

Manta G-235 is a machine vision camera that incorporates the high quality Type 1/1.2 (13.4 mm diagonal) Sony IMX174 CMOS sensor with Pregius global shutter technology. At full resolution, this camera runs 50.8 frames per second. With a smaller region of interest, higher frame rates are possible.

General

Model:	Manta G-235
Product series:	Manta
Status:	Available

Sensor

Sensor type:	Area scan
Chroma:	Mono or Color
Spectrum:	Visible
Resolution:	1,936 × 1,216 (2.40 MP)
Sensor model:	Sony IMX174
Sensor architecture (material):	CMOS
Shutter type(s):	Global Shutter
Sensor size:	13.40 mm diagonal (Type 1/1.2)
Pixel size:	5.86 µm × 5.86 µm

Pixel formats

Sensor bit depth:	8-bit or 12-bit
Monochrome pixel formats:	Mono8, Mono12Packed, Mono12
YUV pixel formats:	YUV411Packed, YUV422Packed, YUV444Packed
RGB pixel formats:	RGB8Packed, BGR8Packed
Bayer pixel formats:	BayerRG8, BayerRG12, BayerRG12Packed
Output color space:	8-bit or 12-bit

Imaging performance

Quantum efficiency @ 529 nm:	70 %
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Timing and gain

Max. frame rate: 50 fps

I/Os and power

Specific non-isolated lines: 1

Opto-isolated lines: 2 inputs, 2 outputs

Power supply: 8 to 30 VDC AUX or IEEE 802.3af PoE

Power consumption: External power: 2.8 W at 12 VDC | Power over Ethernet: 3.3 W

Operating conditions

Operating temperature (housing): 5 °C to 45 °C ambient (without condensation)

Mechanical properties

Body dimensions (L x W x H in mm): 86 × 44 × 29

Weight: 190 g

On-board memory and FPGA

Image buffer (RAM): 128 MByte

Non-volatile memory (Flash): 1024 KByte

Interfaces

Digital interface: IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional

Quantum Efficiency



