# Machine Vision Solutions

***Machine Vision***

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**HSC-13M3-O**

## *USB 3.1 Gen 1 (5Gb/s) Monochrome Camera & Opto-isolated* I/O, 1/2” On-semi CMOS, Global Shutter, 1280x1024 Pixels, without Lens, RoHS

***7/8.1/10***

Windows

# *Features*

***32/64***Bit ***USB 3.1***

Camera Lens (optional)

* Compact 1/2” On-Semi CMOS sensor
* Large pixel: 4.8 µm
* Resolution: 1280 x 1024 (1.3-megapixel)
* Frame rates up to 140FPS with 1280 x1024 resolution
* Global shutter
* USB3 Vision V1.0

***Dimensions (Unit: mm)***

47.1

1/4-20UNC

# *Specifications*

16.5

Camera

|  |  |
| --- | --- |
| Resolution | 1280 x 1024 |
| Frame Rate (fps) | 140FPS (Max) |
| Megapixels | 1.3-megapixel |
| Chrome | Mono |
| Sensor Name | On-Semi PYTHON 1300 |
| Sensor Type | CMOS |
| Readout Method | Global shutter |
| Sensor Size (inch) | 1/2" |
| Pixel Size (µm) | 4.8µm |
| Lens Mount | CS-mount |
| A/D Bits (ADC) | 8-bit/10-bit |
| Acquisition Modes | Continuous, Single Frame, Multi Frame |
| Partial Image Modes | Pixel binning, decimation, ROI |
| Opto-isolated I/O Ports | 1 input, 1 output |
| Non-isolated I/O Ports | 1 RS-232 |
| Auxiliary Output | 5V, 100 mA max |
| Interface | USB 3.1 Gen 1 (5Gb/s) |
| Machine Vision Standard | USB3 Vision v1.0 |
| Compliance | CE, FCC |



# *Packing List*

57

4-M2X4

8

### HR25

29

LED USB 3.0

M2

29

18

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

Software Support

|  |  |
| --- | --- |
| OS Support | Microsoft Windows 7/8.1/10 (32-bit & 64-bit) |
| SDK | Windows: Provides SDK and demo program with sample source code |

Others

# *Ordering Information*



HSC-13M3-O-2019-V10

|  |  |
| --- | --- |
| Part No. | Description |
| HSC-13M3-O-R10 | USB 3.1 Gen 1 (5Gb/s) monochrome camera & opto-isolated I/O, 1/2" on-semi CMOS, global shutter, 1280x1024 pixels, without lens, RoHS |
| 32001-019800-100-RS | USB 3.1 Gen 1 (5Gb/s) cable, 1800mm, USB 3.1 Gen 1 (5Gb/s) A type male and micro USB 3.1 Gen 1 (5Gb/s) B type male+screw, RoHS |
| 32033-001000-100-RS | IO connecting cable with an 8-pin male connector (HR25-7TP- 8P), flying leads in 3 meter lengths, 28AWG, RoHS (custom lengths upon request) |
| 7I003-M1620MPW2-RS | Camera lens, 2/3", focal length 16mm, F2.0 C-Mount, RoHS |
| 7I003-M3514MP-RS | Camera lens, 2/3", focal length 35mm, F1.4 C-Mount, RoHS |
| 7I003-SV1214V-RS | Camera lens, 1/2", focal length 12mm, F1.4 C-Mount, RoHS |
| 7I003-SV1614V-RS | Camera lens, 2/3", focal length 16mm, F1.4 C-Mount, RoHS |
| 7I003-SV2514V-RS | Camera lens, 1", focal length 25mm, F1.4 C-Mount, RoHS |

|  |  |
| --- | --- |
| Dimensions (mm) | 29 mm x 29 mm x 57 mm |
| Weight (grams) | 85g |
| Operating Temperature | 0° ~ 50°C |
| Storage Temperature | -30° ~ 60°C |
| Operating Humidity | 20% ~ 80% |
| Storage Humidity | 30% ~ 95% |
| Power Requirements | 5V via USB 3.1 Gen 1 (5Gb/s) or 6-18V via Opto- isolated input |