



LEOPARD IMAGING INC

Rev. 1.6

LI-USB30-AR1335ICP3

Data Sheet

Key Features

- ON SEMI 13MP sensor AR1335
- YUV output without compression
- UVC compliance
- USB3.0 and USB2.0 supported
- ISP: ICP3
- Support M12 lens
- FOV (3 lens options)
 - Lens Part#: LA037B
FOV (D/H/V): 165 ° / 130 ° / 96 °
 - Lens Part#: SC27
FOV (D/H/V): 123 ° / 99.5 ° / 75.2 °
 - Lens Part#: N118B05518W
FOV (D/H/V): 61 ° / 50 ° / 38 °
- Provide customization services
- USB +5VDC powered device
- Compact Size: 38 mmx38mm
- 2 Boards are stacked
- Part#: **LI-USB30-AR1335ICP3-xxxH**



Applications

- Machine Vision
- Medical Camera
- Video Conference
- Scientific Camera

SDK Supported

- Camera Tool Source Code in C#
- Capture & Display



Leopard Imaging Inc.

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Ordering Information

Part#: LI-USB30-AR1335ICP3-xxxH

Note:

xxxH - 050H: FOV H 50 °

100H: FOV H 100 °

130H: FOV H 130 °

LI-USB30-AR1335ICP3-050H	LI-USB30-AR1335ICP3-100H	LI-USB30-AR1335ICP3-130H
		
Lens: N118B05518W Focal length: 5.5mm Aperture, F/#: 1.8 FOV(D): 61° FOV(H): 50° FOV(V): 38° Optical Distortion: 2.2% Mount: M12 x P0.5mm	Lens: SC27 Focal length: 2.704mm Aperture, F/#: 2.425 +/- 5% FOV(D): 122.9° FOV(H): 99.5° FOV(V): 75.2° Optical Distortion: -41.7% Mount: M12 x P0.5mm	Lens: LA037B Focal length: 2.05mm +/- 5% Aperture, F/#: 2.8 +/- 5% FOV(D): 165° FOV(H): 130° FOV(V): 96° Optical Distortion: -80.9% Mount: M12 x P0.5mm



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Specification

General Behavior		
Video Resolution @ Frame rate		USB3.0: 4208 x 3120 @ 12 fps, 10 fps 3072 x 1728 @ 30 fps, 15 fps 1920 x 1080 @ 60 fps, 30 fps 1280 x 720 @ 60 fps, 30 fps 640 x 480 @ 60 fps, 30 fps USB2.0: 640 x 480 @ 30 fps, 15fps, 10fps 428 x 480 @ 43 fps, 30fps
Responsivity		4700 e ⁻ /lux-sec
Interface (Optical)		
IR cut filter (on lens)		Yes, 650nm IR cut filter
Sensor specification		ON SEMI AR1335 13MP Image Sensor
Format		1/3.2"
Resolution		H:4208, V:3120
Pixel size		1.1 um Back Side Illuminated (BSI)
Chief ray angle (CRA)		11°
Lens mount		M12 x P0.5 lens mount support
Interface (Electrical)		
Interface		USB 3.0
Supply voltage		USB 3.0 +5 VDC power source
Current consumption		< 430mA @ 5V (USB 3.0) < 320mA @ 5V (USB 2.0, 30fps)
Interface (Mechanical)		
Dimensions	AR1335 sensor board	L: 38 mm, W: 38 mm
	USB 3.0 main board	L: 26 mm, W: 26 mm
Mass		18 g
Adjustment (Manual)		
Shutter		Support
Gain		Support
Adjustment (Auto)		
Shutter		Support
Gain		Support
Environmental		
Max. temperature (operation)		-20 °C ~ 70 °C
Max. temperature (storage)		-30 °C ~ 85 °C
Max. humidity (operation)		20 % ~ 80 %, relative, non-condensing
Max. humidity (storage)		20 % ~ 80 %, relative, non-condensing



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