

## Manta

### G-223



- CMOSIS CMOS sensor
- PoE option
- Angled head and board level variants
- Video-iris lens control

## Description

**GigE camera with CMOSIS CMV2000 sensor, global shutter**

Manta G-223B/G-223C is an industrial GigE camera with a 2/3" CMOSIS CMV2000 sensor. This camera offers several modular options.

### Options

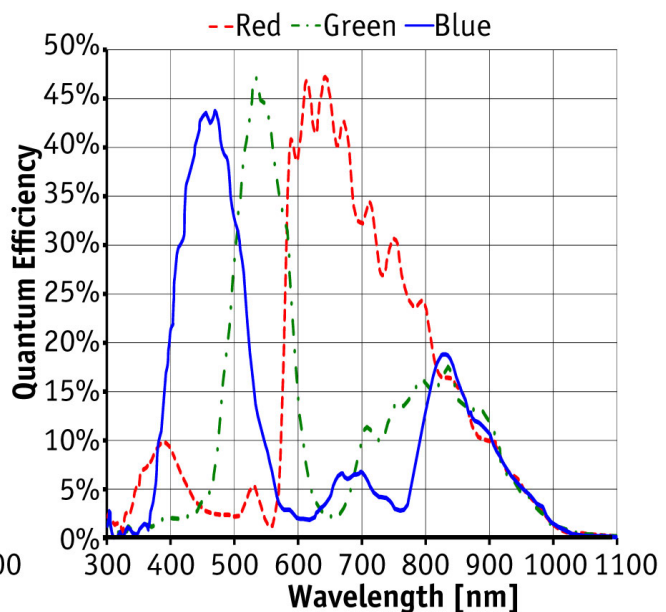
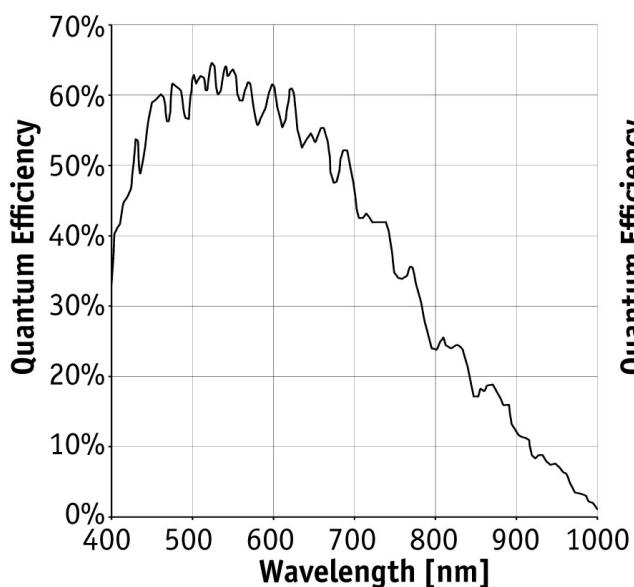
- Power over Ethernet (PoE)
- Various IR cut/pass filters and lens mounts
- Angled head, board level variants, white medical housing

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

## Specifications

| Manta                             | G-223  |
|-----------------------------------|--|
| Interface                         | IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional |
| Resolution                        | 2048 (H) × 1088 (V)                                |
| Sensor                            | CMOSIS CMV2000                                     |
| Sensor type                       | CMOS Progressive                                   |
| Cell size                         | 5.5 µm x 5.5 µm                                    |
| Lens mount                        | C-Mount  |
| Max frame rate at full resolution | 53.7 fps   |
| ADC                               | 12 bit   |
| Image buffer (RAM)                | 128 Mbyte  |
| <b>Output</b>                     |  |
| Bit depth                         | 8-12 bit   |

| Manta                                  | G-223  |
|--|--|
| Mono modes                             | Mono8, Mono12Packed, Mono12                      |
| Color modes YUV                        | YUV411Packed, YUV422Packed, YUV444Packed         |
| Color modes RGB                        | RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed |
| Raw modes                              | BayerGB8, BayerGB12, BayerGB12Packed             |
| General purpose inputs/outputs (GPIOs) |  |
| Opto-isolated I/Os                     | 2 inputs, 2 outputs                              |
| RS-232                                 | 1  |
| Operating conditions/dimensions        |  |
| Operating temperature                  | +5 °C to +45 °C ambient (without condensation)   |
| Power requirements (DC)                | 8 to 30 VDC; PoE                                 |
| Power consumption (@12 V)              | 2.7 W @ 12 VDC; 3.1 W PoE                        |
| Mass                                   | 190 g; 200 g (PoE)                               |
| Body dimensions (L × W × H in mm)      | 86.4 × 44 × 29 (including connectors)            |
| Regulations                            | CE, RoHS, REACH, WEEE, FCC, ICES                 |



## Features

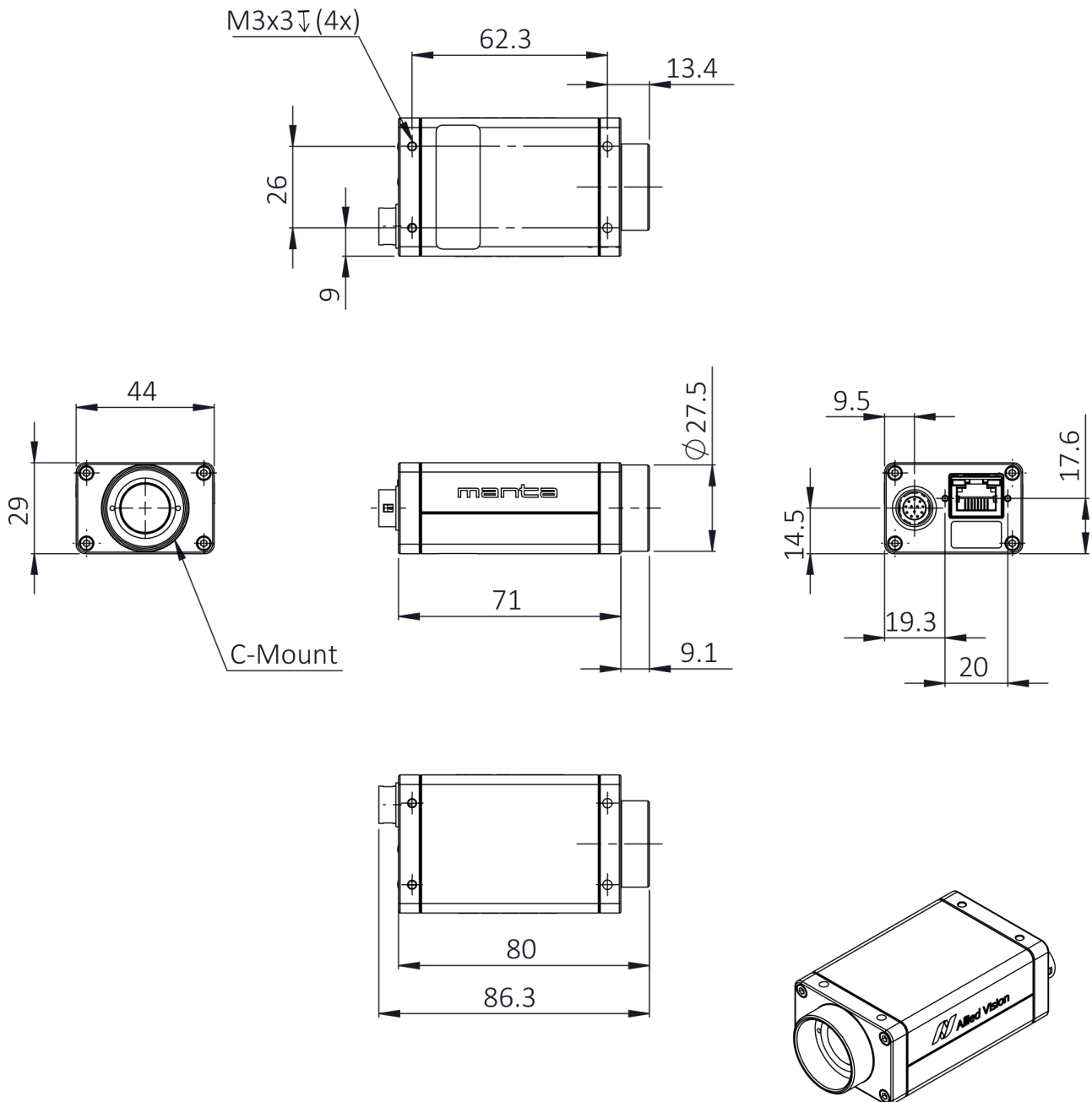
Manta G-223B/G-223C features include:

- Precision Time Protocol (IEEE 1588)
- Camera temperature monitoring
- Video-type auto iris



- Region of interest (ROI), separate ROI for auto features
- Decimation
- Auto gain (manual gain control: 0 to 26 dB)
- Auto exposure (18 #s to 126 s)
- Auto white balance
- Look-up tables (LUTs)
- Gamma
- Hue, saturation, color correction
- 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

Manta G-223B/G-223C is ideal for a wide range of applications including:



- Full HD solutions
- Machine vision
- Industrial inspection
- Security and surveillance
- Industrial image processing
- Intelligent traffic solutions (ITS)