



## Specifications

Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	2048 (H) × 2048 (V)
Sensor	CMOSIS/ams CMV4000 NIR
Sensor type	CMOS
Shutter mode	Global shutter
Sensor size	Type 1
Pixel size	5.5 μm × 5.5 μm
Lens mounts (available)	C-Mount, CS-Mount
Max. frame rate at full resolution	26 fps
ADC	12 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 NIR models measured at full resolution without optical filter. Contact Sales or AE for more information.

Quantum efficiency at 529 nm	79 %
Quantum efficiency at 850 nm	44 %
Temporal dark noise	13.6 e <sup>-</sup>
Saturation capacity	9500 e <sup>-</sup>
Dynamic range	56.6 dB
Absolute sensitivity threshold	14.1 e <sup>-</sup>

### Output

Bit depth	8/12 Bit
Monochrome pixel formats	Mono8, Mono12, Mono12Packed

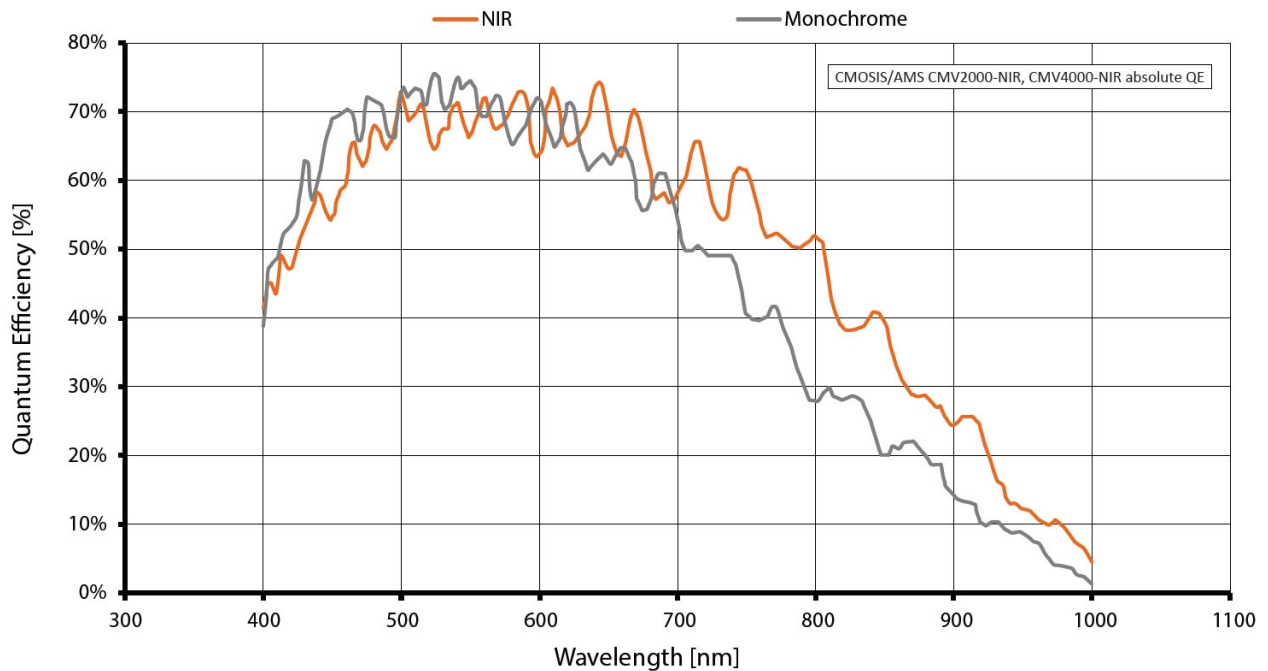
### General purpose inputs/outputs (GPIOs)

Opto-isolated I/Os	1 input, 3 outputs
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### Operating conditions/dimensions

Operating temperature	+5 °C to +45 °C housing temperature
Power requirements (DC)	10.8 to 26.4 VDC AUX or 802.3at Type 1 PoE
Power consumption	2.3 W at 12 VDC; 2.7 W PoE
Mass	80 g (with C-Mount)
Body dimensions (L × W × H in mm)	60.5 × 29.2 × 29.2 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B; CAN ICES-003

### Quantum efficiency



## Features

### Image control: Auto

- Auto exposure
- Auto gain

### Image control: Other

- Black level
- DPC (defect pixel correction)
- Gamma
- HDR mode
- 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
- PTP (IEEE 1588 Precision Time Protocol)
- Stream hold
- Temperature monitoring
- ToE (trigger over Ethernet, action commands)
- 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