

Manta G-145-30fps



Description

GigE Vision camera with Sony ICX285 - 30fps - PoE option

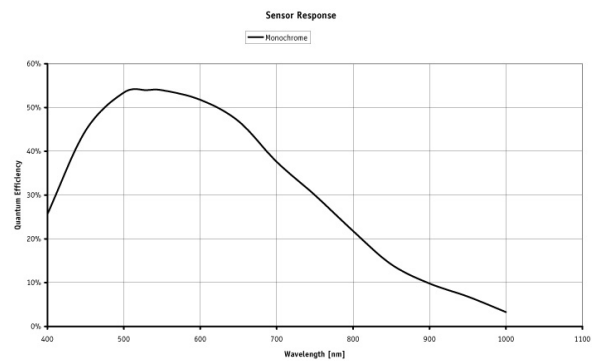
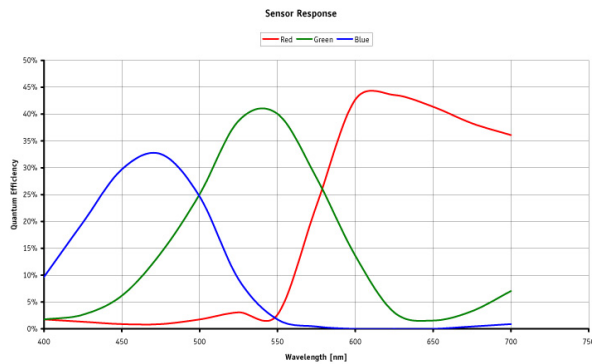
The Manta G-145B/C-30fps is the high-speed version of the Manta G-145B/C. It runs at 30 fps. With a smaller ROI, even higher frame rates are possible.

- Sony ICX285 (type 2/3), ExView HAD CCD, 1.4 Megapixels
- Trigger
 - External trigger event: rising/falling/any edge, level high/low
 - External trigger delay: 0 to 60 seconds in 1 μ s increments
- Sync modes
 - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Modular options
 - Various IR cut/pass filters, removed cover glass
 - Board level version
 - Angled head
 - White medical housing
 - **NEW: Power over Ethernet (PoE)**

Specifications

Manta		G-145-30fps	
Interface	IEEE 802.3 1000baseT		
Resolution	1388 x 1038		
Sensor	Sony ICX285		
Sensor type	CCD Progressive		
Sensor size	Type 2/3		
Cell size	6.45 µm		
Lens mount	C-Mount		
Max frame rate at full resolution	30 fps		
A/D	14 bit		
On-board FIFO	32 MB		
Output			
Bit depth	8-12 bit		
Mono modes	Mono8, Mono16, Mono12 packed		
Color modes YUV	YUV411, YUV422, YUV444		
Color modes RGB	RGB24, BGR24		
Raw modes	Bayer8, Bayer16, Bayer12 packed		
General purpose inputs/outputs (GPIOs)			
Opto-coupled I/Os	2 inputs, 2 outputs		
RS-232	1		
Operating conditions/Dimensions			
Operating temperature	+5 °C ... +45 °C		
Power requirements (DC)	8 V - 30 V		
Power consumption (12 V)	<3.6 W		
Mass	<200 g		
Body Dimensions (L x W x H in mm)	86.4 x 44 x 29 mm incl. connectors		
Regulations	CE, FCC Class B, RoHS		

[Download Manta technical drawing \(click here\)](#)



Smart features

- ROI (Region of Interest Readout)
- Exposure
 - Auto/one push/programmable
 - Exposure time 37 μ s to 60 s
- White balance
 - Auto/one push/programmable
- On-board debayering
- Hue, saturation, sharpness (color versions)
- Gain
 - Auto/one push/programmable
 - Manual gain control: 0 to 33 dB (1 dB/step)
- Three look-up tables (LUTs), gamma correction
- DSP subregion (selectable ROI for auto features)
- Binning (up to 8 x 14, independent x and y binning)
- Sub-sampling (decimation)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- Event channel
- Chunk data
- 5 storable user sets

Applications

The Manta G-145B/C-30fps is a fast GigE camera for machine vision and medical imaging applications. Its sensor is very sensitive in the visible spectrum, and also suitable for applications which require NIR (near infrared) sensitivity. Like the G-145B/C, the 30fps version is also available as boardlevel version with separate sensor head (up to 200 mm distance to camera mainboard).

- Machine vision
- Science and research
- Medical and healthcare
- Ophthalmology
- ITS/Traffic monitoring
- ... and many more

Application case studies:

- **Safe Sex Starts With Virtual Pillow Fight**

Interactive billboard using AVT Manta camera promotes “Designers Against AIDS” charity by inviting passers-by to join pillow fight with Belgian top model Hannelore Knuts.