Pixelink®
A NAVITAR COMPANY

CAMERAS

MACHINE VISION

MICROSCOPY

AUTOFOCUS

NAVITAR®
IMAGING SYSTEM EXPERTS

Satisfy your most demanding imaging application requirements with our wide range of high performance machine vision cameras and custom OEM imaging solutions.

FEATURES

- Available in 1 MP to 20 MP resolutions
- Variety of sensor size, frame rate, resolution and pitch
- Autofocus feature available on models up to 2/3” sensor
- Fast frame rates
- Low noise images
- All cameras are available as board level
- Software Development Kit

1.1” Sensors

Camera Model	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
PL-D7512	12 MP (4096x3000)	17.6 mm	3.45	Sony IMX253	33	Color/Mono	12	C,CS	Global
PL-D7912	12 MP (4096x3000)	17.6 mm	3.45	Sony IMX304	23	Color/Mono	12	C,CS	Global
PL-D757 (HDR)	7 MP (3208x2200)	17.6 mm	4.5	Sony IMX420	57	Color/Mono	12	C,CS	Global
PL-D797	7 MP (3208x2200)	17.6 mm	4.5	Sony IMX428	27	Color/Mono	12	C,CS	Global

1” Sensors

Camera Model	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
PL-D7620	20 MP (5472x3648)	15.9 mm	2.4	Sony IMX183	20	Color/Mono	12	C,CS	Rolling
PL-D759	9 MP (4096x2160)	16.1 mm	3.45	Sony IMX255	45	Color/Mono	12	C,CS	Global
PL-D799	9 MP (4096x2160)	16.1 mm	3.45	Sony IMX267	32	Color/Mono	12	C,CS	Global
PL-D726	7 MP (2208x3000)	13.0 mm	3.5	ON Semi IBIS4	5	Mono	10	C	Rolling
PL-D725	5 MP (2592x2048)	15.9 mm	4.8	ON Semi Vita 5000	75	Color/Mono	10	C,CS	Global
PL-D734	4 MP (2048x2048)	15.9 mm	5.5	CMOSIS CMV4000	90	Color/Mono NIR	10	C,CS	Global

1/1.2” Sensors

Camera Model	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
PL-D752	2 MP (1920x1200)	13.4 mm	5.86	Sony IMX174	167	Color/Mono	12	C,CS	Global

2/3” Sensors

Camera Model	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
PL-D729	9 MP (3840x2484)	11.0 mm	2.4	ON Semi Mano 9600	22	Mono	10	C,S,CS	Rolling
PL-D755MU-POL (Polarized)	5 MP (2448x2048)	11.1 mm	3.45	Sony IMX250MZR	36	Mono	12	C	Global
PL-D755	5 MP (2448x2048)	11.1 mm	3.45	Sony IMX250	80	Color/Mono	12	C,S,CS	Global
PL-D795	5 MP (2448x2048)	11.1 mm	3.45	Sony IMX264	36	Color/Mono	12	C,S,CS	Global
PL-D753 (HDR)	3 MP (1936x1464)	11.0 mm	4.5	Sony IMX421	141	Color/Mono	12	C,S,CS	Global
PL-D732	2 MP (2048x1088)	12.7 mm	5.5	CMOSIS CMV2000	170	Color/Mono NIR	10	C,S,CS	Global
PL-D722	2 MP (1920x1200)	10.9 mm	4.8	ON Semi Vita 2000	87	Color/Mono	10	C,S,CS	Global

1/2” Sensors

Camera Model	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
PL-D721P	1 MP (1280x1024)	7.9 mm	4.8	ON Semi Python 1300	212	Mono	10	C,S,CS	Global
PL-D721	1 MP (1280x1024)	7.9 mm	4.8	ON Semi Vita 1300	151	Color/Mono	10	C,S,CS	Global

1/2.3” Sensors

Camera Model	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
PL-D7715	15 MP (4608x3288)	7.9 mm	1.4	ON Semi MT9F002	13	Color	12	C,S,CS	Rolling

1/2.5” Sensors

Camera Model	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
PL-D775C	5 MP (2592x1944)	7.1 mm	2.2	ON Semi MT9P006	14	Color	12	C,S,CS	Rolling
PL-D775M	5 MP (2592x1944)	7.1 mm	2.2	ON Semi MT9P031	14	Mono	12	C,S,CS	Rolling

FEATURES

» One push-autofocus, move focus from one point to another at high speed
» Fully integrated compact, low-power durable liquid lens
» Get a sharp image from a few centimeters to infinity in less than 20 ms
» Easy integration with Pixelink SDK

ADVANTAGES

» Large range of optical variation - displacing a liquid interface allows for large phase shift variations
» Rugged design - tested for over 100 million cycles and shows zero performance degradation
» Shock resistance - excellent response before and after shock tests
» High-speed - reconfigure in tens of milliseconds
» Low power consumption - lens dissipates about 15mW; ten times lower than other systems

Camera Model	Sensor Size	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
PL-D729	2/3”	9 MP (3840x2484)	11.0 mm	2.4	ON Semi Mano 9600	22	Mono	10	C,S	Rolling
PL-D755	2/3”	5 MP (2448x2048)	11.1 mm	3.45	Sony IMX250	80	Color/Mono	12	C,S	Global
PL-D753 (HDR)	2/3”	3 MP (1936x1464)	11.0 mm	4.5	Sony IMX421	141	Color/Mono	12	C,S	Global
PL-D732	2/3”	2 MP (2048x1088)	12.7 mm	5.5	CMOS CMV2000	170	Color/Mono NIR	10	C,S	Global
PL-D722	2/3”	2 MP (1920x1200)	11.0 mm	4.8	ON Semi Vita 2000	87	Color/Mono	10	C,S	Global
PL-D721	1/2”	1 MP (1280x1024)	7.9 mm	4.8	ON Semi Vita 1300	151	Color/Mono	10	C,S	Global
PL-D7715	1/2.3”	15 MP (4608x3288)	7.9 mm	1.4	ON Semi MT9F002	13	Color	12	C,S	Rolling
PL-D775C	1/2.5”	5 MP (2592x1944)	7.1 mm	2.2	ON Semi MT9\P006	14	Color	12	C,S	Rolling
PL-D775M	1/2.5”	5 MP (2592x1944)	7.1 mm	2.2	ON Semi MT9P031	14	Mono	12	C,S	Rolling

Liquid Lens Specifications

Format	Varioptic C-Mount Lens		Edmund Optics Liquid Lens CxSeries Focal Length Lenses				Varioptic S-Mount Lens (Board Level Only)		
Effective Focal Length	16 mm	25 mm	12 mm	16 mm	25 mm	35 mm	2.6 mm	7.5 mm	9.6 mm
Sensor Compatibility	1/3” - 2/3”	1/3” - 2/3”	1/2”	1/2”	2/3”	2/3”	1/2.5”	1/4” - 1/2.5”	1/4” - 1/2.5”
Aperature (f#)	f/2.8	f/4 - 22	f/6	f/5	f/6	f/8	f/2.5	f/2.9	f/3.7
Focus Range	110 mm - ∞	120 mm - ∞	40 mm - ∞	65 mm - ∞	125 mm - ∞	200 mm - ∞	4 mm - ∞	70 mm - ∞	70 mm - ∞

FEATURES

» High-resolution imaging ideal for any laboratory setting
» Use for bright field and dark field microscopy
» Consistent, high-quality image acquisition
» Excellent color reproduction
» Cameras come in a rugged housing bundle with an industrial 2M USB 3.0 cable
» 1 MP to 20 MP

1.1” Sensors

Camera Model	Resolution (MP)	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
M12-CYL	12 MP (4096x3000)	17.6 mm	3.45	Sony IMX253	33	Color/Mono	12	C	Global
M12B-CYL	12 MP (4096x3000)	17.6 mm	3.45	Sony IMX304	23	Color/Mono	12	C	Global

1” Sensors

Camera Model	Resolution	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
M20-CYL	20 MP (5472x3648)	15.9 mm	2.4	Sony IMX183	20	Color/Mono	12	C	Rolling
M9-CYL	9 MP (4096x2160)	16.1 mm	3.45	Sony IMX255	45	Color/Mono	12	C	Global
M4-CYL	4 MP (2048x2048)	15.9 mm	5.5	CMOSIS CMV4000	90	Color/Mono	10	C	Global
M5-CYL	5 MP (2592x2048)	15.9 mm	4.8	ON Semi Vita 5000	75	Color/Mono	10	C	Global

2/3” Sensors

Camera Model	Resolution	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
M5D-CYL	5 MP (2448x2048)	11.1 mm	3.45	Sony IMX250	80	Color/Mono	12	C	Global
M2-CYL	2 MP (2048x1088)	12.7 mm	5.5	CMOSIS CMV2000	170	Color/Mono	10	C	Global

1/2” Sensors

Camera Model	Resolution	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
M1-CYL	1 MP (1280x1024)	7.9 mm	4.8	ON Semi Vita 1300	151	Color/Mono	10	C	Global

1/2.3” Sensors

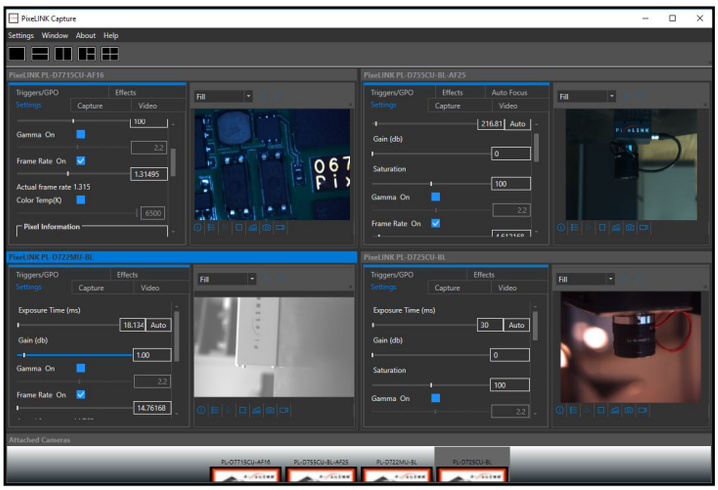
Camera Model	Resolution	Sensor Diagonal	Pixel Pitch (µm)	Sensor	Frame Rate (fps)	Color Space	Bit Depth	Mount Option	Shutter Type
M15-CYL	15 MP (4608x3288)	7.9 mm	1.4	ON Semi MT9F002	13	Color	12	C	Rolling

Pixelink Capture Software

Powerful multi-camera image capture software

Pixelink Capture is a real-time, interactive, multi-camera software application compatible with all Pixelink cameras. With a built-in autofocus feature and measurement tools, Pixelink Capture offers tremendous flexibility and power allowing the ability to configure and test multi-camera vision applications.

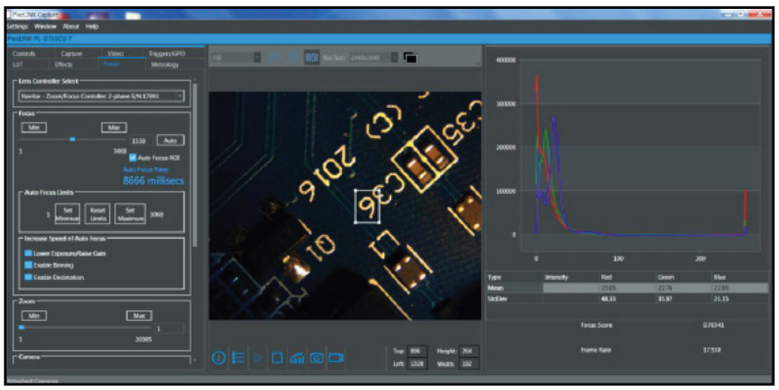
The multi-window environment includes a preview window, a configuration window, and a real-time graphical histogram. Users have the ability to adjust image size, color and exposure interactively through an easy-to-use control interface prior to image or video clip capture. The camera begins streaming at the point the application is launched.



Four Camera Layout

Important Features

- Real-time video streaming
- Built-in autofocus application
- Resizable region of interest (ROI)
- Customizable multi-camera layout
- Image and video capture
- Trigger and GPO controls
- Supports Windows 7 and above



Integrated Lens Control of Focus and Zoom

Enhanced Functionality

- Integrated lens control of zoom and focus for Navitar motorized lenses
- Accurate autofocus option for Navitar fine focus mechanisms
- Advanced measurement tools for on screen measurement of length, area and pixel location
- Export measurement results to Excel

Software Development Kit (SDK)

Providing full control of all camera functions, the Pixelink SDK is the software package of choice for developers and system integrators.

FEATURES

» Fast and easy integration
» Free technical support
» Powerful, easy to use interface
» Full U3V compliance on all USB 3.0 cameras
» Get started with a free 30 day trial
» Microsoft Windows and Linux supported
» Supports C/C++, .NET, Visual Studio 2003 and above, Python
» Robust API allowing full control of all camera features
» Drivers: USB3 Vision, GigE, 1394/IIDC (DCAM), Direct Show, TWAIN, USB 2.0
» 3rd Party Compatibility: LabVIEW, MATLAB, Halcon, Norpix, Matrox, USB3 Vision

Lens and Camera Solutions

SEAMLESSLY INTEGRATED

We've simplified the lens and camera selection process by pairing proven high-speed USB 3.0 Pixelink® industrial camera models with Navitar® high magnification imaging lens systems to meet the needs of your most demanding machine vision application.

The Navitar Resolv4K, 12X Zoom and Zoom 6000 lens systems seamlessly integrate with Pixelink CMOS cameras giving you high-resolution, low-noise digital imaging solutions backed by industry leading engineering and sales support.

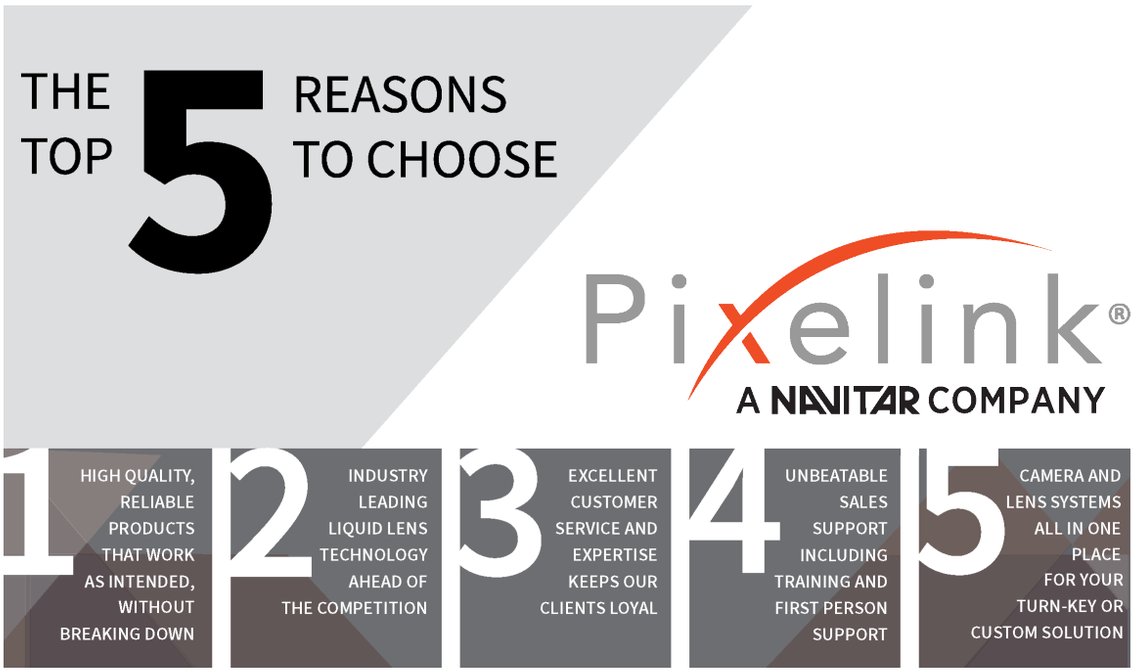
CONTACT A NAVITAR ACCOUNT REPRESENTATIVE FOR MORE DETAILS

AVAILABLE INTERFACES

Additional FireWire, USB 3.0, USB 2.0 and GigE camera models are available on pixelink.com

WHY CHOOSE PIXELINK?

OUR TECHNOLOGY, PRODUCTS AND PEOPLE MAKE ALL THE DIFFERENCE.



ADDITIONAL PRODUCT OFFERINGS FROM THE NAVITAR COMPANIES

LENSES

INDUSTRIAL ZOOMS

FIXED MACHINE VISION

LARGE FORMAT

4K HDR

COMPONENTS

ILLUMINATION

BEAM EXPANDERS

MICROSCOPE OBJECTIVES

F-THETA LENSES

CUSTOM

LENS/SENSOR INTEGRATION

LENS & CAMERA DESIGN

SYSTEM ANALYSIS

CUSTOM OPTICAL DESIGN

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