



# Vision Sensor LM 2K SMART LINE SCAN CAMERA



## 2K SMART LINE SCAN CAMERA

The Vision Sensor LM is a worldwide unique complete line scan vision system in a form factor of a matchbox! The mini smart camera combines line scan technology with intelligent image processing in one product. With its 2k line scan resolution the Vision Sensor LM fits perfectly for image processing tasks that are best solved by using entry level line scan camera systems. With its free programmability and high performance based on ARM processors, the ultra compact industrial camera allows high flexibility in a wide range of applications: from production to pharma, packaging, food and printing. By using IMAGO's ViewIT software platform, development time can be drastically reduced, resulting in higher effectiveness.

### **Key Features**

- Ultra compact and powerful
- Embedded Line Scan Vision System
- 4 integrated LED's
- Line Trigger + Image Trigger
- Digital I/Os: 2 IN / 4 OUT
- ViewIT Software Framework



#### Processor

Туре	Quad Core ARM Cortex-A53
Processor Clock	4 x 1.8 GHz
DDR RAM	2 GB DDR4
Mass Storage	1 × µSD Card ≥ 32 GB
Interfaces	
Ethernet	1000 Mbit/s
Digital In/Out	2 x Input / 4 x Output, opto-isolated, 24V

#### Sensor

Optical Size	1/3"	1/3"	
Resolution / Scan rate	1920 × 1 @ 15.6 kHz 1920 × 2 @ 13.8 kHz 1920 × 4 @ 11.3 kHz 1920 × 8 @ 8.3 kHz 1920 × 16 @ 5.4 kHz	1920 × 1 @ 15.6 kHz 1920 × 2 @ 13.8 kHz 1920 × 4 @ 11.3 kHz 1920 × 8 @ 8.3 kHz 1920 × 16 @ 5.4 kHz	
Pixel Size	2.8 µm	2.8 µm	
Color	mono	color	

#### Technical Data Vision Sensor LM [Document Revision: 1.8 / 05.2025]



## **Lens Properties**

Lens Mount	S-Mount	S-Mount	S-Mount
Focal length	9 mm	6 mm	4 mm
Field of View (H x V)	$\approx 34^{\circ} \times \approx 20^{\circ}$	≈ 53° × ≈ 29°	$\approx 68^\circ \times \approx 42^\circ$

## LED Strobe

LED Color	White
Quantity	4 x High-Brightness
Pulse Duration	Synchronized with shutter

### Mechanical / Electrical

Power Supply	21 VDC - 28 VDC
Dimension $W \times H \times D$	45 mm x 53.7 mm x 25 mm
Weight	125 g
Temperature Range	+ 5 to + 40 °C
Ethernet Cable	0.5 m, M12 8 pin
I/O & Power Cable	0.5 m, M12 8 pin
Mounting	4 x M3

### Documentation

Hompage	Link
SDK Documentation	Link
Hardware Manual	Link

### **Dimensional Drawing**



## The smartest embedded vision components

For more than 30 years, IMAGO has been supplying machine vision technology to machine builders to improve product quality, make processes smoother, avoid production errors, reduce manufacturing costs and make systems more efficient.



## What we do

With the focus on what counts for our customers, we develop hardware components for industrial image processing. Be it in factory automation, the printing industry, for the food and beverage industry, pharmaceutical or logistics industry. IMAGO supplies vision systems, smart cameras, vision sensors and the appropriate software for the optimized use of our products. We pay special attention to miniaturization, high frame rates, increasing computing power and environmentally friendly power consumption. These characteristics already distunguish our products today. *And we are proud of them.*