



- Power over Ethernet
- Compact design
- Affordable price

Small and powerful

Ultra-compact GigE Vision cameras

Mako G-125 with Sony ICX445 runs 30.0 frames per second at 1.2 MP resolution.

Mako is an attractively priced GigE Vision-compliant camera in a compact rugged industrial housing. Many models include advanced functionalities such as Precision Time Protocol (PTP), Trigger over Ethernet (ToE) Action Commands, and Power over Ethernet (PoE). Screw mount RJ45 connector and multiple I/Os facilitate your straightforward system integration. Mako cameras are also available as Near Infrared (NIR) and polarizer variants.

Easy software integration with Allied Vision's [Vimba Suite](#) and compatibility to the most popular [third party image-processing libraries](#).

See the [Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options. See the [Customization and OEM Solutions](#) webpage for additional options.

Specifications

| | |
|------------------------------------|-------------------------------------------|
| Interface | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) |
| Resolution | 1292 (H) × 964 (V) |
| Sensor | Sony ICX445 |
| Sensor type | CCD Progressive |
| Shutter mode | Global shutter |
| Sensor size | Type 1/3 |
| Pixel size | 3.75 μm × 3.75 μm |
| Lens mounts (available) | C-Mount, CS-Mount |
| Max. frame rate at full resolution | 30 fps |
| ADC | 14 Bit |
| Image buffer (RAM) | 64 MByte |

Imaging performance

Imaging performance data is based on the evaluation methods in the EMVA 1288 Release 3.1 standard for characterization of image sensors and cameras. Measurements are typical values for monochrome models measured at full resolution without optical filter. Contact Sales or AE for more information.

| | |
|--------------------------------|---------------------|
| Quantum efficiency at 529 nm | 56 % |
| Temporal dark noise | 8.3 e ⁻ |
| Saturation capacity | 8800 e ⁻ |
| Dynamic range | 60.0 dB |
| Absolute sensitivity threshold | 8.8 e ⁻ |

Output

| | |
|--------------------------|------------------------------------------|
| 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 |

Features

Image control: Auto

- Auto exposure
- Auto gain
- Auto white balance (color models)

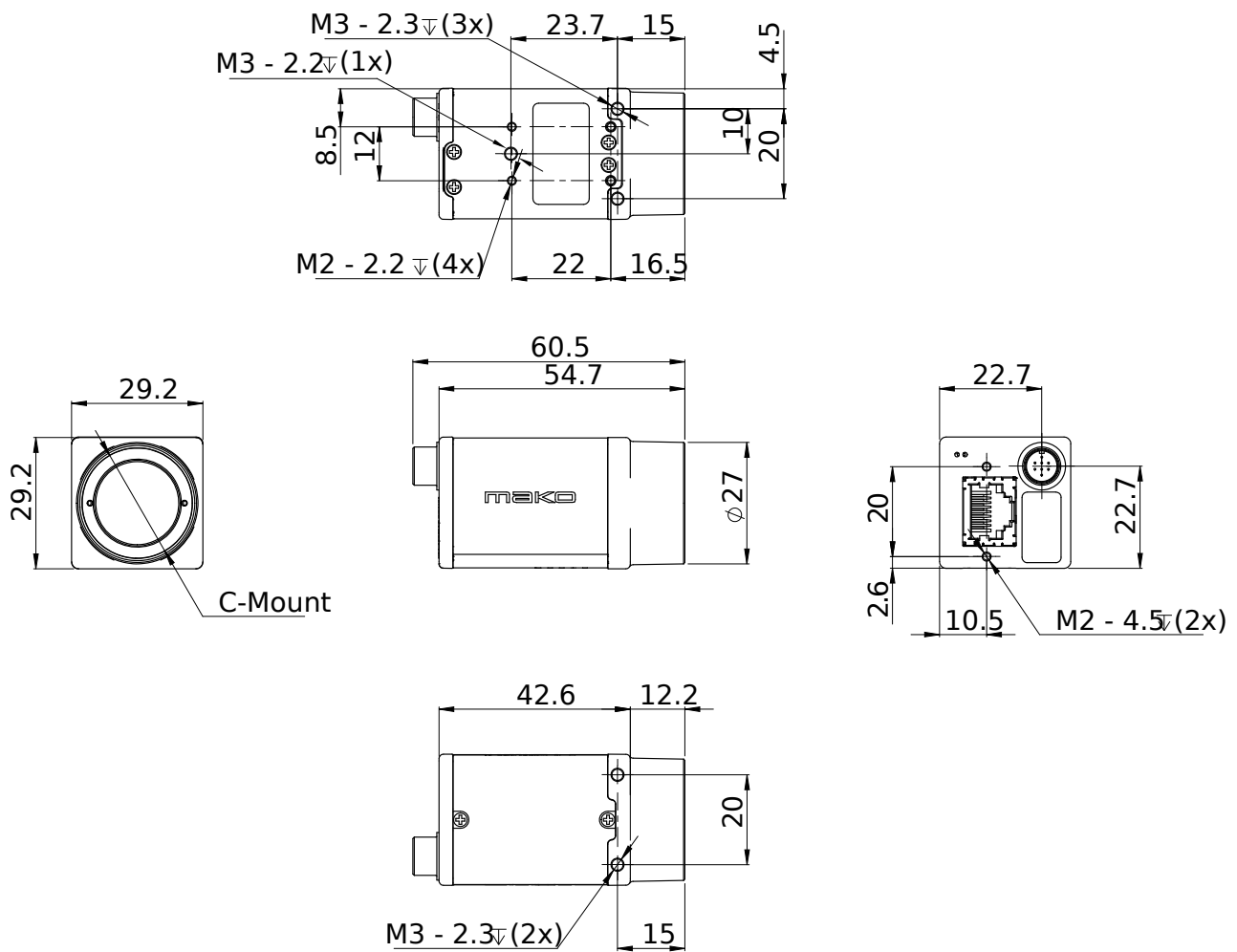
Image control: Other

- Binning
- Black level
- Color transformation (incl. hue, saturation; color models)
- Gamma
- LUT (look-up table)
- ROI (region of interest)

Camera control

- Acquisition frame rate
- Bandwidth control
- Event channel
- Firmware update in the field
- I/O and trigger control
- Image chunk data
- Stream hold
- Temperature monitoring
- User sets

Technical drawing



Applications

Mako G is suitable for all typical applications in machine vision:

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