



Vision Cam XM

Smart Area Scan Camera

SMART AREA SCAN CAMERA Vision Cam XM

The VisionCam XM is a versatile programmable camera with IMAGO's unique Real-Time Communication Controller (RTCC). The 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.

Next to this the dual-core ARM Cortex-A15 runs under Debian based Linux which provides developers a powerful basis for quick applications in C++ or other languages. Halcon Embedded as the leading library for machine vision is also supported.

Key Features

- LED Controller for integrated and external LED's with up to 2A current
- Sensor Trigger
- Digital I/Os with opto-isolators: 2 IN / 4 OUT



- Color and monochrome sensors of up to 5.3 megapixels
- Serial Interface and 1 Gigabit/s Ethernet
- Industrial Ethernet Protocols on request
- Free programmable under Debian based Linux
- Fast developing with IMAGO's ViewIT available
- Halcon Embedded support



sample configuration

Sensor Options / CMOS – Global Shutter

Optical Size	1/3"	1/1.8"	1/1.8"	1.1"
Resolution (pixels)	752 × 480	1280 × 1024	1600 × 1200	2592 × 2048
Pixelsize	(6.0 μm) ²	(5.3 μm) ²	(4.5 μm) ²	(4.8 μm) ²
Framerate (full res.)	63 fps	65 fps	55 fps	40 fps
Framerate (VGA res.)	74 fps	136 fps	134 fps	460 fps
Partial Scan	yes	yes	yes	yes
Color	mono / color	mono / color	mono / color	mono / color
HW-demosaiing	yes	yes	yes	no

Processor / Storage

Manufacturer, Type	Texas Instruments AM5728 Sitara
ARM Cortex-A15 Processor Clock	2 × 1.5 GHz
Floating-Point DSP Processor Clock	2 × 750 MHz
DDR RAM	1 GB DDR3L
Mass Storage	1 × μSD Card ≥ 32 GB (accessible)

Interfaces

Ethernet	1000 MBit/s
Serial Interface	1 × RS-232
Digital In/Out	2 × Input / 4 × Output, opto-isolated, 24V
Fieldbus	[Optional: PROFINET, EtherCAT, SERCOS, ...]

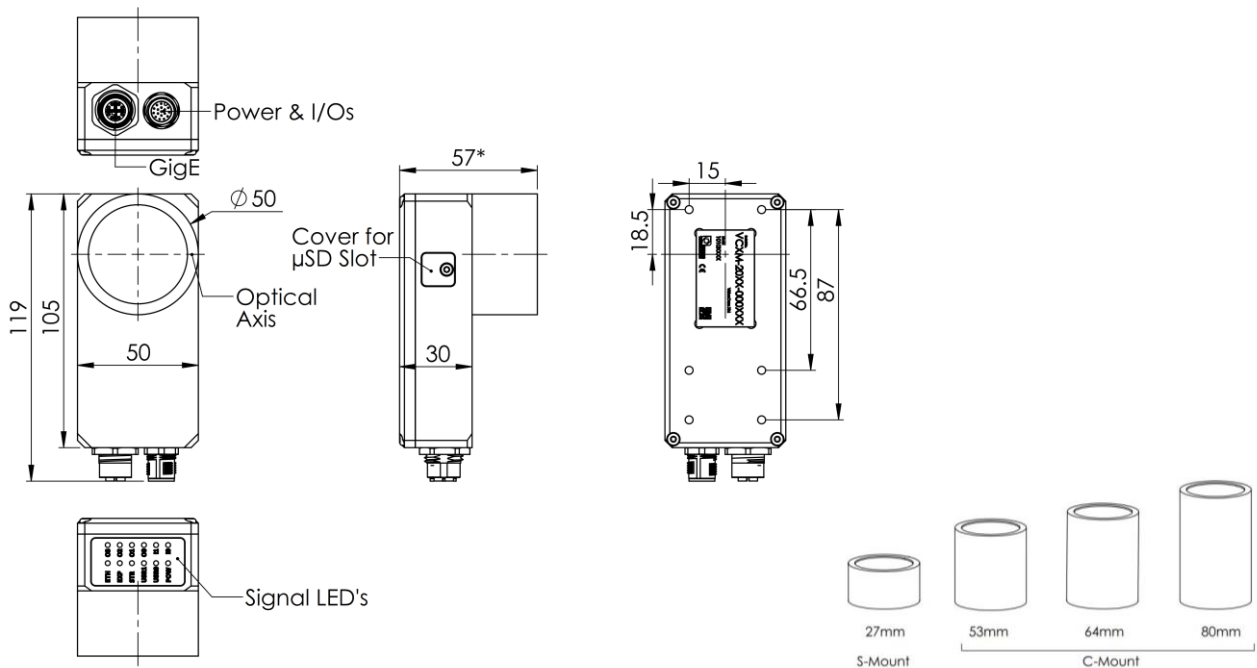
Mechanical / Electrical

Lens Mount	S-Mount or C-Mount (CS-Mount option for WVGA)
I/O Connector	M12 - 17 Pin
Ethernet Connector	M12 - 8 Pin [Option: RJ 45]
Dimension L × W × D	105 mm × 50 mm × (30 mm + lens tube 27 – 80 mm)
Weight (without lens)	180 g
Power Supply	11 V _{DC} – 26 V _{DC} (internal LED ring light requires ≈ 24 V)
Temperature Range	+5 °C ... +50 °C
Protection Class	IP 54, only with M12 connectors and lens tube
Mounting	6 × M4

LED Strobe

Location	Internal ring light or external LED
Maximum Strobe Current	2 A
Strobe Current Step Size	10 mA
Minimum Flash Duration @ 2A	10 μs
Flash Duration Step Size	1 μs

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.