

Manta

G-283



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

Description

GigE camera with Sony ICX674 sensor

Manta G-283B/G-283C includes an 2/3" Sony ICX674 CCD sensor with EXview HAD II technology. This sensor is distinguished by reduced smear, higher quantum efficiency, and enhanced NIR sensitivity. At full resolution, this camera runs at 30.4 frames per second. This camera with its ICX674 sensor has an excellent image quality even under challenging light conditions.

Options

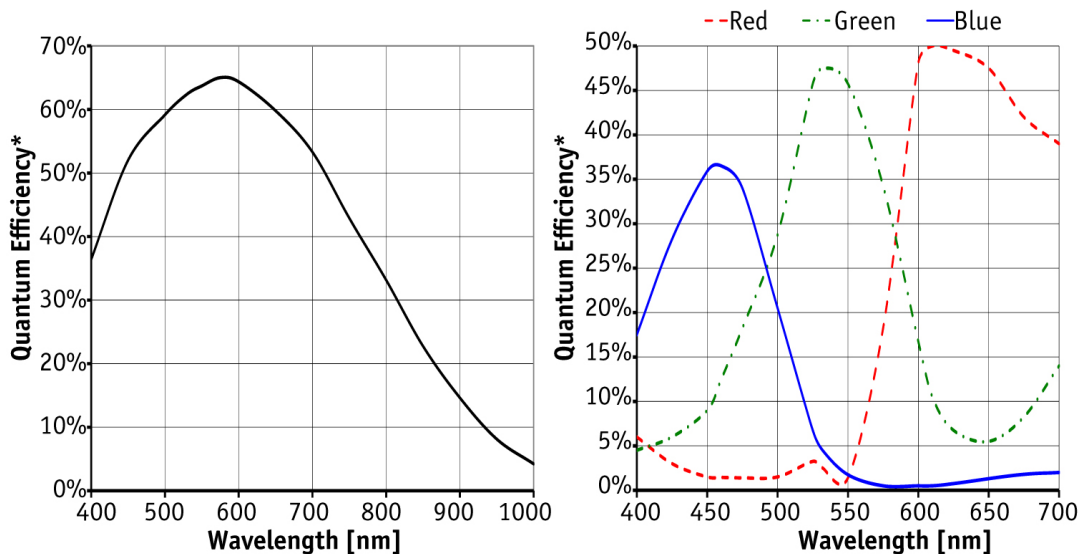
- Power over Ethernet (PoE)
- Various IR cut/pass filters and lens mounts
- White medical housing

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

Specifications

Manta	G-283
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1936 (H) × 1458 (V)
Sensor	Sony ICX674
Sensor type	CCD Progressive
Cell size	4.54 μm x 4.54 μm
Lens mount	C-Mount
Max frame rate at full resolution	30.4 fps
ADC	12 bit
Image buffer (RAM)	128 Mbyte

Manta	G-283
	Output
Bit depth	8/14-8/12 bit
Mono modes	Mono8, Mono12Packed, Mono12
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12, BayerRG12Packed
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)	3.7 W @ 12 VDC; 4.3 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



*QE measured without protection glass or filters. With glass or filters, quantum efficiency decreases by approximately 10%.

Features

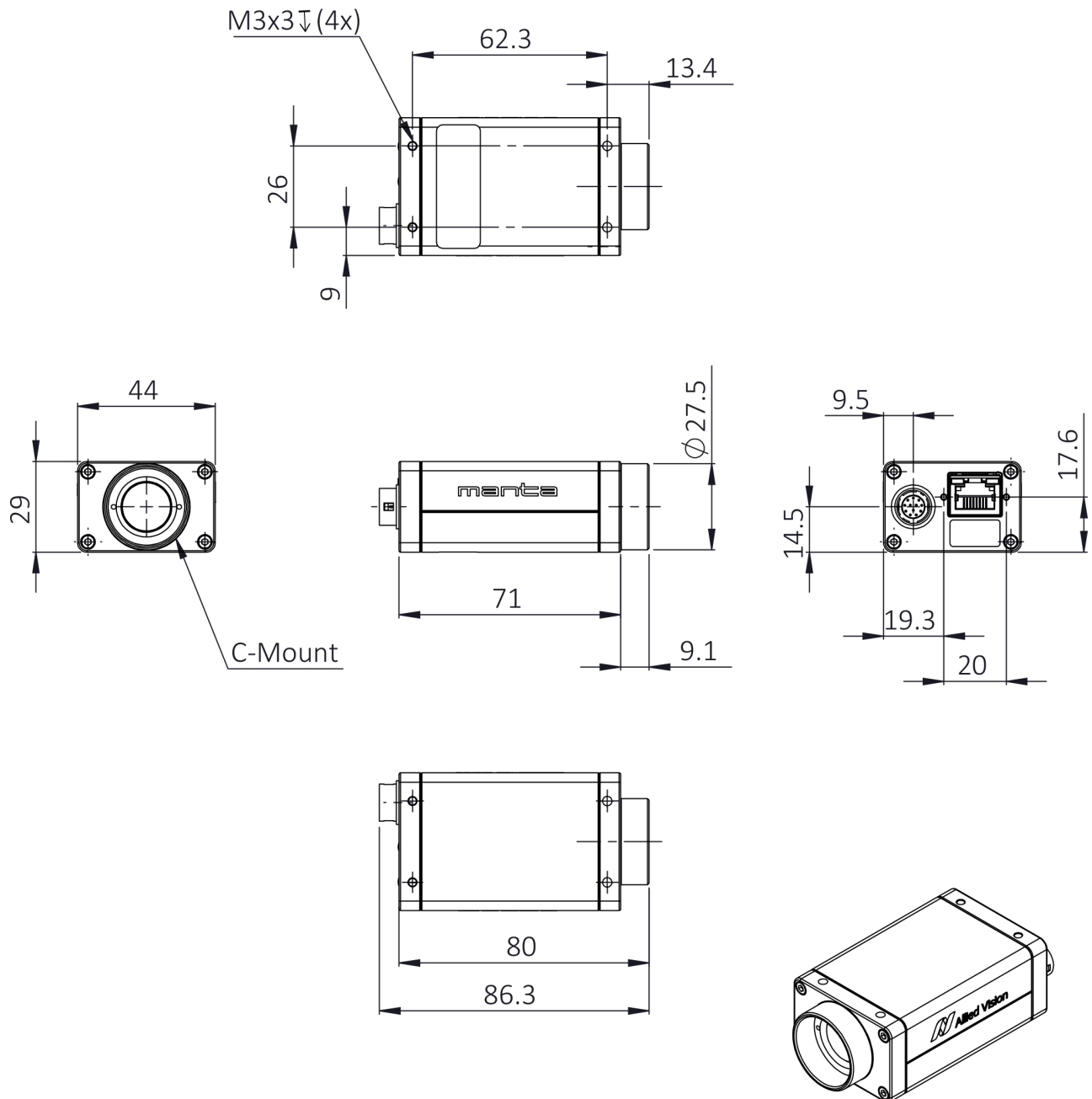
Manta G-283B/G-283C features include:

- Precision Time Protocol (IEEE 1588)
- Camera temperature monitoring



- Video-type auto iris
- Region of interest (ROI), separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 33 dB)
- Auto exposure (41 #s to 38 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-283B/G-283C is ideal for a wide range of applications including:



- 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