

CMOS FireWire Cameras and software for high-performance Machine Vision applications.

Wide VGA - 1.3 Mega Pixel

- larger field of view, smaller defect detection and improved precision

FireWire Interface

- deterministic communication for precisely timed applications
- eliminates frame grabber and simplifies cabling

Global Shutter CMOS Sensors

- snapshot shutter provides crisp images of moving objects
- multiple slope integration extends scene dynamic range to 100+ dB

Common Software Developer's Kit (SDK)

- quick exchanges between FireWire, USB 2.0 and GigE cameras
- includes sample source code and wrappers for National Instruments LabVIEW

In-Camera Flat Field Correction

- enhances image quality through correction of FPN, PRNU and illumination non-uniformities



PixelINK Software Developer's Kit

Providing full control of all camera functions

The PixelINK SDK contains a full Application Programming Interface, a sample application with source code, LabVIEW wrappers and documentation. The SDK is compatible with Visual Basic and Visual C++ on Windows™ 2000, XP and Vista (32-bit) platforms.

With the SDK, developers can integrate PixelINK cameras into their custom applications with ease. A small set of API functions can be used to determine and control the camera feature set required for your application. Integration is fast and simple.

The SDK includes *PixelINK Capture OEM*, a free sample application that controls all the camera functions and demonstrates camera performance. *PixelINK Capture OEM* provides integrators with examples of how a PixelINK camera can be integrated into a complex application. An API function call log displays the sequence of API calls used and their parameter values any time a control on the GUI is accessed.

PixelINK Capture OEM also acts as a camera configuration utility and provides access to all camera features that are not available with standard interfaces such as DirectShow.

PixelINK offers full technical support with the purchase of the SDK. The support includes access to our advanced support area on the PixelINK website, free software upgrades as well as assistance from our experienced support team.

FireWire Digital Imaging Solutions for Machine Vision

PL-B700F series are high-performance megapixel color and monochrome cameras designed for machine vision and industrial inspection applications. The cameras are complemented by on-board look-up tables, multiple triggering modes, flexible ROI sub-windowing and excellent anitblooming. Real-time flat-field correction provides image quality similar to high-end CCD cameras.

For OEM and end-users who require increased flexibility, PixelINK offers all of its cameras with both standard and right-angle mechanical configurations.

Contact us or your PixelINK Representative directly to determine which configuration best suits you application.

For more information, contact sales@pixelink.com

PixelINK

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Camera Model >	PL-B741F	PL-B741EF	PL-B742F	PL-B761F	PL-B762F
Camera Specifications					
Color / Mono	Mono	Mono	Color	Mono	Color
Resolution	1280 x 1024	1280 x 1024	1280 x 1024	752 x 480	752 x 480
Frame Rate at Full Resolution	27	27	27	60	60
Sensor Type	CMOS	CMOS	CMOS	CMOS	CMOS
Shutter Type	Global	Global	Global	Global	Global
Lens Format	C 2/3"	C 2/3"	C 2/3"	C 1/3"	C 1/3"
Pixel Pitch	6.7 µm	6.7 µm	6.7 µm	6.0 µm	6.0 µm
Sensor Diagonal	11.01 mm	11.01 mm	11.01 mm	5.35 mm	5.35 mm
Bit Depth	8 or 10	8 or 10	8 or 10	8 or 10	8 or 10
Power Consumption (Watts)	3.2W	3.2W	3.5W	TBD	TBD
Variable ROI	Yes	Yes	Yes	Yes	Yes
Right-angle Capable	All camera models are available with right angled case by adding suffix -R to part number				
Interface (FireWire)	2 x 6 PIN Connectors (with the option to daisy chain multiple cameras)				

Camera Features via FireWire	
Trigger Options	Hardware - Optically Isolated 5-12V @ 4-11mA, Software and Free Running
General Purpose Outputs	2 Optically Isolated - Maximum 40V Differential. Maximum 15mA

Image Quality Measures	(See the Knowledge Base at http://www.pixelink.com for a description of Image Quality Measures)				
Peak Responsivity (DN/(nJ/cm ²))	9.8	10.8	7.3	28.1	17.5
Dynamic Range	54.6 dB	54.6 dB	54.6 dB	56.7 dB	56.7 dB
FPN	< 1%	< 1%	< 1%	<1%	<1%
PRNU	< 1%	< 1%	< 1.5%	<1.5%	<1.5%
Read Noise	< 2 DN	< 2 DN	< 2 DN	<1.5 DN	<1.5 DN

Software	
PixeLINK Capture OEM	Free Download at http://www.pixelink.com
SDK (incl. LabView Wrappers)	Optional
DirectShow Compatible	Yes
Windows Compatible	Windows™ 2000, XP and Vista (32-bit)
IIDC DCAM Compatible	(Version 1.31) Including Format 7 Extensions

