

Manta G-145 NIR



- NIR-enhanced
- PoE optional
- Angled head and boardlevel variants
- Video-iris lens control

Description

NIR optimized camera with Sony ICX285, excellent anti-blooming

Manta G-145B NIR is an NIR optimized camera with the popular Sony ICX285 ExView HAD sensor. Besides the enhanced NIR sensitivity, it is distinguished by an excellent anti-blooming. The Manta G-145B NIR provides three modes with higher frame rates or higher NIR sensitivity. These modes are switchable during operation.

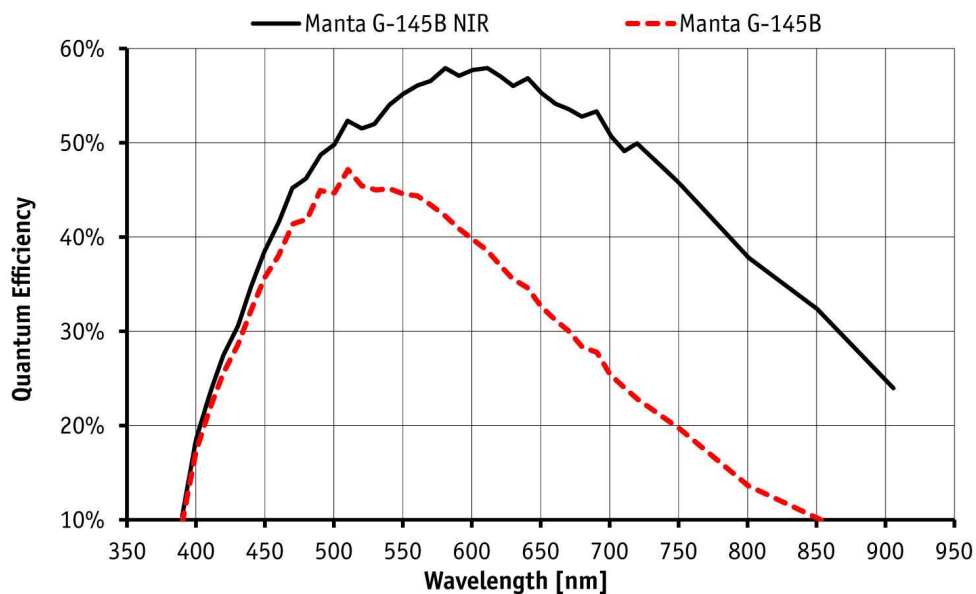
Options

- PoE (Power over Ethernet)
- Various IR cut/pass filters and lens mounts
- Angled head, board level version, white medical housing

Specifications

Manta	G-145 NIR
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1388 × 1038
Sensor	Sony ICX285
Sensor type	CCD Progressive
Sensor size	Type 2/3
Cell size	6.45 μm
Lens mount	C/CS-Mount
Max frame rate at full resolution	15 fps
ADC	12 bit
On-board FIFO	32 Mbyte
	Output
Bit depth	8-12 bit

Manta	G-145 NIR
Mono modes	Mono8, Mono12, Mono12Packed
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1
Operating conditions/dimensions	
Operating temperature	+5 °C ... +45 °C
Power requirements (DC)	PoE, or 8-30 VDC
Power consumption (@12 V)	4.9 W (PoE) / 4.2 W (non-PoE)
Mass	210 g (PoE) / 200 g (non-PoE)
Body dimensions (L × W × H in mm)	86.4 × 44 × 29 mm incl. connectors
Regulations	CE, FCC Class B, RoHS



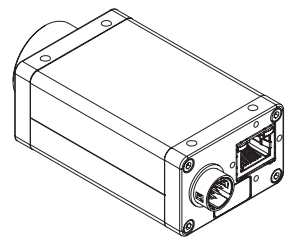
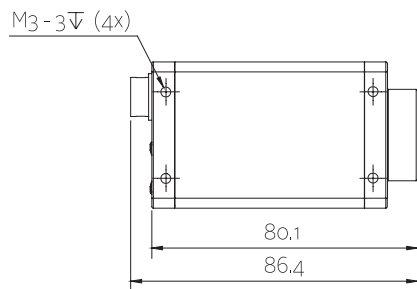
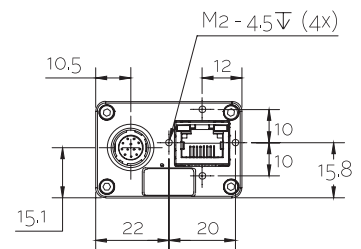
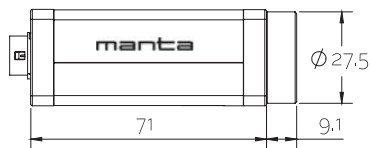
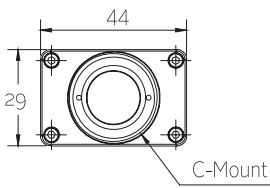
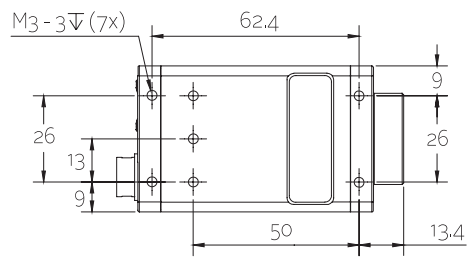
Features

- Three operating modes with higher NIR sensitivity or higher frame rates
- Video-type auto iris
- ROI, separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 33 dB)
- Auto exposure ($\approx 20 \mu\text{s}$ to 60 s, depending on NIR mode)
- LUTs (look-up tables)
- Gamma



- 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-145B NIR is a very affordable GigE Vision camera with excellent sensitivity in the visible spectrum, optimized NIR sensitivity, and outstanding anti-blooming. On request, board level versions with separate sensor head (up to 200 mm distance to camera mainboard) are available.

- Machine vision, visible and NIR spectrum
- Applications which require switching NIR sensitivity on/off
- Food inspection
- Medical and healthcare
- Microscopy
- ITS/Traffic monitoring
- ... and many more