

# COE-013-M-USB-040-IR-C | DATASHEET

Area scan camera -, CMOS, Global shutter, 1280 x 1024, 1.3 MP, 4.8 μm pix, 1/2", Mono, 201 fps,

# USB 3.0, USB 3.0, C mount, AR













# **SPECIFICATIONS**

#### **Sensor Specification**

Megapixel		1.3
Resolution		1280 x 1024
Sensor format		1/2"
Sensor diagonal	(mm)	7.9
Pixel size	(µm)	4.8
Sensor model		-
Sensor type		CMOS
Shutter		Global
Chroma		Mono

#### Connectivity

Connectivity		
Data connector		USB 3.0 Micro-B
Data interface		USB 3.0
I/O connector		6-pin Hirose
I/O interface		1x opto-isolated input 1x opto-isolated output 1x bi-directional non-isolated
Serial interface		no
Enconder interface		no
Power supply	(V)	9-24, USB 3.0
Max power consumption <sup>1</sup>	(W)	2.4

#### **KEY ADVANTAGES**

#### **USB 3.0 connectivity**

Easy connectivity to most new computers with 5Gbps bandwidth.

#### USB3 Vision® protocol & GenlCam® standard

Standard vision SDK platform for easy integration in existing software.

#### Full GenlCam® compliant: easy to integrate

GenlCam® compliant SDK package provides more flexibility to Vision Systems.

#### **High quality sensors**

New SONY Pregius CMOS Global shutter sensors provide high quality images to the camera.

#### Frame Rate up to 210 fps

High frame rate ideal for high speed applications.

### Sensor Sizes from 1/2.5" to 1.1" to fit all application requirements

Find the exact sensor you need for your needs.

The COE-U series includes USB3 Vision® cameras equipped with the latest sensors, ranging from high speed VGA to the latest 1.1" 12MP SONY Pregius sensor, which deliver USB 3.0 connectivity with high frame rate.

#### **Camera Specification**

Filter		AR
Framerate	(fps)	201
Exposure time		9 μs - 10 s
Dynamic range	(dB)	53
Gain range	(dB)	0-16
SNR	(dB)	40
Image buffer	(MB)	128
Pixel formats		Mono 8/10/ 10Packed/ 12/12Packed
Chunk data		yes
User sets		3
Timers/Counters		0/1
Synchronization		Free run, software trigger, hardware trigger

<sup>&</sup>lt;sup>1</sup> Measured at 5 VDC

All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only. Data are reported by design, actual lens performance may vary due to manufacturing tolerances.



# **Compliance**

Standards		USB3 Vision, GenlCam
Client software		OECS or other USB3 Vision software
Operating systems		32/64-bit Windows XP/7/10
Warranty	(years)	1

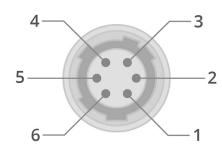
# **Environment**

Operating temperature	(°C)	0-+50
Storage temperature	(°C)	-30-+70
Operating relative humidity	(%)	20-80, non condensing
IP rating		IP30

# **Mechanical Specifications**

Mount		C
Dimensions <sup>2</sup>	(mm)	29 x 29 x 42
Clamping system		3x M3 and 4x M2 threaded holes (on one side)
Mass	(g)	80

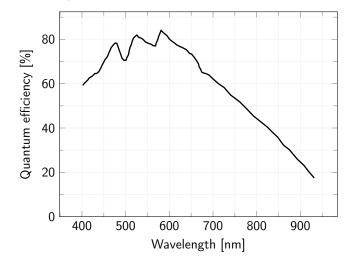
# **HIROSE PINOUT**



Device side

Pin	Signal	1/0	Description
1	12V	Input	DC 12V
2	Opt-Iso In	Input	Opto-isolated input
3	GPIO	I/O	Can be configured as input or output
4	Opt-Iso Out	Output	Opto-isolated output
5	I/O Ground	Input	Opto-isolated I/O grounding
6	GND	Input	Power and GPIO grounding

# **SENSOR QUANTUM EFFICIENCY**



# **RECOMMENDED ACCESSORIES**

Opto-Engineering  $^{\hbox{\scriptsize @}}$  suggests the following accessories to power the camera:

- CBUSB3001, Passive USB 3.0 cable, industrial level, horizontal screw locking, 3 m
- COE-6P-OPEN1-030-01, HIROSE 6-pin/Open end cable, 3 meters

# **COMPATIBLE PRODUCTS**

Full list of compatible products available here.



A wide selection of innovative machine vision components.