



LEOPARD IMAGING INC

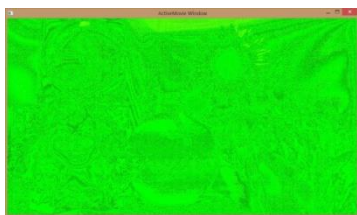
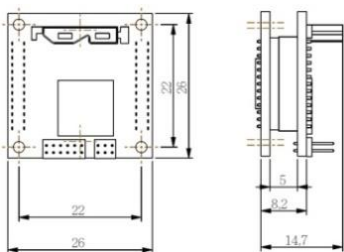
Rev. 1.1

## Key Features

- USB 3.0 Super Speed support
- RAW data output without compression
- UVC compliance
- USB 2.0 backwards compatible
- Support External Trigger, Software Trigger
- Support either CS or M12 lens
- Provide customization services
- USB +5VDC powered device
- Compact Size: 26mmx26mm
- 2 Boards are stacked
- Part#:

LI-USB30-P031C (Color)

LI-USB30-P031M (Mono)



RAW data streaming



Camera Tool view mode

# LI-USB30-P031X

## Data Sheet



## Default Lens Specification

- Model: M13B0618WR5
- Focal length: 6.0 mm
- Aperture, F/#: 1.8
- Built in IR cut filter
- FOV (D/H/V): 75 ° / 57 ° / 42 °  
(1/2.5", Full 5M)

## Applications

- Machine Vision
- Medical Camera
- Scientific Camera

## SDK Supported

- Camera Tool Source Code in C#
- Capture & Display
- OpenCV supported through Emgu
- RAW to RGB Conversion
- Save file as BMP & RAW format
- Color matrix



Leopard Imaging Inc.

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# Specification

|                               |                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------|
| General Behavior              |                                                                                          |
| Video Resolution @ Frame rate | 2592 x 1944 @ 14 fps<br>1920 x 1080 @ 30 fps<br>800 x 600 @ 90 fps<br>640 x 480 @ 60 fps |
| Sensitivity                   | 1.4 V/lux-sec                                                                            |
| Dynamic range                 | 12 bit                                                                                   |
| Trigger mode                  | External Trigger, Software Trigger                                                       |
| Interface (Optical)           |                                                                                          |
| IR cut filter (on lens)       | Yes, 650nm IR cut filter                                                                 |
| Sensor specification          | Aptina MT9P031 5M pixels Sensor                                                          |
| Shutter                       | Rolling                                                                                  |
| Format                        | 1/2.5"                                                                                   |
| Resolution                    | H:2592, V:1944                                                                           |
| Pixel size                    | H:2.2 um, V: 2.2 um                                                                      |
| Lens mount                    | CS / M12 lens mount support (Default: M12 lens)                                          |
| M12 Lens                      | 6.0 mm (default), 4.2 mm, 2.6 mm Focal Length                                            |
| Interface (Electrical)        |                                                                                          |
| Interface                     | USB 3.0                                                                                  |
| Supply voltage                | USB 3.0 +5 VDC power source                                                              |
| Current consumption           | Approx. 245 mA at 5 VDC                                                                  |
| Interface (Mechanical)        |                                                                                          |
| Dimensions                    | L: 26 mm, W: 26 mm, H: 38 mm                                                             |
| Mass                          | 22 g                                                                                     |
| Adjustment (Manual)           |                                                                                          |
| Shutter                       | Support                                                                                  |
| Gain                          | Support                                                                                  |
| Adjustment (Auto)             |                                                                                          |
| Shutter                       | Support                                                                                  |
| Gain                          | TBD                                                                                      |
| Environmental                 |                                                                                          |
| Max. temperature (operation)  | 0 °C ~ 50 °C (32 °F~ 122 °F)                                                             |
| Max. temperature (storage)    | -20 °C ~ 80 °C (-4 °F~176 °F)                                                            |
| Max. humidity (operation)     | 20 % ~ 80 %, relative, non-condensing                                                    |
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