



LEOPARD IMAGING INC

Rev. 1.0

LI-USB30-OS05A20

Data Sheet

Key Features

- USB 3.0 Super Speed support
- 10-bit RAW data output without compression
- UVC compliance
- Color sensor
- Resolution: 2688 x 1944
- Support register access function
- Provide customization services
- USB +5VDC powered device
- Support M12 lens
- Compact Size: 26mmx26mm
- 2 Boards are stacked
- Part#: **LI-USB30-OS05A20**
- Support multiple module options
- Default OS05A20 module Part#: **LI-OS05A20-MIPI-145H**



Lens Specification

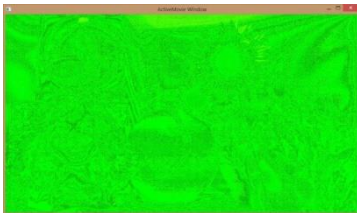
- Focusing Range: 20cm to Infinity
- Focal length: 1.98 mm
- F/#: 2.0
- FOV (H): 145 °
- TV Distortion < -50%

Applications

- Machine Vision
- Scientific Camera

SDK Supported

- Camera Tool Source Code in C#
- Capture & Display
- RAW to RGB Conversion
- Save file as BMP & RAW format
- Access registers



RAW data streaming



Camera Tool view mode



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Specification

General Behavior	
Video Resolution @ Frame rate	2688 x 1944 @ 6 fps
Dynamic range	10 bit
Interface (Optical)	
IR cut filter (on lens)	Yes
Sensor specification	OmniVision CMOS 5MP image sensor OS05A20
Shutter	Rolling shutter
Format	1/2.7"
Resolution	H:2688, V:1944
Pixel size	H: 2 um, V: 2 um
Interface (Electrical)	
Interface	USB 3.0
Supply voltage	USB 3.0 +5 VDC power source
Current consumption	Approx. 190 mA at 5 VDC
Interface (Mechanical)	
Dimensions	L: 26 mm, W: 26 mm, H: 20 mm
Mass	20 g
Adjustment (Manual)	
Shutter	TBD
Gain	TBD
Register Access	Support
Adjustment (Auto)	
Shutter	TBD
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
Max. humidity (storage)	20 % ~ 80 %, relative, non-condensing



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