Mako G

G-131

- Ultra-compact
- e2v Sapphire CMOS sensor
- Switchable shutter modes
- 62 fps @ full resolution

Description

GigE Vision camera with e2v Sapphire#sensor

Mako G-131B/G-131C is an industrial GigE camera with the e2v#Sapphire#EV76C560 CMOS sensor. Mako G cameras have the same compact form factor and the same mounting positions as many analog cameras. All models include Power over Ethernet (PoE), three opto-isolated outputs, and a 64 MB image buffer. The image quality profits from the precisely aligned sensors.
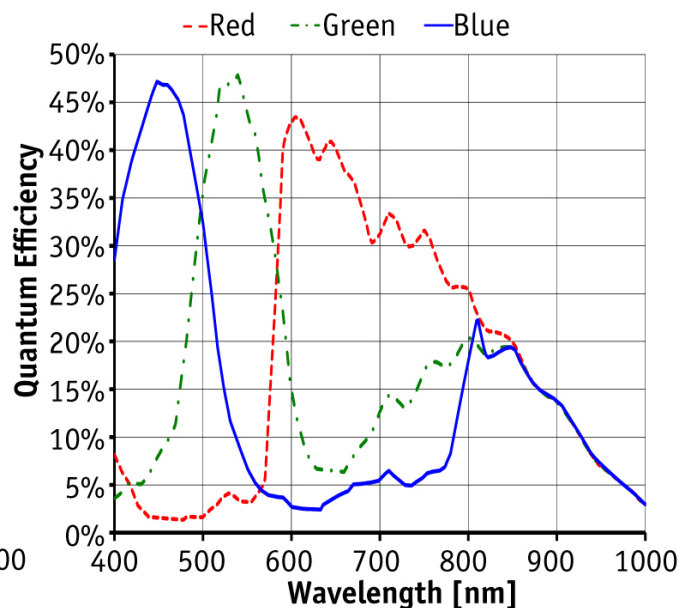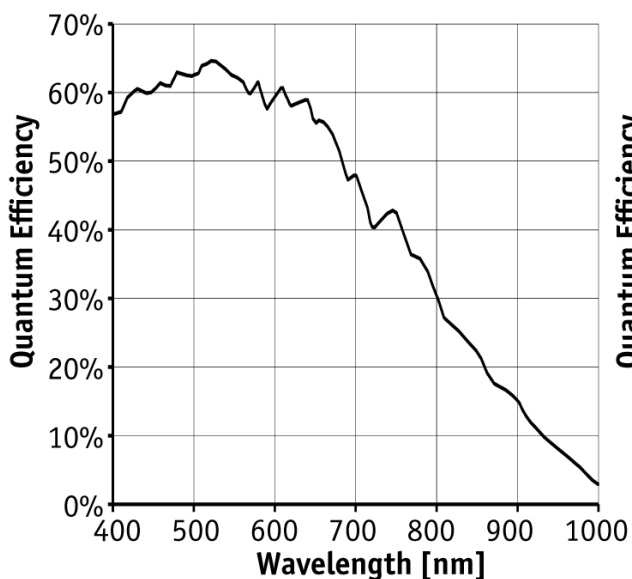**Options:**

- Various optical filters
- Various lens mounts
- White medical housing

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

Specifications

Mako G	G-131
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	1280 (H) × 1024 (V)
Sensor	e2v EV76C560
Sensor type	CMOS Progressive
Cell size	5.3 µm x 5.3 µm
Lens mount	C-Mount
Max frame rate at full resolution	62 fps
ADC	10 bit
Image buffer (RAM)	64 MByte
Non-volatile memory (Flash)	1024 KB

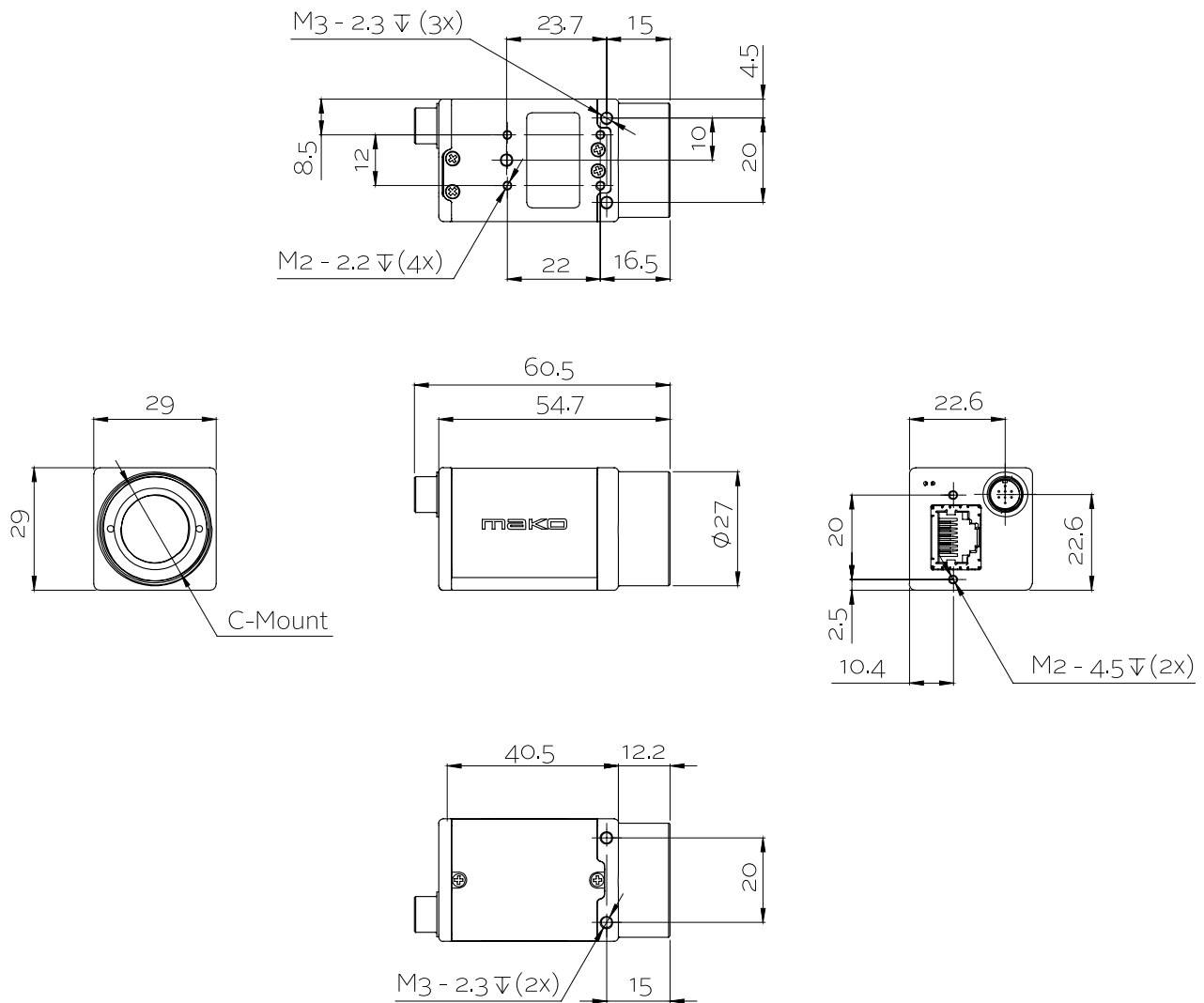| Mako G	G-131
Output	
Bit depth	8/10 bit
Mono modes	Mono8, Mono10
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerGB8, BayerGB10
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	1 input, 3 outputs
Operating conditions/dimensions	
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, RoHS, REACH, WEEE, FCC, ICES

Features

Mako G-131B/G-131C features include:

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

- Region of interest (ROI), separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 24 dB)
- Auto exposure
- Auto white balance
- Look-up tables (LUTs)
- 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

Technical drawing

Applications

Mako G-131B/G-131C is ideal for a wide range of applications including:

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