

# FLIR **LADYBUG<sup>®</sup>3** 1394b

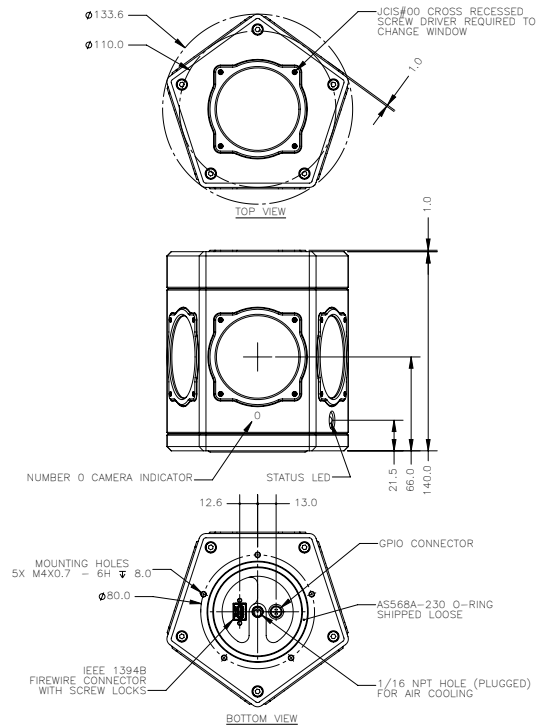


## 12MP + WEATHER-RESISTANT + 1394B

The high resolution Ladybug3 spherical digital video camera system has six 2 MP cameras that enable the system to collect video from more than 80% of the full sphere, and an IEEE-1394b (FireWire) interface with locking screw connection that allows JPEG-compressed 12MP resolution images to be streamed to disk at 15fps. The Ladybug3 is an ideal solution for applications that require very high resolution, a weather-resistant case, direct FireWire connection, and the ability to synchronize to external devices such as an external trigger or light source.

## KEY FEATURES

- Weather-Resistant Case
- 6 Sensors, 12 MP Total
- Synchronize To External Trigger Or Light Source
- Complete Hardware Dev Kit included



## Specifications

MODEL	VERSION	MP	IMAGING SENSOR
LD3-20S4C-33	Red	2.0 MP	<ul style="list-style-type: none"> <li>■ Sony ICX274 CCD x6, 1/1.8", 4.4 μm</li> <li>■ Global Shutter</li> <li>■ 1600 x 1200 at 16 FPS JPEG compressed; 6.5 FPS uncompressed</li> </ul>
LD3-20S4C-33B	Black		
<b>A/D Converter</b>	12-bit		
<b>Image Data Output</b>	8-bit Raw Bayer digital data		
<b>Image Data Formats</b>	Raw8, Mono8		
<b>Partial Image Modes</b>	Pixel binning and region of interest (ROI) modes		
<b>Image Processing</b>	Shutter, gain, white balance, gamma and JPEG compression, are programmable via software		
<b>Shutter</b>	Global shutter; Automatic/manual/one-push/extended shutter modes 0.01 ms to 4.2 s (extended shutter mode)		
<b>Gain</b>	Automatic/manual/one-push modes 0 - 24 dB		
<b>Gamma</b>	0.50 to 4.00		
<b>White Balance</b>	Manual		
<b>High Dynamic Range</b>	Cycle 4 gain and exposure presets		
<b>Digital Interface</b>	9-pin 1394b 800 MB/s interface for camera control, power, and video data; locking screw guarantee secure connection		
<b>Transfer Rates</b>	100, 200, 400, 800 Mbit/s		
<b>GPIO</b>	8-pin GPIO connector for external trigger, strobe, serial port, or external power		
<b>External Trigger Modes</b>	IIDC Trigger Modes 0, 1, 3, 14, 15		
<b>Memory Channels</b>	2 memory channels for custom camera settings		
<b>Case</b>	Machined aluminum housing, anodized red or black; single unit, water resistant		
<b>Dimensions</b>	122 mm x 141 mm (without lens hoods)		
<b>Mass</b>	2414 g		
<b>Power Consumption</b>	7.2 W at 12 V via GPIO or FireWire interface		
<b>Machine Vision Standard</b>	IIDC v1.31		
<b>Camera Control</b>	via Ladybug SDK, CSRs, or third party software		
<b>Camera Updates</b>	In-field firmware updates		
<b>Optics</b>	Six high quality 3.3 mm focal length lenses		
<b>Field of View</b>	>80% of full sphere		
<b>Spherical Distance</b>	Calibrated at 20 m		
<b>Focus Distance</b>	~200 cm. Objects have an acceptable sharpness from ~60 cm to infinity		
<b>Temperature</b>	Operating: 0° to 45°C; Storage: -30° to 60°C		
<b>Humidity</b>	Operating: 20 to 80% (no condensation) ; Storage: 20 to 95% (no condensation)		
<b>Compliance</b>	CE, FCC, RoHS		
<b>Operating System</b>	Windows XP, Windows 7		
<b>Warranty</b>	One Year		

### FLIR Integrated Imaging Solutions

**CANADA**  
12051 Riverside Way  
Richmond, BC, Canada  
V6W 1K7  
T: +1 866.765.0827 (toll free)  
T: +1 604.242.9937  
F: +1 604.242.9938  
E: mv-sales@flir.com  
www.flir.com/iis

**USA**  
T: +1 866.765.0827 (toll free)  
E: mv-na-sales@ptgrey.com

**EUROPE**  
T: +49 7141 488817-0  
F: +49 7141 488817-99  
E: mv-eusales@flir.com

**CHINA**  
T: +86 10 8215 9938  
F: +86 10 8215 9936  
E: mv-chinasales@flir.com

**ASIA**  
E: mv-asiasales@ptgrey.com

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