

# OEM0-D2048-C01-3D06-G2

The camera OEM0-D2048-C01-3D06-G2 is based on the CMOSIS CMV4000 V3 CMOS image sensor



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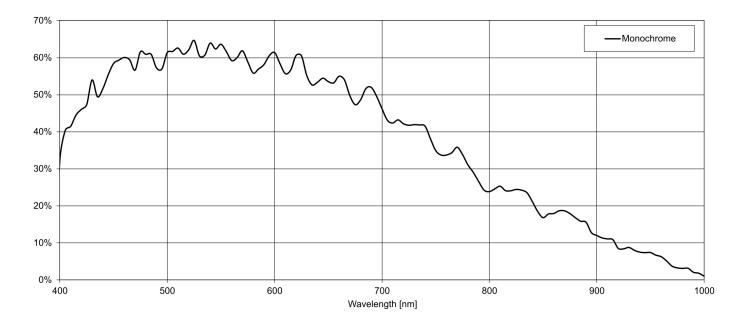
#### Features

- CMOSIS CMV4000 V3 image sensor
- 2048 x 2048 pixel resolution
- Good NIR spectral response
- Suitable for standard and low light applications
- Up to 14842 profiles per second (pps) @ 2048 x
- 11 resolution

- Global shutter
- Available in monochrome
- Extended sensor and camera features
- Up to 10bit greyscale resolution
- GigEVision interface (PoE)







# **Quantum Efficiency Image Sensor**

#### **Image Sensor Specifications**

Manufacturer / Type	CMOSIS, CMV4000	
Technology	CMOS	
Optical format	1"	
Optical diagonal	15.92mm	
Resolution	2048 x 2048	
Pixel size	5.5μm x 5.5μm	
Active optical area	11.26mm x 11.26mm	
Dark current	125e-/s	
Read out noise	13e-	
Full well capacity / SNR	11ke- / 105:1	
Spectral range	Monochrome: 330 to 930nm (to 10% of peak responsivity)	
Responsivity	Monochrome: 1200 x 10 <sup>3</sup> DN / (J/m <sup>2</sup> ) @ 540nm / 8bit	
Quantum Efficiency	Monochrome: < 57%	
Optical fill factor	42% without micro lenses	
Dynamic range	60dB	
Characteristic curve	Linear, Piecewise linear	
Shutter mode	Global shutter	

# **Camera Specifications**

Interface	GigE		
Frame rate	14842pps		
Pixel clock	n/a		
Camera taps	n/a		
Greyscale resolution	8bit		
Fixed pattern noise (FPN)	< 1DN RMS @ 8Bit		
Exposure time range	10µs - 419ms		
Analog gain	yes		
Digital gain	0.1 to 15.99 (FineGain)		
Trigger Modes	Free running (non triggered), external Trigger, SWTrigger		
Features	Configurable region of interest (ROI), Decimation in y-direction, 2 look-up		
	tables (12-to-8Bit) on user-defined image region (Region-LUT), Constant		
	frame rate adjustable by software, Temperature monitoring of camera,		
	Camera informations readable over SDK, Ultra low trigger delay and low		
	trigger jitter, Extended trigger input and strobe output functionality, Status		
	line in picture, with Shaft Encoder		
Operation temperature / moisture	0°C + 50°C / 20% 80%		
Storage temperature / moisture	-25°C 60°C / 20% 95%		
Power supply	PoE (compliant according to IEEE 802.3af standard Class: 2)		
Power consumption	< 4.2W		
Lens mount	C-Mount		
I/O Inputs	2x Opto-isolated		
I/O Outputs	1x Opto-isolated		
Dimensions	26.5 x 26.5 x 50.5mm <sup>3</sup>		
Mass	75g		
Connector I/O (Power)	Binder 4-pole (mating plug M5 x 0.5, Series 707)		
Connector Interface	X-coded M12		
Conformity	CE / RoHS / WEEE		
IP Code	IP40		

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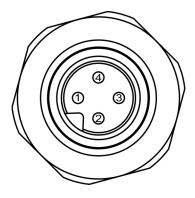
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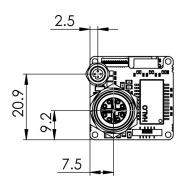


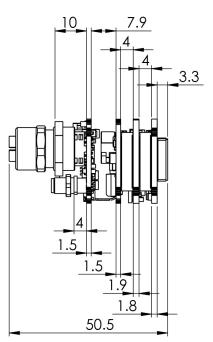
# Connectors

Pin	I/O Type	Name	Description
1	1	ISO_IN0	Trigger input 0 (opto-isolated)
2	PWR	ISO_GND	I/O GND 0V
3	0	ISO_OUT	Strobe output (opto-isolated)
4	1	ISO_IN1	Trigger input 1 (opto-isolated)



#### Dimensions





26.5

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P1.0

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## Explanation

DN DigitalNumber (equals to LSB)

e<sup>-</sup> Electrons

## **Order Information**

OEM0-D2048-C01-3D06-G2 BW model

#### Compatibility



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