



LEOPARD IMAGING INC

Rev. 1.4

# LI-USB30-OV13850

## Data Sheet

### Key Features

- USB 3.0 Super Speed support
- RAW data output without compression
- UVC compliance
- Color sensor
- Support manual focus control
- Provide customization services
- USB +5VDC powered device
- Compact Size: 26mmx26mm
- 2 Boards are stacked
- Part#: **LI-USB30-OV13850**
- OV13850 module Part#: **LI-OV13850-MIPI-AF**



### Lens Specification

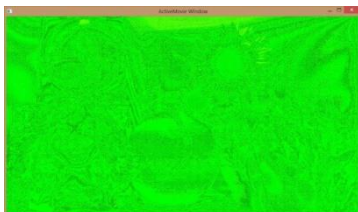
- Focusing Range: 10cm to Infinity
- Focal length: 3.85 mm
- F/#: 2.2
- FOV (D): 70 °
- TV Distortion < 1.5%

### 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



RAW data streaming



Camera Tool view mode



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# Specification

General Behavior	
Video Resolution @ Frame rate	4224 x 3136 @ 5 fps 3840 x 2160 @ 9 fps
Sensitivity	TBD
Dynamic range	10 bit
Interface (Optical)	
IR cut filter (on lens)	Yes, 650nm IR cut filter
Sensor specification	OmniVision CMOS 13.2MP image sensor OV13850
Shutter	Rolling
Format	1/3.06"
Resolution	H:4224, V:3136
Pixel size	H: 1.12 um, V: 1.12 um
Focus	Support manual control
Interface (Electrical)	
Interface	USB 3.0
Supply voltage	USB 3.0 +5 VDC power source
Current consumption	Approx. 220 mA at 5 VDC
Interface (Mechanical)	
Dimensions	L: 26 mm, W: 26 mm, H: 20 mm
Mass	10 g
Adjustment (Manual)	
Shutter	Support
Gain	Support
Focus	Support
Adjustment (Auto)	
Shutter	Support (software)
Gain	TBD
Focus	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
Max. humidity (storage)	20 % ~ 80 %, relative, non-condensing



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