IMAGO
TECHNOLOGIES

NVIDIA.

Vision Cam XM2
Smart Area Scan Camera

SMALL 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 featuring 6-core ARM-based CPU and a powerful GPU runs under Ubuntu, providing developers a powerful basis for quick applications in C++ or other languages.

sample configuration

Key Features

- Sensor Trigger
- Digital I/Os with opto-isolators:
  4 IN / 4 OUT

- Monochrome sensor, 5 megapixels
- Serial Interface and 1 Gigabit/s Ethernet
- Free programmable under Ubuntu
- Fast developing with IMAGO's ViewIT available

Sensor Options / CMOS – Global Shutter

Optical Size	1"
Resolution (pixels)	2.560 × 2.048
Pixelsize	$(5.0 \ \mu m)^2$
Framerate (full res.)	165 fps
Framerate (VGA res.)	1400 fps (1.4 kHz)
Partial Scan	yes
Color	mono

Processor/GPU/ Storage

Manufacturer, Type	NVIDIA
ARM Cortex-A78 Processor Clock	6 × 1.5 GHz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores
DDR RAM	8 GB LPDDR5 68 GB/s
Mass Storage	NVMe SSD 60 GB

Interfaces

Ethernet	1000 MBit/s
Serial Interface	RS-232
Digital In/Out	4 × Input / 4 × Output, 24V
Encoder	[Optional: RS-422 Inputs]

Mechanical / Electrical

Lens Mount	C-Mount
I/O Connector	M12 - 17 Pin
Ethernet Connector	M12 - 8 Pin
Dimension L × W × D	120 mm × 56 mm × (30 mm + lens tube 27 – 80 mm)
Weight (without lens)	314 g
Power Supply	11 V_{DC} – 26 V_{DC} (internal LED ring light requires ≈ 24 V)
Temperature Range	+5 °C … +45 °C
Mounting	4 × M4

Order number:
10100798

Dimensions

*referring to tube lengths
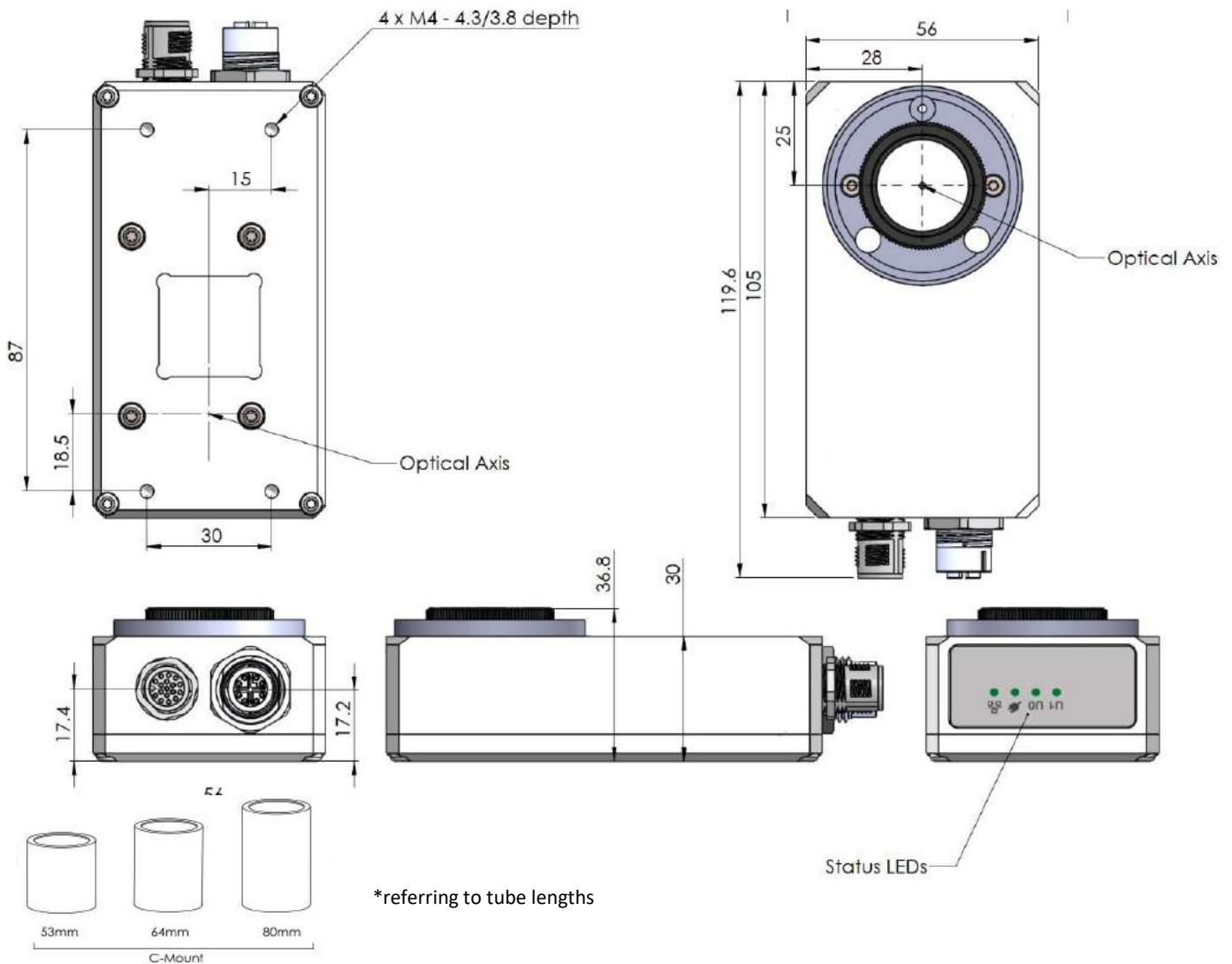
The smartest embedded vision components

For more than 25 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.