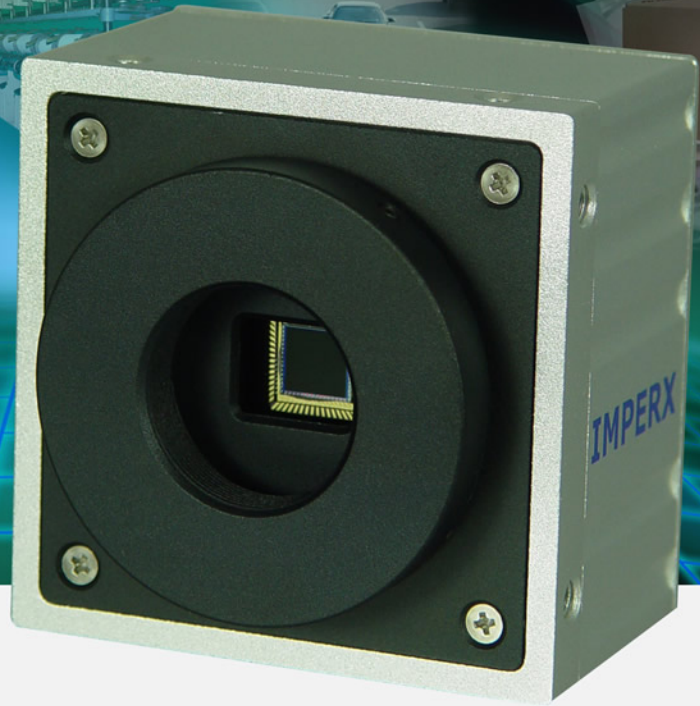




1 MEGA-PIXEL 8/10/12 BIT, 48 FPS, PROGRAMMABLE DIGITAL CAMERA

IPX-1M48



Features

- 1004 x 1004 pixels @ 48 fps
- Base Camera Link
- Mono or Color
- 8/10/12 bit data
- Single or dual tap operation
- RS232 serial communication
- Horizontal and vertical binning
- Programmable:
 - resolution • gain and offset
 - electronic shutter • long integration
 - external trigger • pre-exposure
 - strobe output • AOI
- Dynamic Gamma Correction

Applications

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

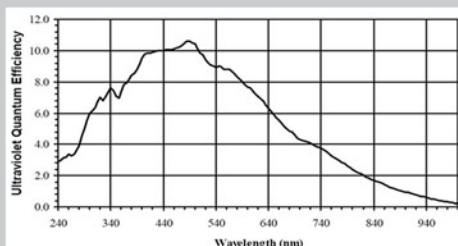
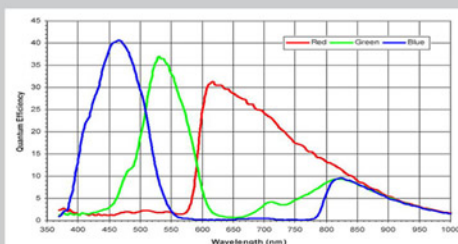
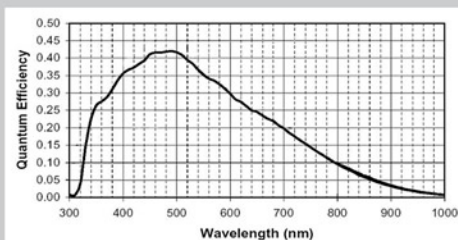
The **IPX-1M48** is an advanced, high-speed progressive scan, programmable CCD camera, built around KODAK's KAI-1020 interline transfer CCD. The camera provides 1004 x 1004 resolution and delivers 48 frames per second at full resolution. The camera image processing engine is based on a 1 million gate FPGA, featuring programmable resolution, AOI, binning, triggering, shutter, long integration, and gamma correction.

PROGRAMMABLE...
IPX
FAMILY

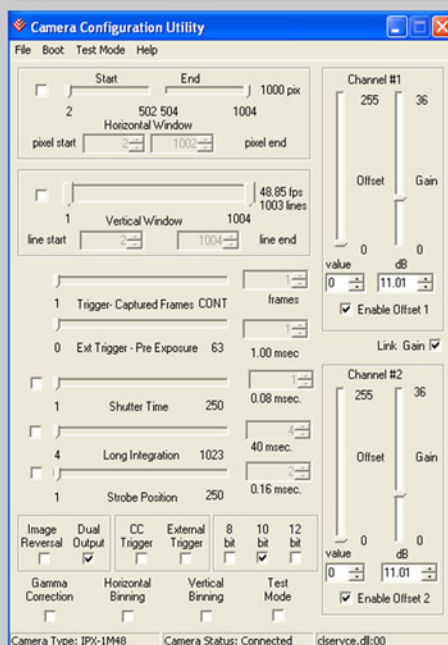
Specifications for IPX-1M48

Active Image Pixels	1004 (H) x 1004 (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	1004 x 1004 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
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

Power Connector



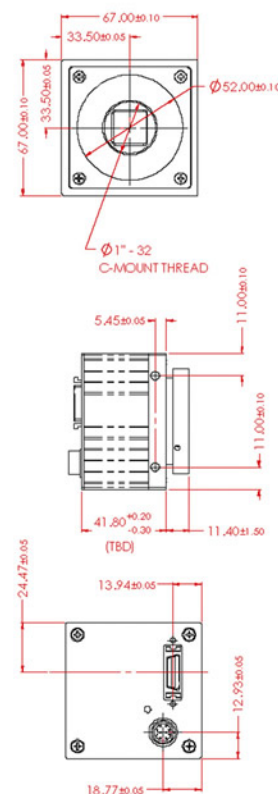
Rear Camera View

- 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 Reserve
- 10 Reserve

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-MC

Sensor Type	Lens Mount
M - Monochrome	blank - "C" mount (default)
C - Color	F - "F" mount
U - UV sensitive (no glass)	O - Open frame
S - Special - user filter	

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

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