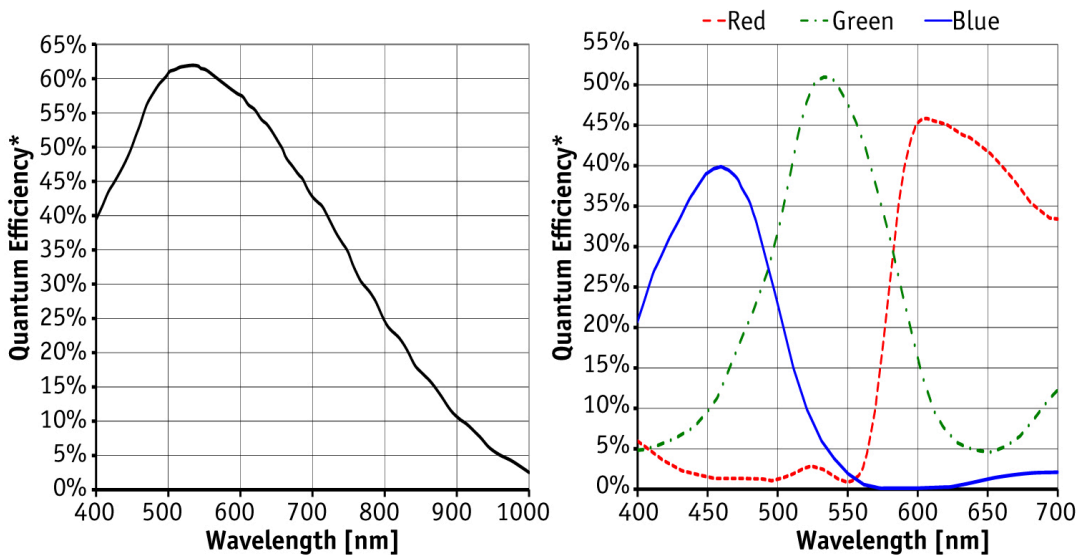
## Specifications

Mako G	G-050
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	812 × 614
Sensor	Sony ICX693
Sensor type	CCD Progressive



<b>Mako G</b>	<b>G-050</b>
Shutter mode	Global shutter
Sensor size	Type 1/3
Pixel size	6.0 $\mu\text{m}$ $\times$ 6.0 $\mu\text{m}$
Lens mounts (available)	C-Mount, CS-Mount, S-Mount
Max. frame rate at full resolution	71.2 fps
ADC	14 Bit
Image buffer (RAM)	64
<b>Output</b>	
Bit depth	8/12 Bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed
YUV color pixel formats	YUV411Packed, YUV422Packed, YUV444Packed
RGB color pixel formats	RGB8Packed, BGR8Packed
Raw pixel formats	BayerRG8, BayerRG12, BayerRG12Packed
<b>General purpose inputs/outputs (GPIOs)</b>	
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)	12 to 24 VDC AUX or 802.3at Type 1 PoE
Power consumption	2.1 W at 12 VDC; 2.4 W PoE
Mass	80 g (with C-Mount)
Body dimensions (L $\times$ W $\times$ H in mm)	60.5 $\times$ 29 $\times$ 29 including connectors
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES

## Quantum efficiency

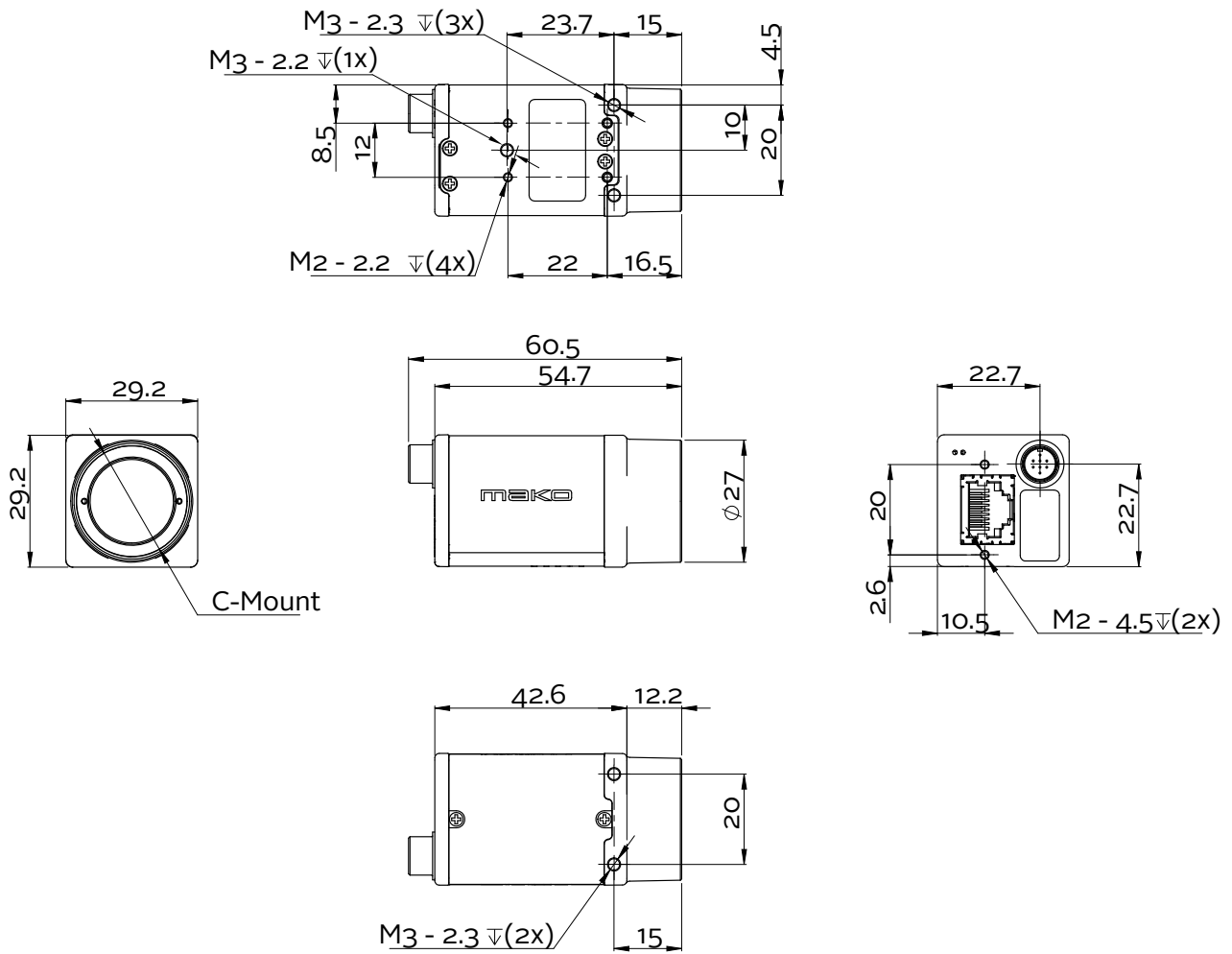


\*QE measured without protection glass or filters. With glass or filters, quantum efficiency decreases by approximately 10%.

## Features

- Camera temperature monitoring
- Region of Interest, separate region for auto features
- Binning
- Auto gain (manual gain control: 0 to 35 dB)
- Auto exposure (manual exposure control: 46  $\mu$ s to 84 s)
- Auto white balance
- Look-up table
- 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 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