

PRELIMINARY

# VCS-245MX2-M/C12H00

Ultra High Resolution CMOS Digital Camera  
with CoaXPress 2.0 Interface



The VCS-245MX2-M/C12H00 camera is a new 245-Megapixel CoaXPress camera equipped with the CoaXPress interface and based on the latest BSI (Backside-Illuminated) CMOS image sensor technology (IMX811) from Sony Semiconductor Solutions Corporation. Equipped with the Viewsorks' innovative technologies proved by world's top FPD manufacturers, this camera offers not only fast frame rates but also highly uniformed images.

Featured with high speed and high performance, the VCS-245MX2-M/C12H00 camera is an excellent choice for applications that require high data rates and resolutions, such as FPD, PCB and semiconductor inspections.

## Main Features

- BSI (Backside Illuminated) CMOS Image Sensor
- CoaXPress 2.0 Interface up to 12.4 fps at 50 Gbps using 4 Channels
- Rolling Shutter CMOS Technology
- DSNU and PRNU Correction
- Defective Pixel Correction
- Pixel by Pixel Flat Field Correction
- GenICam Compatible – XML based Control

## Applications

- FPD and Electronics Inspection
- PCB Inspection
- Electronics Inspection
- Semiconductor Inspection

## Specifications

Model		VCS-245MX2-M/C12H00
Resolution (H × V)		19,200 × 12,800
Sensor (Type)		SONY IMX811 (Back-Illuminated CMOS Image Sensor)
Sensor Size (Diagonal)		64.84 mm
Pixel Size		2.81 μm × 2.81 μm
Interface		CoaXPress 2.0 (CXP-12)
Max. Frame Rate (Trigger mode non-overlap)		12.4fps@12bit
Exposure Time (1 μs step)		1 μs to 60 s (1 μs step)
Partial Scan (Max. Speed)		449 fps at 8 Lines
Pixel Data Format	Monochrome	8/10/12/14/16 bit
	Color	RG Bayer 8/10/12/14/16 bit
Electronic Shutter		Rolling Shutter
Exposure Mode		Timed, Trigger Width
Dynamic Range		72dB@12bit, 76dB@14bit, and 78dB@16bit
Gain	Digital Gain	×1 to ×12
	Analog Gain	×1 to ×32
Digital Black Level		0 to 4095 LSB at 16bit (1 LSB step)
Dimension		90 mm × 90 mm × 81 mm
Weight		1.1 kg
Temperature		Operating: 0°C to 40°C, Storage: -40°C to 70°C
Trigger Synchronization	Overlapped	Free-Run
	Non-overlapped	Hardware Trigger, Software Trigger or CXP
External Trigger		3.3 V to 24.0 V, 10 mA, Logical Level Input Optically Isolated
Digital IO		TTL Level Exposure Active, Frame Active, User Output, Timer, and Strobe Output
Lens Mount		M72-mount, Custom mount available upon request
Power	Adapter	11 to 24V DC, Typ. 24W
	PoCXP	24V DC, Minimum of two PoCXP cables required
Compliance		CE, FCC, and KC
API SDK		Vieworks Imaging Solution 7.X

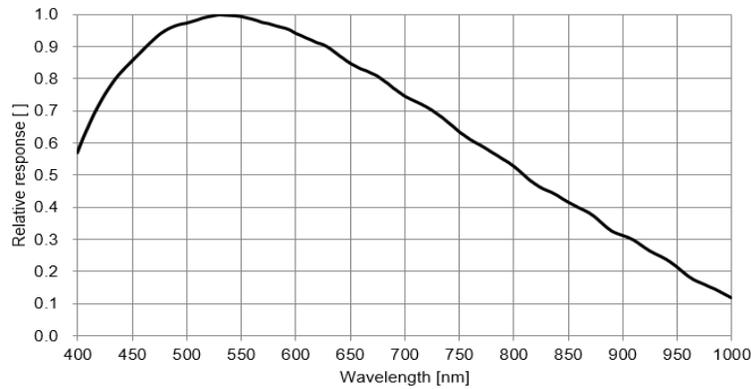
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The Fastest Speed & High Resolution CMOS Digital Camera with CoaXPress 2.0 Interface

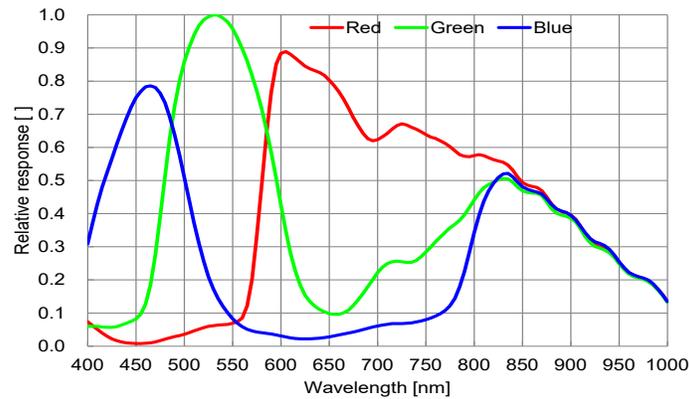


## Spectral Response

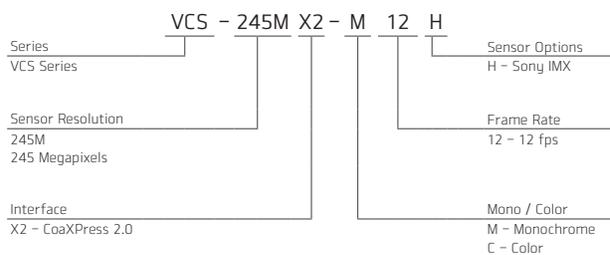
- Mono



- Color



## Ordering Scheme



## Connector Specification

### Power



1, 2, 3: +12V DC    4, 5, 6: GND  
(HR10A-7R-6PB)

### Control



1: Trigger IN+    2: Trigger IN-  
3: Strobe Out-(GND)    4: Strobe Out+  
(HR10A-7R-4S)

### Data Transfer / Communications

Micro-BNC



CH1 CH2 CH3 CH4

CH1: Master Connection  
75 Ω, Micro-BNC (HD-BNC)

Connectors on camera body

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## Mechanical Dimensions

Unit: mm

