

## Manta

### G-419



- CMOSIS CMV4000 sensor
- PoE option
- Angled head and board level variants
- Video-iris lens control

## Description

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

Manta G-419B/G-419C is an industrial GigE camera with a 1" CMOSIS CMV4000 CMOS sensor. This camera offers several modular options.

### Options

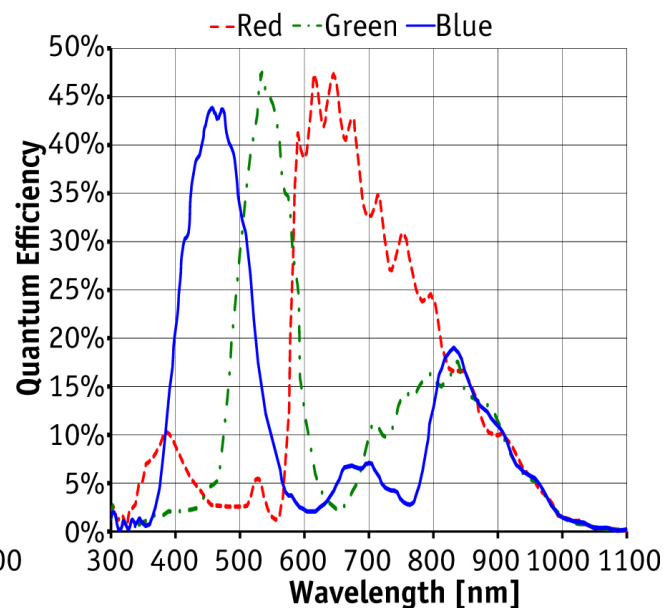
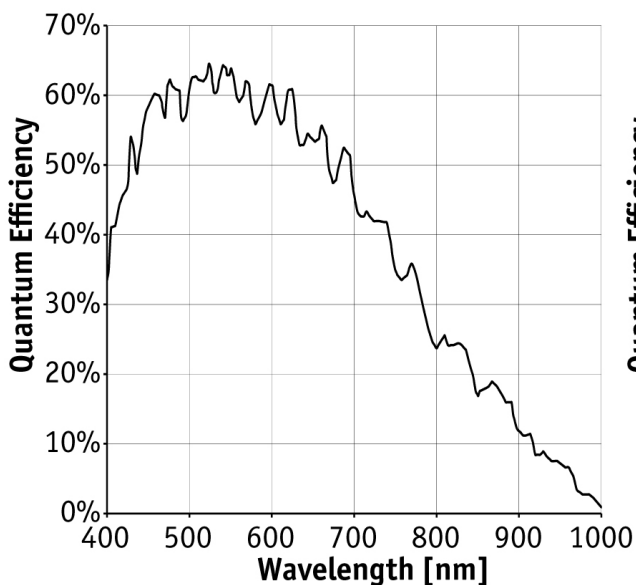
- Power over Ethernet (PoE)
- Various IR cut/pass filters and lens mounts
- Angled head, board level variants, white medical housing

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

## Specifications

Manta	G-419
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	2048 (H) × 2048 (V)
Sensor	CMOSIS CMV4000
Sensor type	CMOS Progressive
Cell size	5.5 µm x 5.5 µm
Lens mount	C-Mount
Max frame rate at full resolution	28.6 fps
ADC	12 bit
Image buffer (RAM)	128 Mbyte
<b>Output</b>	
Bit depth	8-12 bit

Manta	G-419
Mono modes	Mono8, Mono12, Mono12Packed
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

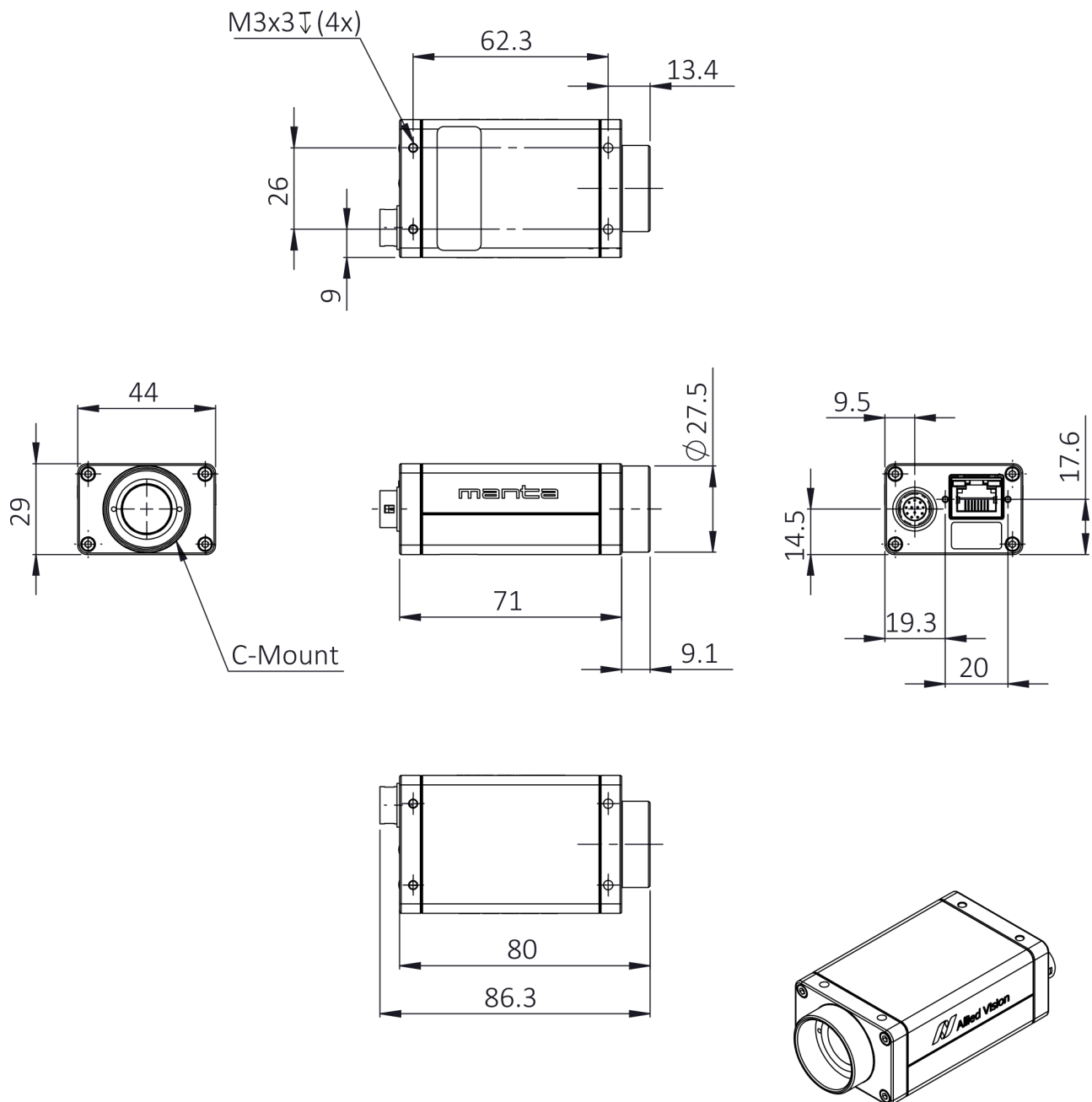
Manta G-419B/G-419C features include:

- 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 (34 #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-419B/G-419C is ideal for a wide range of applications including:



- Multimedia and entertainment
- Machine vision
- Security and surveillance
- Metrology and inspection systems
- Industrial image processing