



# Manta G-419 NIR



## Description

### \*Preliminary\*

The Manta G-419B NIR includes an 1" CMOSIS CMV4000 sensor. At full resolution, it runs 25 fps.

- CMOSIS CMV4000 (type 1), 4.2 Megapixels
- Sync modes
  - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Trigger
  - External trigger event: rising/falling/any edge, level high/low
  - External trigger delay: 0 to 60 s in 1  $\mu$ s increments
- Modular options
  - Various IR cut/pass filters
  - Board level version
  - Angled head
  - White medical housing
  - PoE (Power over Ethernet)

## Specifications

Manta	G-419 NIR
<b>Interface</b>	IEEE 802.3 1000baseT
<b>Resolution</b>	2048 x 2048
<b>Sensor</b>	CMOSIS CMV4000
<b>Sensor type</b>	CMOS Progressive
<b>Sensor size</b>	Type 1
<b>Cell size</b>	5.5 $\mu$ m
<b>Lens mount</b>	C-Mount
<b>Max frame rate at full resolution</b>	25 fps
<b>A/D</b>	12 bit
<b>On-board FIFO</b>	64 MB
	<b>Output</b>
<b>Bit depth</b>	8-12 bit
<b>Mono modes</b>	Mono8, Mono16, Mono12 packed
<b>Raw modes</b>	Bayer8, Bayer16, Bayer12 packed
	<b>General purpose inputs/outputs (GPIOs)</b>
<b>Opto-coupled I/Os</b>	2 inputs, 2 outputs
<b>RS-232</b>	1
	<b>Operating conditions/Dimensions</b>
<b>Operating temperature</b>	+5 °C ... +45 °C
<b>Power requirements (DC)</b>	8 V - 30 V
<b>Power consumption (12 V)</b>	tbd
<b>Mass</b>	tbd
<b>Body Dimensions (L x W x H in mm)</b>	86.4 x 44 x 29 mm incl. connectors
<b>Regulations</b>	CE, FCC Class B, RoHS



## Smart features

- ROI (Region of Interest Readout)
- Gain, exposure
- 3 Look-up tables (LUTs)
- Gamma (0.25 - 4.0)
- DSP subregion (selectable ROI for auto features)
- Binning
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- IEEE 1588 (PTP, Precision Time Protocol)
- Event channel
- Chunk data
- Storable user sets

## **Applications**

The Manta G-419B NIR is a robust industrial camera with 25 fps.

- Multimedia and entertainment
- Machine vision
- Security and surveillance
- Metrology and inspection systems
- Industrial image processing