



Vision Cam XM2

Smart Area Scan Camera

Smart Area Scan Camera

Vision Cam XM2

The Vision Cam XM2 is an intelligent, freely programmable high resolution camera. Multi-core ARM and GPUs provide high computing power. IMAGO's unique Real-Time Communication Controller (RTCC) provides user-programmable logic and internal units for I/Os. As it operates independent from the operating system many time-critical applications can be realized without using a real-time operating system. NVIDIA ORIN Nano/NX featuring 6-core/8-core ARM-based CPU and a powerful GPU runs under Ubuntu, providing developers a powerful basis for quick applications in C++ or other languages.

Key Features

- Sensor Trigger
- Digital I/Os: 4 IN / 4 OUT
- Serial Interface and 1 Gigabit/s Ethernet
- Free programmable under Ubuntu
- Fast developing with IMAGO's ViewIT available



Processor

Type	NVIDIA ORIN NANO ARM Cortex A78AE	NVIDIA ORIN NX ARM Cortex A78AE	NVIDIA ORIN NX ARM Cortex A78AE
Processor Clock	6 x 1.5 GHz	8 x 2 GHz	8 x 2 GHz
GPU	1024-core NVIDIA Ampere GPU	1024-core NVIDIA Ampere GPU	1024-core NVIDIA Ampere GPU
DDR RAM	8 GB LPDDR5 68 GB/s	8 GB LPDDR5 102 GB/s	16 GB LPDDR5 102 GB/s
Mass Storage	NVMe SSD ≥ 60 GB	NVMe SSD ≥ 60 GB	NVMe SSD ≥ 60 GB

Interfaces

Ethernet	1000 Mbit/s
Digital In/Out	4 x Input & 4 x Output (24V)
Serial Interface	1 x RS-232

Sensor

Optical Size	1/1.8"	1"	1/1.1"
Resolution	2432 x 2064 pixels	2560 x 2048 pixels	4096 x 3008 pixels
Pixel Size	2.74 μm	5 μm	2.74 μm
Framerate	96 fps	165 fps	42 fps
Partial Scan	yes	yes	yes
Color	mono / color	mono / color	mono / color

Lens Properties (Optional)

Lens Mount	C-Mount
Focal length	e.g. 4 mm / 6 mm / 8 mm / 12 mm / 16 mm / ...

LED Strobe (Optional)

White LED	LED Ring Illumination
Pulse Duration	Synchronized with shutter

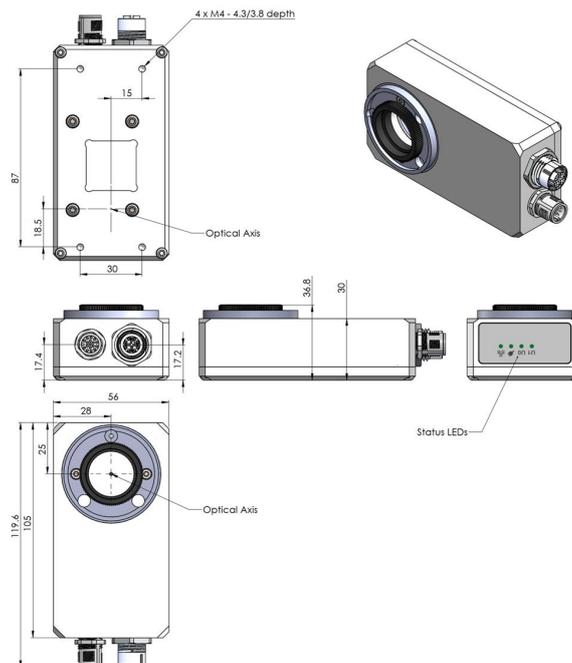
Mechanical / Electrical

Power Supply	11 VDC – 26 VDC (light requires ≈ 24 V)
Dimension W x H x D	56 mm x 120 mm x 30 mm (No lens no tube) 56 mm x 120 mm x 57 mm (Small tube) 56 mm x 120 mm x 83 mm (Big tube)
Weight	341 g (No lens and no tube) 378 g (No lens and small tube) 402 g (No lens and big tube)
Temperature Range	+5 °C ... +45 °C
Ethernet Connector	M12 - 8 Pin
I/O Connector	M12 - 17 Pin
Certification	IP50, CE Optional: IP54, CE
Mounting	4 x M4

Documentation

Homepage	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 distinguish our products today.

And we are proud of them.