



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

Simplify your setup of multi-camera applications

Modular machine vision camera with GigE Vision interface

Manta G-609 with Sony ICX694 runs 15.2 frames per second at 6.1 MP resolution.

Manta is Allied Vision's most versatile GigE Vision camera series. It provides the largest choice of image sensors and its advanced feature set simplifies the setup of multi-camera applications. With its modular hardware concept, Manta offers nearly endless configuration possibilities to adapt the camera to your application.

Easy software integration with Allied Vision's [Vimba Suite](#) and compatibility to the most popular [third party image-processing libraries](#).

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

Specifications

Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	2752 (H) × 2206 (V)
Sensor	Sony ICX694
Sensor type	CCD Progressive
Shutter mode	GS (Global shutter)
Sensor size	Type 1
Pixel size	4.54 μm × 4.54 μm
Lens mounts (available)	C-Mount, CS-Mount
Max. frame rate at full resolution	15.2 fps
ADC	14 Bit
Image buffer (RAM)	128 MByte

Output

Bit depth	8-bit, 12-bit, or 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

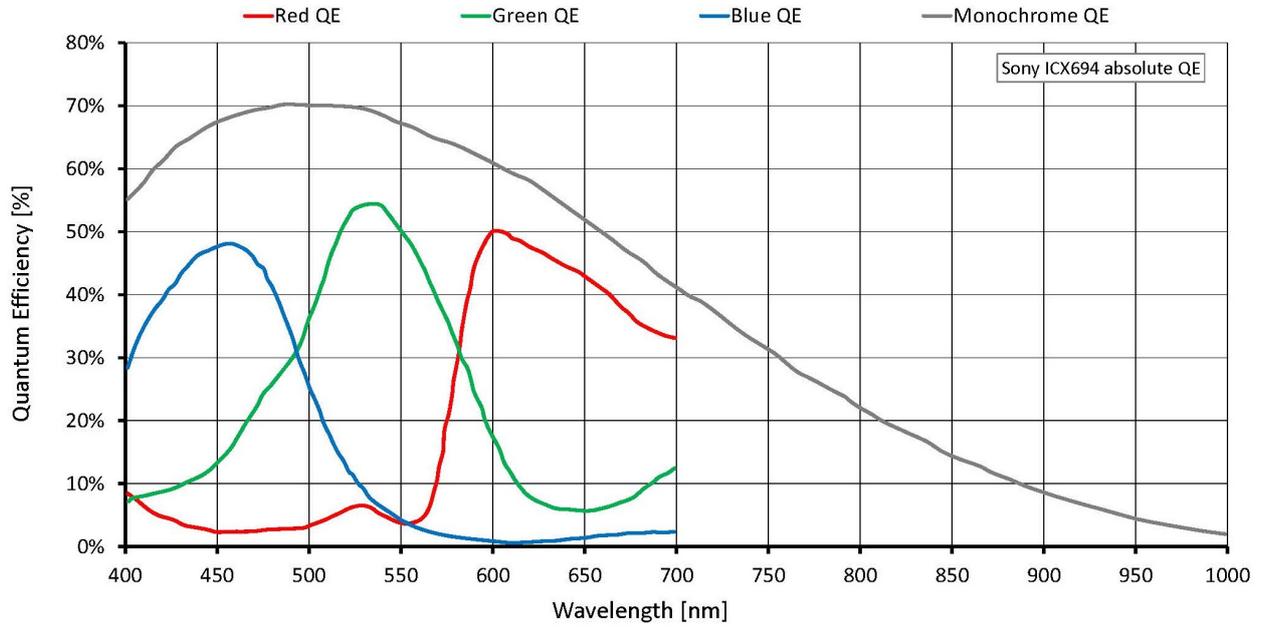
General purpose inputs/outputs (GPIOs)

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)

Quantum efficiency



Features

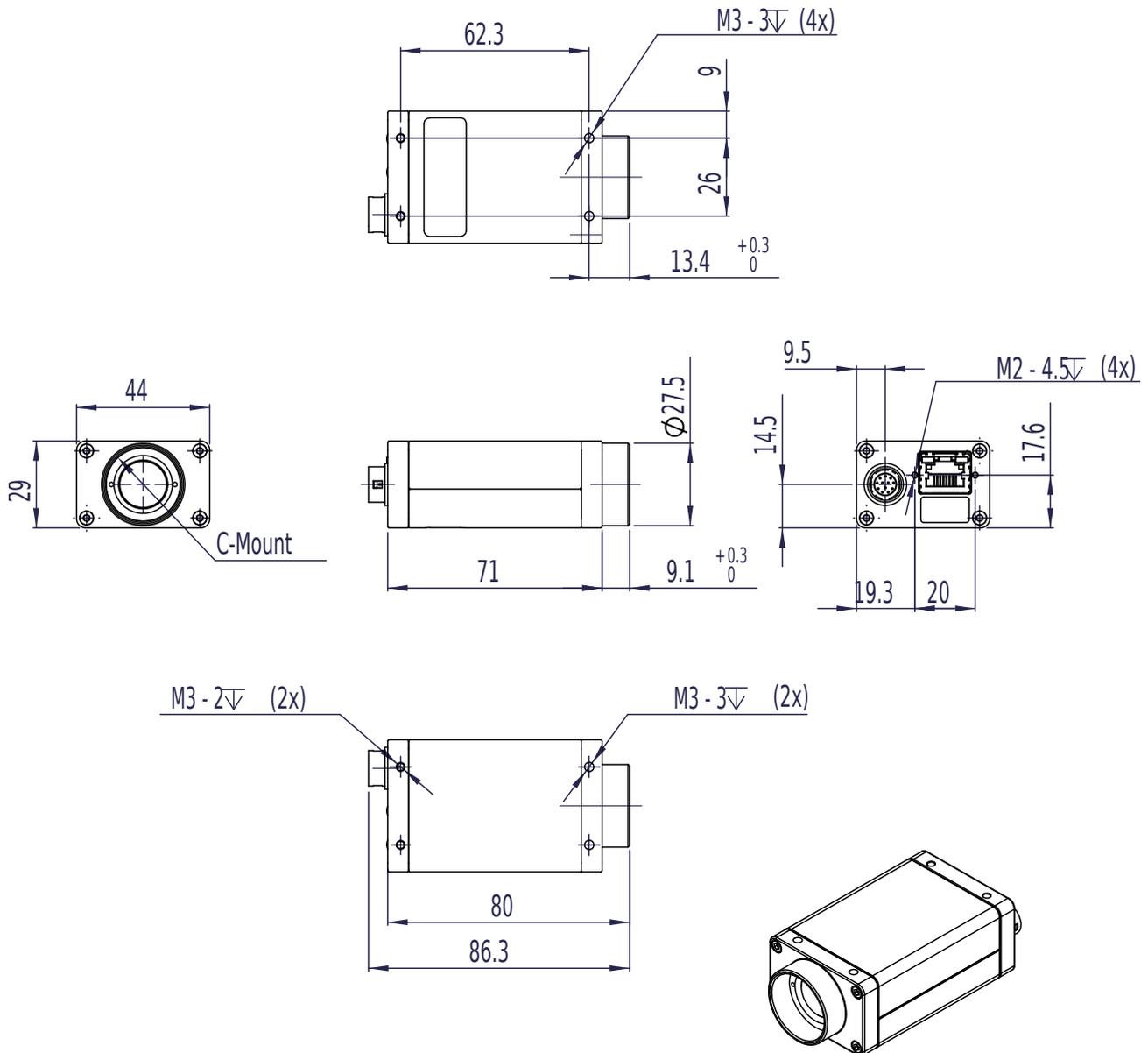
Image optimization features:

- 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
- Region of interest, separate region 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 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