

Mako G

G-503



- Ultra-compact (60.5 × 29 × 29 mm)
- Latest Aptina CMOS sensor
- 14 fps @ 5 Megapixel
- PoE

Description

GigE camera with Aptina CMOS sensor

Mako G-503 is an industrial GigE camera with the Aptina MT9P031 (mono) / MT9P006 (color) 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.

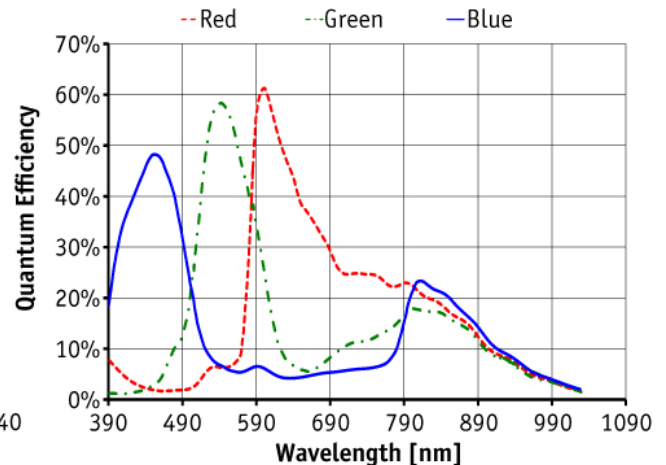
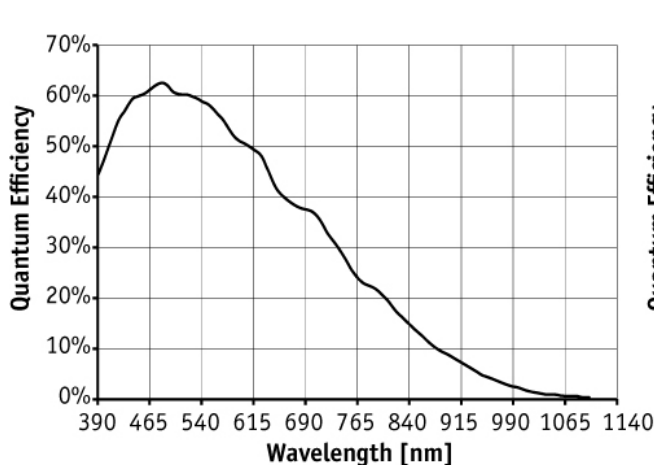
Options

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

Specifications

| Mako G | G-503 |
|-----------------------------------|---|
| Interface | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
| Resolution | 2592 × 1944 |
| Sensor | Aptina MT9P031 / MT9P006 |
| Sensor type | CMOS Progressive |
| Sensor size | Type 1/2.5 |
| Cell size | 2.2 μm |
| Lens mount | C/CS-Mount |
| Max frame rate at full resolution | 14 fps |
| ADC | 12 bit |
| On-board FIFO | 64 |
| | Output |
| Bit depth | 8/12 bit |

| Mako G | G-503 |
|---|--|
| Mono modes | Mono8, Mono12, Mono12Packed |
| Color modes YUV | YUV411Packed, YUV422Packed, YUV444Packed |
| Color modes RGB | RGB8Packed, BGR8Packed |
| Raw modes | BayerGR8, BayerGR12Packed, BayerGR12 |
| General purpose inputs/outputs (GPIOs) | |
| TTL I/Os | |
| Opto-isolated 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) | 2.2 W (PoE) / 2.0 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 |



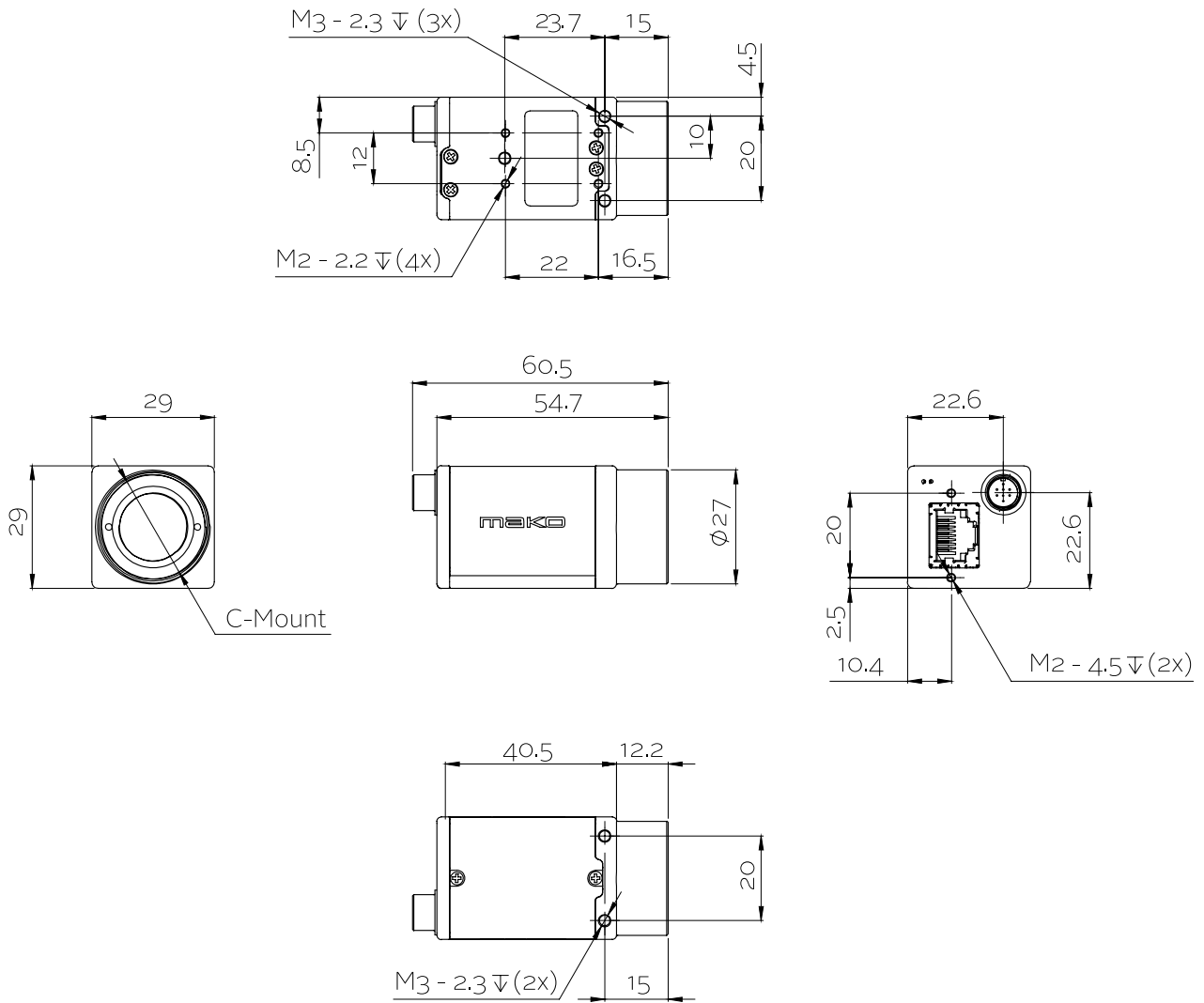
Features

- Camera temperature monitoring
- Pixel defect masking
- ROI, separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 24 dB)



- Auto exposure
- Auto white balance
- LUTs (look-up tables)
- 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

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