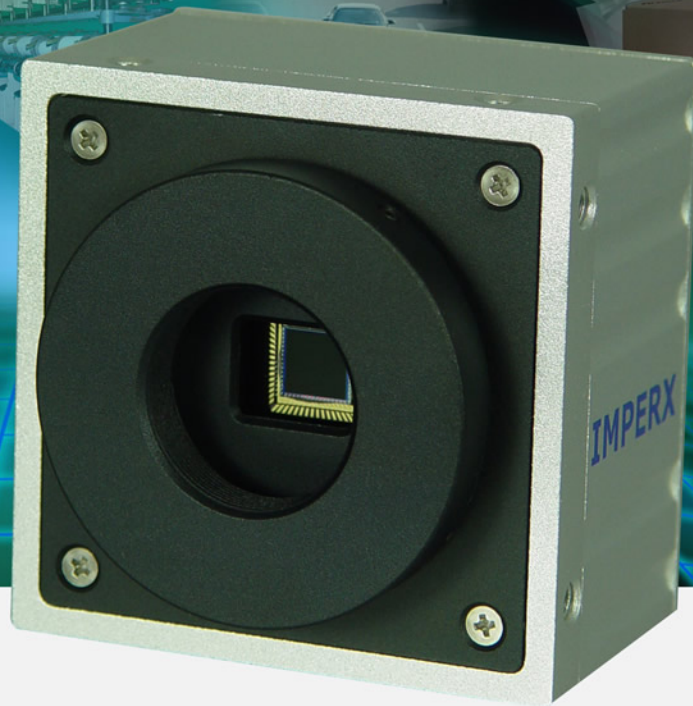


1 MEGA-PIXEL 8/10/12 BIT, 48 FPS, PROGRAMMABLE DIGITAL CAMERA

IPX-1M48-L



Features

- 1000 x 1000 pixels @ 48 fps
- Mono or Color
- 8/10/12 bit data, Base Camera Link
- Single or Dual tap operation
- RS232 serial communication
- 32 bit RISC processor
- Horizontal and vertical binning
- Highly programmable:
 - resolution • frame rate
 - electronic shutter • long integration
 - external trigger • pre-exposure
 - fast triggering • double exposure
 - strobe output • gain and offset
 - area of interest • user LUT
- Dynamic Transfer Function correction
- Dynamic S/N correction
- Temperature monitor
- Field upgradeable:
 - software • firmware • user LUT
- Automatic Iris Control - optional

Applications

- Medical and Scientific Imaging
- Machine Vision and Metrology
- Microscopy
- Remote Sensing
- Surveillance

The **IPX-1M48-L** is an advanced, high-resolution progressive scan, fully programmable and field upgradeable CCD camera, built around KODAK's KAI-1020 interline transfer CCD. The camera provides 1000 x 1000 resolution and delivers 48 frames per second at full resolution. The camera image processing engine is based on a 1 million gate FPGA and 32 bit RISC processor, featuring programmable resolution, AOI, binning, triggering, shutter, long integration, transfer function correction and user LUT.

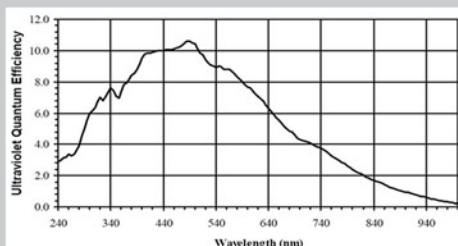
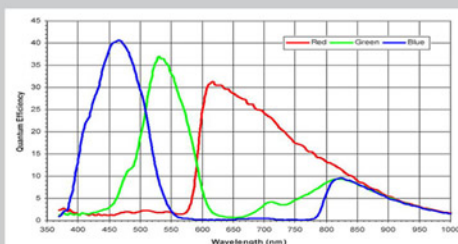
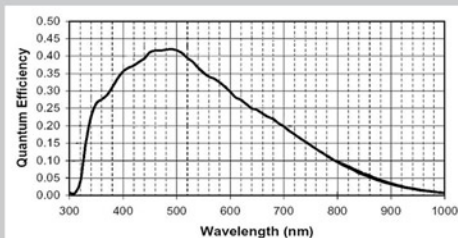
FAST...SMART...FLEXIBLE...
LYNX FAMILY



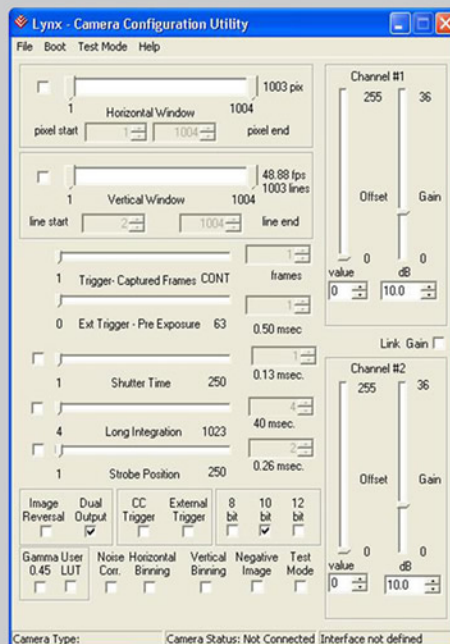
Specifications for IPX-1M48-L

Active Image Pixels	1000 (H) x 1000 (V), Mono or Color
Active Image Area	8.90 x 8.20 mm (0.350" x 0.320")
Pixel size	7.4 μ m
Video Output	Digital, 8/10/12 bit, one or two outputs
Camera Interface	Base Camera Link
Data Clock	40.000 MHz
Resolution	1000 x 1000 pixels max
Frame Rate	48fps (dual)/30fps (single), up to 140 fps w/AOI
Shutter Speed	1/50000 sec to 1/30 sec
Long Integration	1/30 sec to 10 sec
Gamma Correction	G=1.0, G=0.45, User defined LUT
Black Level Offset	256 levels/output
Video Gain	0-36 dB, 1024 steps/output
External Trigger	Asynchronous
Hardware Trigger	External, level sensitive, 3.3V - 5.0V, 10 mA., optically isolated, programmable exposure
Software Trigger	Frame-grabber, CC1, programmable exposure
S/N Ratio	60 dB
Strobe Output	Active HIGH, for external light source
Lens Mount	C mount, 2/3" format
Environmental	Operating: -5 to 50 C, Storage: -10 to 65 C
Min. Illumination	1.0 Lux, f=1.4, no IR cut filter, no shutter
Mechanical	(67 x 67 x 41) mm; 10 oz (280 g)

Spectral Response



Configuration Utility



- CameraLink protocol compliant
- Control all camera features via:
 - our intuitive, easy-to-use GUI, or
 - simple ASCII commands

Power Connector



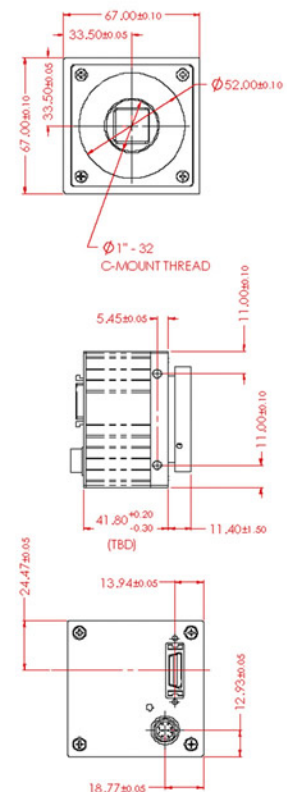
Rear Camera View

- 1 Trigger IN -
- 2 Trigger IN +
- 3 -12 VDC
- 4 -12 VDC
- 5 +12 VDC
- 6 +12 VDC
- 7 Strobe OUT -
- 8 Strobe OUT +
- 9 Auto Iris +
- 10 Auto Iris -

Power Requirements

- 12V DC, (10V min, 15V max)
- 300 mA steady, 1.0 A inrush
- 3.6 W constant power
- Connector: Hirose HR 10A-10R-10P

Mechanical Dimensions



Ordering: IPX-1M48-LMC1

Camera Family	Options
L - LYNX Family	blank - none
Sensor Type	I - Auto Iris
M - Monochrome	Lens Mount
C - Color	blank - "C" mount
U - UV sensitive (no glass)	(default)
S - Special - user filter	F - "F" mount
	O - Open frame

For specific details and ordering information, consult the camera user's manual or contact us at sales@imperx.com.

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