

# HSC-13M3-O

USB 3.0 Monochrome Camera & Opto-isolated I/O,  
1/2" On-semi CMOS, Global Shutter, 1280x1024  
Pixels, without Lens, RoH



## Features

- » Compact 1/2" On-Semi CMOS sensor with global shutter
- » Large pixel: 4.8  $\mu$ m / Frame rate: 140fps / Resolution: 1280x1024
- » High bandwidth, provides power and data over a single cable.
- » Lower cost implementation, Plug-and-play and easier to set up.
- » Adopted as "USB3 Vision" standard and supported vision software such as Halcon, Merlic, MIL, NI LabVIEW.

## Specifications

|                         |  |
|-------------------------|--|
| Appearance              |  |
| Dimension               | 29 mm x 29 mm x 57 mm  |
| Net Weight              | 85g  |
| Capture Interface       |  |
| Interface Type          | 1 x USB3.0   |
| Certifications          |  |
| Safety & EMC            | CE/EMC, FCC  |
| LED Safety              | CE/LVD   |
| Environment             |  |
| Operating Temperature   | 0° ~ 50°C  |
| Storage Humidity        | 30% ~ 95%  |
| Storage Temperature     | -30° ~ 60°C  |
| Operating Humidity      | 20% ~ 80%  |
| I/O Interface           |  |
| I/O Interface           | 1 x Trigger connection(IO connecting cable with an 8-pin male connector) |
| Others                  |  |
| Power Requirements      | 5V via USB 3.0 or 6-18V via Opto-isolated input                          |
| Parameters              |  |
| Opto-isolated I/O Ports | 1 input, 1 output  |
| ADC                     | 8-bit/10-bit   |
| Pixel Size              | 4.8 $\mu$ m  |
| Readout Method          | Global shutter   |
| Resolution              | 1280 x 1024  |
| Sensor Name             | On-Semi PYTHON 1300  |
| Sensor Type             | CMOS   |
| Machine Vision Standard | USB3 Vision v1.0   |
| Non-isolated I/O Ports  | 1 RS-232   |
| Sensor Size (inch)      | 1/2"   |
| Auxiliary Output        | 5V, 100 mA max   |
| Chroma                  | Mono   |
| Compliance              | CE, FCC  |
| Frame Rate              | 150FPS (Max)   |
| Interface               | USB 3.0  |
| Lens Mount              | CS-mount   |
| Megapixels              | 1.3 MP   |

| Software Support      |                                       |
|-----------------------|---------------------------------------|
| SDK                   | 1 x Windows                           |
| OS Support            | 1 x Microsoft Windows 10 32-bit       |
|                       | 1 x Microsoft Windows 10 64-bit       |
|                       | 1 x Microsoft Windows 7 32-bit        |
|                       | 1 x Microsoft Windows 7 64-bit        |
|                       | 1 x Microsoft Windows 8.1 32-bit      |
|                       | 1 x Microsoft Windows 8.1 64-bit      |
| Sensor Specifications |                                       |
| Acquisition           | Continuous, Single Frame, Multi Frame |

## Ordering Information

|                |   |
|----------------|---|
| HSC-13M3-O-R10 | USB 3.0 Monochrome Camera & Opto-isolated I/O, 1/2" On-semi CMOS, Global Shutter, 1280x1024 pixel, without Lens, RoHS |
|----------------|---|

## Packing List

|                           |                      |
|---------------------------|----------------------|
| 1 x HSC-13M3-O            | 1 x Mounting bracket |
| 1 x CS to C mount adapter | 1 x QIG              |