

# Manta

## G-282



- Versatile 2.8 Megapixel camera
- 30.4 fps @ full resolution
- PoE option
- Video-iris lens control

## Description

### GigE camera with Sony ICX687 sensor

Manta G-282B/G-282C includes an 1/1.8" Sony ICX687 sensor with EXview HAD II technology. This sensor has the same resolution as the ICX674 at a more cost-effective price level. At full resolution, this camera runs 30.4 frames per second.

### Options

- Power over Ethernet (PoE)
- Various IR cut/pass filters and lens mounts
- White medical housing

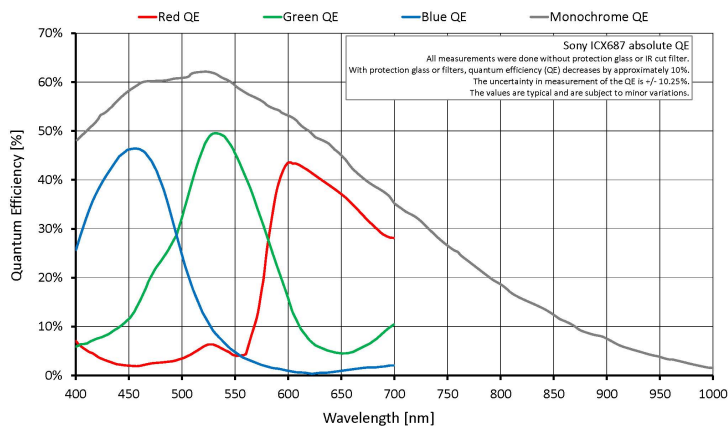
See the [#Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options.

Optical filter note: By default monochrome models ship with protection glass B 270 (ASG) and color models ship with an IRC Hoya C-5000 IR cut filter.

## Specifications

Manta	G-282
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1936 (H) × 1458 (V)
Sensor	Sony ICX687
Sensor type	CCD Progressive
Cell size	3.69 μm x 3.69 μm
Lens mount	C-Mount
Max frame rate at full resolution	30.4 fps
ADC	12 bit

Manta	G-282
Image buffer (RAM)	128 MByte
<b>Output</b>	
Bit depth	8-12 bit
Mono modes	Mono8, Mono12Packed, Mono12
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12Packed, BayerRG12
<b>General purpose inputs/outputs (GPIOs)</b>	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1
<b>Operating conditions/dimensions</b>	
Operating temperature	+5 °C to +45 °C ambient (without condensation)
Power requirements (DC)	8 to 30 VDC; PoE
Power consumption (@12 V)	3.5 W @ 12 VDC; 4.1 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

### Image optimization features:

- Auto gain (manual gain control: 0 to 32 dB)

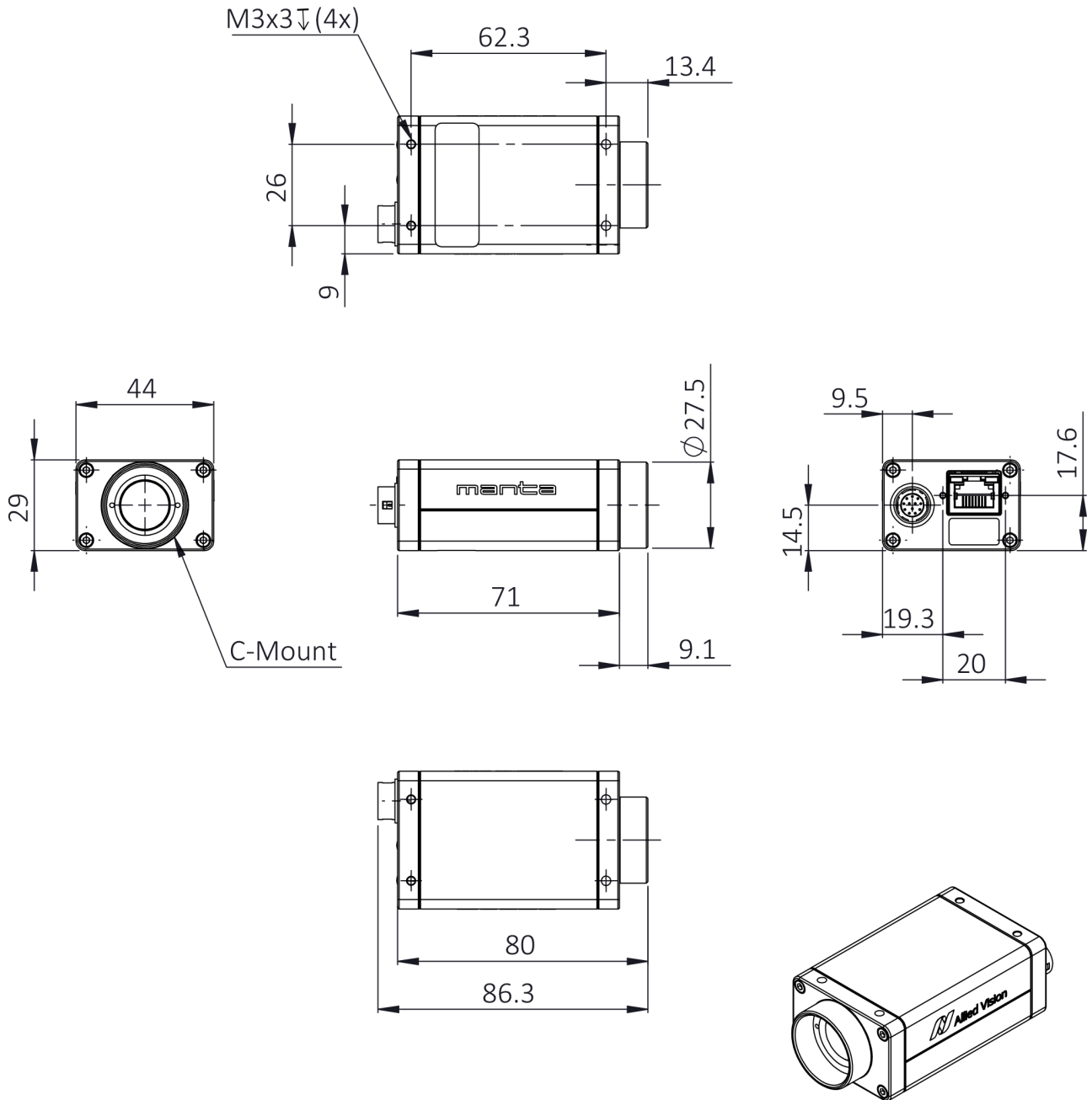


- Auto exposure (41 #s to 38 s)
- Auto white balance
- Binning
- Black level (offset)
- Color correction, hue, saturation#(color models only)
- Decimation
- Gamma correction
- Look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features

**Camera control features:**

- Auto-iris (video type)
- Event channel
- Image chunk data
- IEEE 1588 Precision Time Protocol
- Storable user sets
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger#ready, input, exposing, readout, imaging, strobe, GPO
- Tap mode switchable in Vimba Viewer 2.0 or later (two-tap, one-tap)
- Temperature monitoring (main board)
- Trigger over Ethernet (ToE) Action Commands

## Technical drawing



## Applications

Manta G-282B/G-282C is ideal for a wide range of applications including:



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