

## Mako G G-419B NIR



- Ultra-compact (60.5 × 29 × 29 mm)
- Affordable
- PoE
- CMOS CMV4000 NIR enhanced sensor

### Description

**GigE camera with CMOSIS CMV4000 sensor, NIR optimized, global shutter**

Mako G-419B NIR is an industrial GigE camera with the CMOSIS CMV4000 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.

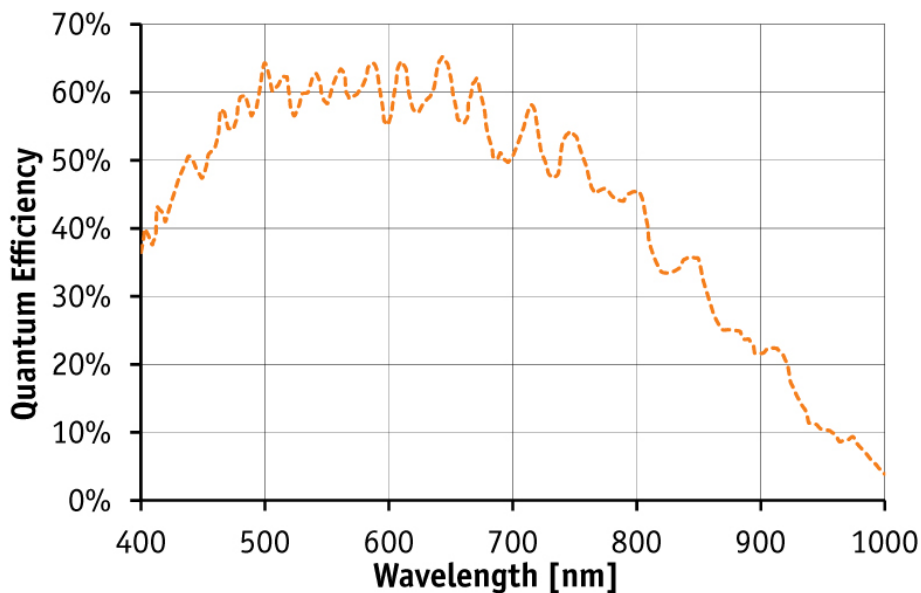
Options

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

### Specifications

| Mako G                            | G-419B NIR                                |
|-----------------------------------|---|
| Interface                         | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
| Resolution                        | 2048 × 2048                               |
| Sensor                            | CMOSIS CMV4000                            |
| Sensor type                       | CMOS Progressive                          |
| Sensor size                       | Type 1                                    |
| Cell size                         | 5.5 μm                                    |
| Lens mount                        | C/CS-Mount                                |
| Max frame rate at full resolution | 26.3 fps                                  |
| ADC                               | 12 bit                                    |
| On-board FIFO                     | 64 Mbyte                                  |
|                                   | <b>Output</b>                             |
| Bit depth                         | 8/12 bit                                  |

| Mako G  | G-419B NIR                          |
|---|-------------------------------------|
| Mono modes                                    | Mono8, Mono12, Mono12Packed         |
| <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)                       | PoE /12 V - 24 V                    |
| Power consumption (@12 V)                     | 2.7 W (PoE) / 2.3 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               |

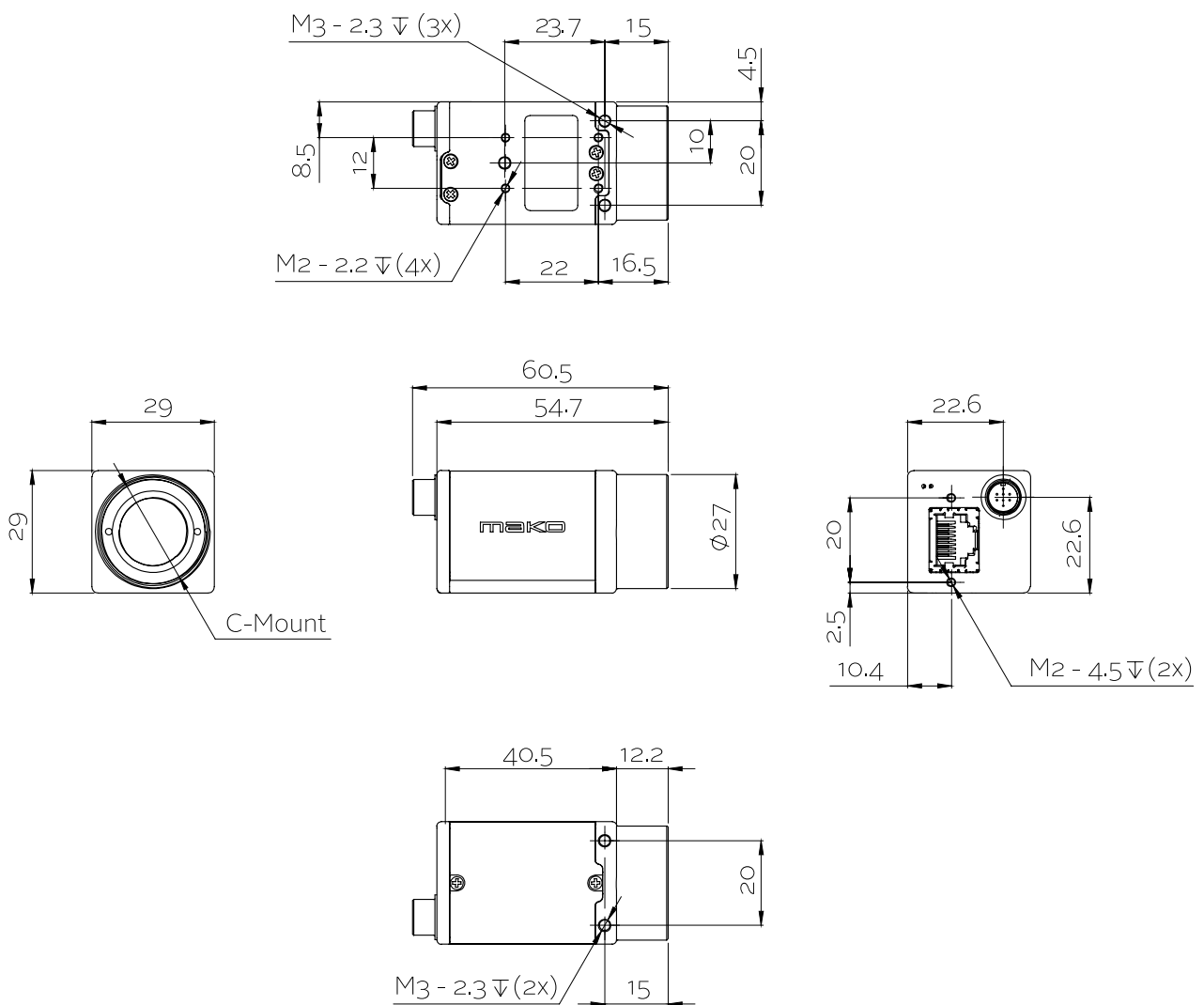


## Features

- Camera temperature monitoring
- Column defect masking
- ROI, separate ROI for auto features
- Auto gain (manual gain control: 0 to 26 dB)
- Auto exposure (manual exposure control: 41 μs to 153 s)
- LUTs (look-up tables)
- Gamma
- 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