




Cat. # (Color/Mono)	Megapixel	Resolution	Sensor	C-Mount Coupler	Pixel Pitch	Frame Rate	Bit Depth	Read Noise	Binning/ Sub Sampling	Region of Interest
<b>INFINITY1</b>										
INFINITY1-2 C	2.0	1600x1200	1/2" CMOS	0.5X	4.20	15	8 or 10	20 e-	N/Y	Y
INFINITY1-3 C	3.1	2048x1536	1/2" CMOS	0.5X	3.20	12	8 or 10	20 e-	N/Y	Y
INFINITY1-5 C or M	5.0	2592x1944	1/2.5" CMOS	0.5X	2.20	5	8 or 10	20 e-	N/Y	Y
<b>INFINITY2</b>										
 INFINITY2-1R C or M	1.4	1392x1040	1/2" CCD	0.5X	4.65	15	8 or 14	8.5 e-	Y/Y	Y
INFINITY2-2 C or M	2.0	1616x1216	1/1.8" CCD	0.5X	4.40	12	8 or 12	12 e-	Y/Y	Y
INFINITY2-3 C	3.3	2080x1536	1/1.8" CCD	0.5X	3.45	5	8 or 12	12 e-	Y/Y	Y
INFINITY2-5 C or M	5.0	2448x2048	2/3" CCD	0.63X	3.45	8	8 or 12	12 e-	Y/Y	Y
<b>INFINITY3</b>										
INFINITY3-1 C or M	1.4	1392x1040	2/3" Cooled CCD	0.67X	6.45	15	8 or 12	8 e-	Y/Y	Y
 INFINITY3-1UR C or M	1.4	1392x1040	2/3" CCD	0.67X	6.45	30	8 or 14	6 e-	Y/Y	Y
<b>INFINITY4</b>										
INFINITY4-11 C or M	10.7	4008x2672	35mm Format CCD (43.3mm)	Custom F-Mount	9.00	3.5	8 or 12	12 e-	Y/Y	Y
<b>INFINITYX</b>										
INFINITYX-32 C or M	32	6464x4864	1/1.8" CCD	0.5X	4.40	12	8 or 12	12 e-	Y/Y	Y
<b>INFINITYHD</b>										
 INFINITYHD C	2.0	1920x1080	1/3" CMOS	0.33, 0.4 or 0.5X	2.70	60	8	8.7 e-	N/A	N/A

### INFINITY Camera Specifications

- Auto/Manual Exposure
- Manual White Balance
- 1 to 10x Programmable Gain (varies by model)
- USB 2.0 High-Speed Interface (480 MB/s)
- **Power:**  
INFINITY1, 2 & 3-1UR: USB Bus Power  
INFINITY3 Cooled/INFINITYX: External 5 V DC – 1 A  
INFINITY4: External 12 V DC – 1 A  
INFINITYHD: External 5 V DC – 500 mA
- **Operating Temp:** 0 to 50 °C
- **Operating Humidity:** 5 to 95 %, Non-condensing
- **Operating Systems:**  
PC: Windows XP, Windows Vista and Windows 7, 32 and 64-bit  
Mac: 32 and 64-bit (10.6 or higher)


### OEM Custom Camera Design


As a Lumenera OEM customer you can now leverage the success of the INFINITY camera line through our custom camera development. Our unique options for OEM custom software features and hardware camera design offer the following advantages:

- Improve Time-to-Market
- Reduce Development Costs
- Differentiate from the Competition

### Comparing USB 2.0 to FireWire

Video performance in digital cameras is defined by the maximum frame rate at a given resolution and is measured in frames per second (fps). Both FireWire and high-speed USB 2.0 digital cameras exhibit almost identical frame rates by resolution. These frame rates are usually limited by the sensor read-out rate – not the physical interface. As an example, a 1 megapixel CCD sensor using a FireWire or USB 2.0 interface is limited to 15 or 30 fps depending on the camera model. As resolution increases, frame rates decrease.

 **USB 2.0:** 480 Mbit/s, 15 fps, plug-and-play. 99% of computers have USB 2.0 ports.

 **Firewire:** 400 Mbit/s, 15 fps. Most computers need a FireWire card installed – some laptops may not have the space required.

USB 2.0 is an ideal interface for scientific cameras, offering plug-and-play with all computers, while providing more than enough throughput for its selected image sensors.

### INFINITY Mac Software

A Mac Camera Driver and ImageJ Plug-In are available for the following INFINITY cameras:

- INFINITY1-2
- INFINITY1-5
- INFINITY2-2
- INFINITY3-1
- INFINITY4-11
- INFINITY1-3
- INFINITY2-1R
- INFINITY2-5
- INFINITY3-1UR

Visit [www.lumenera.com/support/downloads/microscopy-downloads.php](http://www.lumenera.com/support/downloads/microscopy-downloads.php) to download the latest version.

\* Mac Software is not available for the INFINITY2-3, INFINITYHD or INFINITYX cameras.



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