

Mako G-050



Description

GigE camera with Sony ICX693 sensor

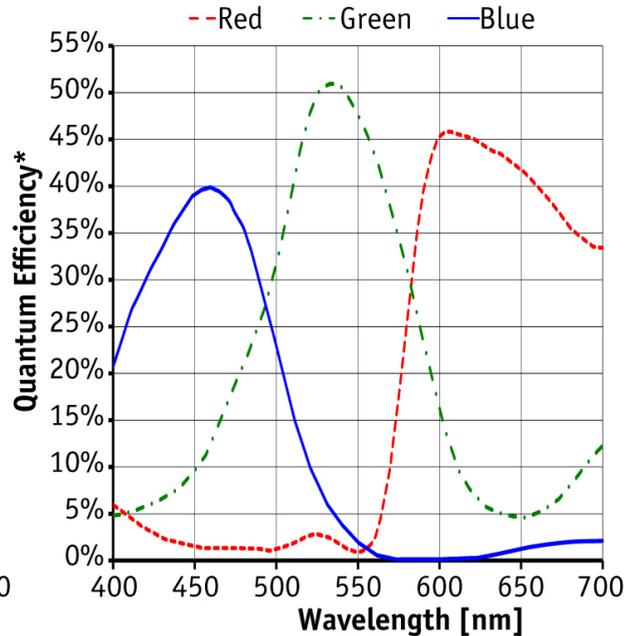
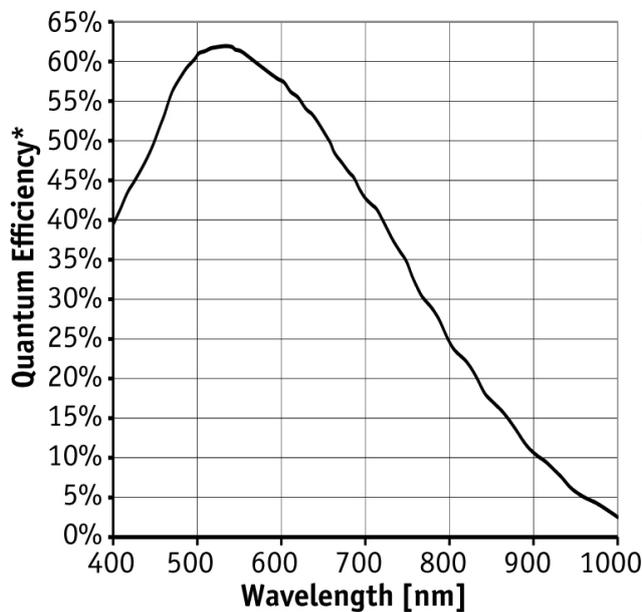
The Mako G-050B/C is an industrial GigE camera with Sony's ICX693 sensor. Mako cameras have the same 29 x 29 mm form factor and the same mounting positions as many analog cameras. All models include PoE, three optocoupled outputs, and a 64 MB image buffer. The image quality profits from the precisely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

- Sony ICX693 (type 1/3), 0.5 Megapixels
- Trigger
 - External trigger event: rising/falling/any edge, level high/low
 - External trigger delay: 0 to 42 s in 1 μ s increments
- Sync modes
 - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Modular options
 - Various IR cut/pass filters, protection glass
 - CS-Mount
 - White medical housing

Specifications

Mako	G-050
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	812 x 614
Sensor	Sony ICX693
Sensor type	CCD Progressive
Sensor size	Type 1/3
Cell size	6.0 μm
Lens mount	C/CS-Mount
Max frame rate at full resolution	71.2 fps
A/D	14 bit
On-board FIFO	64 MB
	Output
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12, BayerRG12Packed
	General purpose inputs/outputs (GPIOs)
Opto-coupled I/Os	1 input, 3 outputs
	Operating conditions/Dimensions
Operating temperature	+5°C to +45°C (housing temperature)
Power requirements (DC)	PoE /12 V - 24 V
Power consumption (12 V)	2.4 W (PoE) / 2.1 W (non-PoE)
Mass	80 g
Body Dimensions (L x W x H in mm)	60.5 x 29 x 29 mm, incl. connectors
Regulations	CE, FCC Class B, RoHS

[Download technical drawing \(click here\)](#)



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

Smart features

- ROI (Region of Interest Readout)
- Camera temperature monitoring
- Exposure
 - Auto/one push/programmable
 - Exposure time 46 μ s to 84 s
- White balance
 - Auto/one push/programmable
- On-board debayering
- Hue, saturation
- Gain
 - Auto/one push/programmable
 - Manual gain control: 0 to 35 dB (1 dB/step)
- Look-up table (LUT), gamma correction
- DSP subregion (selectable ROI for auto features)
- Binning (up to 8 x 14, independent x and y binning)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- Event channel
- Chunk data
- 3 storable user sets

Applications

The 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