

Manta

G-609



- Versatile 6 Megapixel camera
- 15.2 fps at full resolution
- Power over Ethernet option
- Video-iris lens control

Description

GigE camera with Sony ICX694 CCD sensor

Manta G-609 is a machine vision camera that incorporates the high quality Type 1 (15.989 mm diagonal) Sony ICX694 CCD sensor with EXview HAD II technology. This sensor has excellent sensitivity and near-infrared response. At full resolution, this camera runs 15.2 frames per second. With a smaller region of interest, higher frame rates are possible. The Manta is one of Allied Vision's versatile GigE Vision cameras with a wide range of features. Particular highlights are the three look-up tables, sophisticated color correction capabilities, a robust metal housing, and many modular options. By default monochrome models ship with protection glass B 270 (ASG) and color models ship with an IRC Hoya C-5000 IR cut filter.

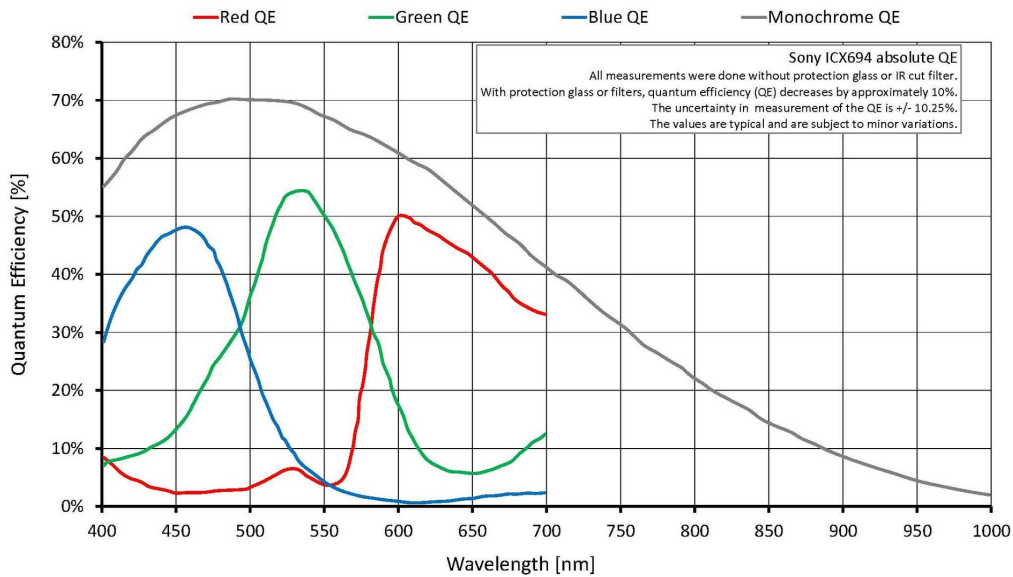
Benefits and features:

- Monochrome (G-609B) and color (G-609C) models
- GigE Vision interface with Power over Ethernet option
- Screw mount RJ45 Ethernet connector for secure operation in industrial environments
- Supports cable lengths up to 100 meters (CAT-5e or CAT-6)
- Comprehensive I/O functionality for simplified system integration
- Popular C-Mount lens mount
- Easy camera mounting via standard M3 threads on top and bottom of housing or optional tripod adapter
- Easy software integration with Allied Vision's [Vimba SDK](#) and compatibility to the most popular [third party image-processing libraries](#).

Specifications

Manta	G-609
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional

Manta	G-609
Resolution	2752 (H) × 2206 (V)
Sensor	Sony ICX694
Sensor type	CCD Progressive
Sensor size	Type 1
Pixel size	4.54 μm × 4.54 μm
Lens mount (default)	C-Mount
Max. frame rate at full resolution	15.2 fps
ADC	14 bit
Image buffer (RAM)	128 MByte
Output	
Bit depth	8/12/14 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
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 2 outputs
RS232	1
Operating conditions/dimensions	
Operating temperature	+5 °C to +45 °C ambient (without condensation)
Power requirements (DC)	8 to 30 VDC AUX or 802.3af PoE
Power consumption	3.9 W at 12 VDC; 4.6 W PoE
Mass	190 g; 200 g (PoE)
Body dimensions (L × W × H in mm)	86.4 × 44 × 29 (including connectors)
Regulations	CE: 2014/30/EU (EMC), 2011/65/EU, including amendment 2015/863/EU (RoHS); FCC Class B; CAN ICES-003



Features

Image optimization features:

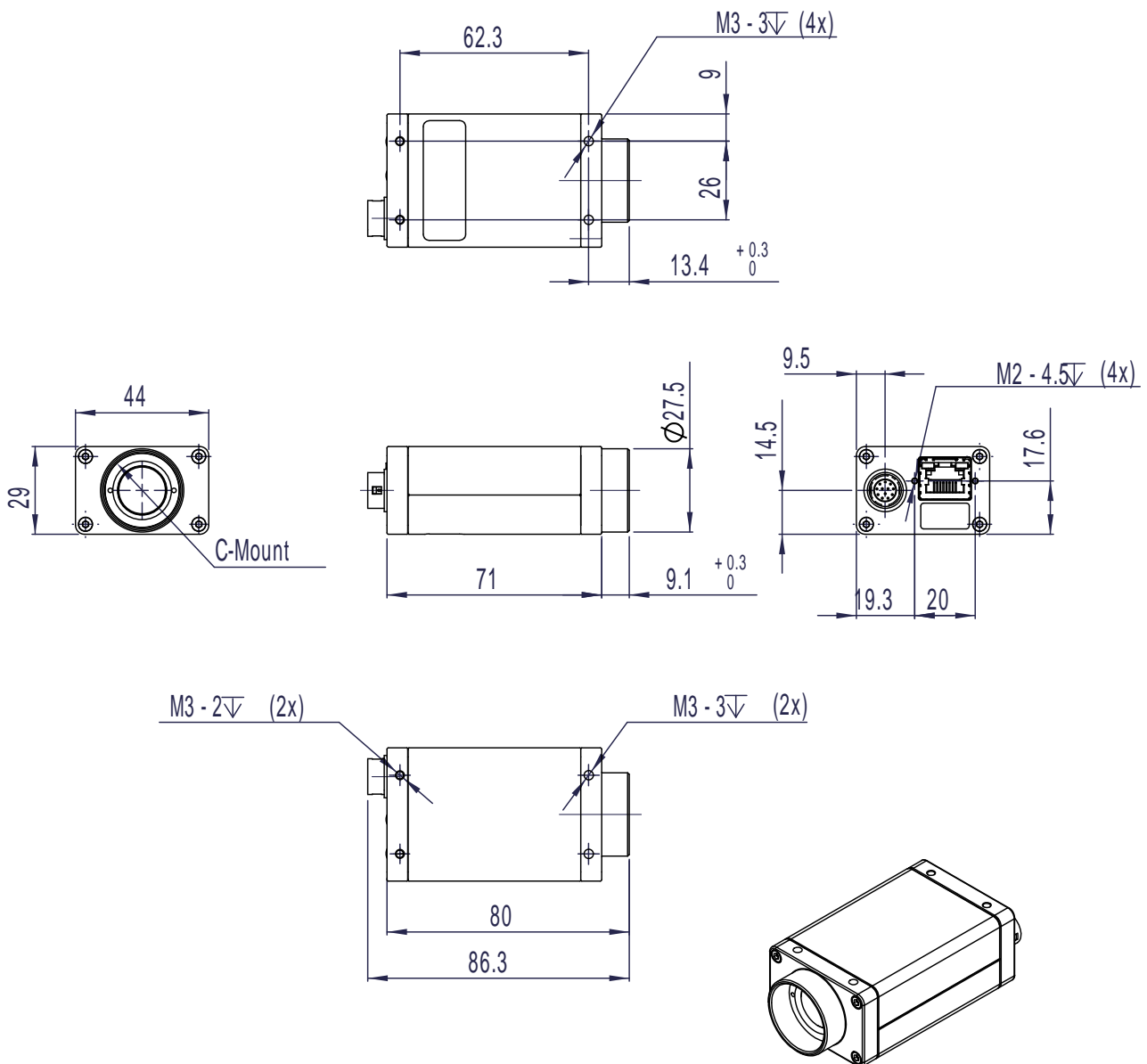
- Auto gain (manual gain control: 0 to 33 dB, 1dB increments)
- Auto exposure (41 μ s to 38 s; 1 μ s increments)
- Auto white balance (G-609C only)
- Binning
- Black level (offset)
- Color correction, hue, saturation (G-609C only)
- Decimation
- Gamma correction
- Three look-up tables (LUTs)
- Region 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 (PTP)
- 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-609 is ideal for a wide range of applications including:

- High-resolution surveillance
- Metrology and inspection systems
- Scientific measurement
- Microscopy
- Forensic solutions
- Intelligent traffic solutions (ITS)
- Applications requiring a highly sensitive camera (low light conditions)
- Applications requiring good sensitivity in the NIR spectrum