

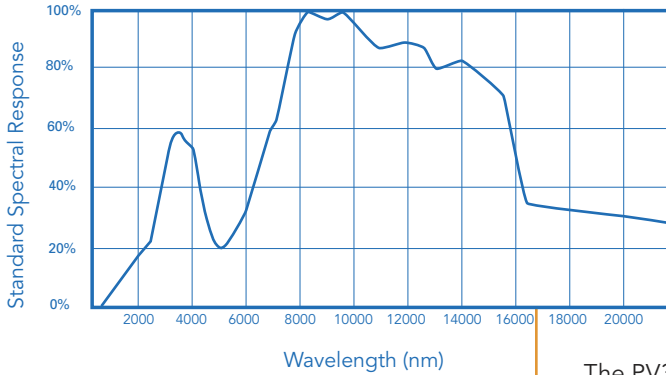


# PV320A

THERMAL IMAGING CAMERA



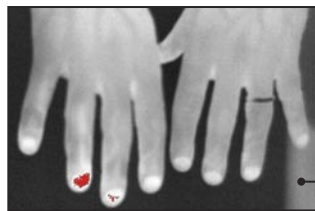
Shown with optional 35mm lens (lens not included)



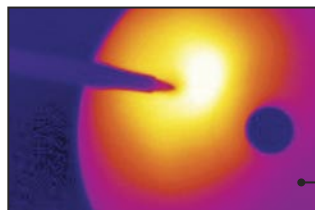
Machine Vision



Night Vision



Medical Thermal Imaging



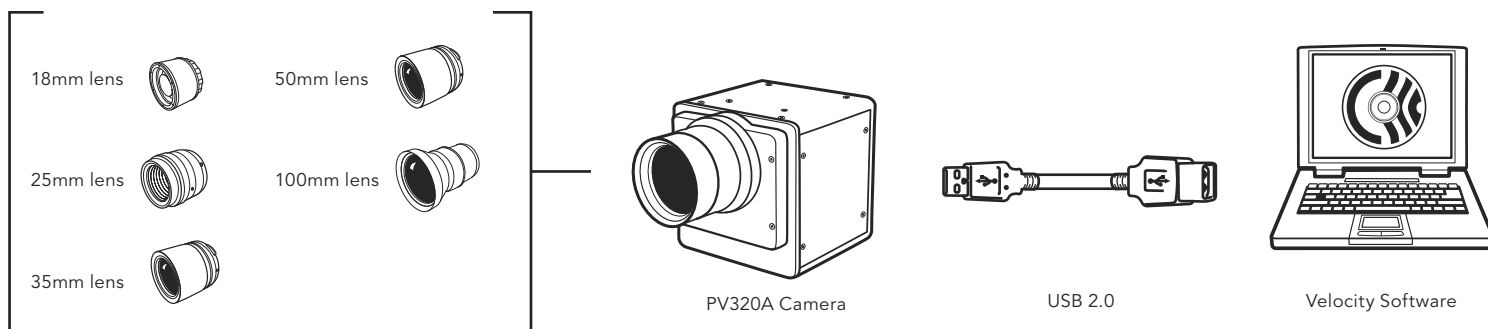
NDT

The PV320A is a low-cost thermal camera incorporating a high resolution (320x240) uncooled focal plane array and advanced features including a USB 2.0 high-speed digital output and automatic ambient temperature compensation (AATC). With over 76,000 pixels and 0.08°C (32.144°F) sensitivity, the PV320A provides superior image quality at a very affordable cost.

Operate the PV320A as a stand-alone, video-based system with on-camera controls, or interface the camera with Velocity Advanced, our powerful real-time image acquisition and analysis software application. Connect the camera to any USB 2.0-enabled PC platform and run Velocity Basic, and display real-time images on any PC and control the camera remotely. The compact PV320A in its rugged, all-metal, alloy chassis is currently in operation in many demanding applications around the world.

FEATURES	BENEFITS
<ul style="list-style-type: none"> <li>• Low cost</li> </ul>	<ul style="list-style-type: none"> <li>• Makes infrared imaging affordable for many new applications</li> </ul>
<ul style="list-style-type: none"> <li>• 320x240 uncooled focal plane array</li> </ul>	<ul style="list-style-type: none"> <li>• Great image quality with fine spatial detail</li> </ul>
<ul style="list-style-type: none"> <li>• Automatic Normalization Process</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous normalization reduces requirement for non-uniformity correction</li> </ul>
<ul style="list-style-type: none"> <li>• USB 2.0 High-Speed Serial Output</li> </ul>	<ul style="list-style-type: none"> <li>• Interface to a wide range of PC types</li> </ul>
<ul style="list-style-type: none"> <li>• 0.08°C Sensitivity (32.144°F)</li> </ul>	<ul style="list-style-type: none"> <li>• Visualize minute temperature variations</li> </ul>
<ul style="list-style-type: none"> <li>• Automatic ambient temperature compensation</li> </ul>	<ul style="list-style-type: none"> <li>• Camera can operate in a wide range of ambient temperatures</li> </ul>
<ul style="list-style-type: none"> <li>• Real-time software availability</li> </ul>	<ul style="list-style-type: none"> <li>• Collect and analyze images easily</li> </ul>
<ul style="list-style-type: none"> <li>• Interchangeable lens mount with wide selection of optics offered</li> </ul>	<ul style="list-style-type: none"> <li>• Optimize the camera system for many different applications</li> </ul>

**PV320A** THERMAL IMAGING CAMERA



**SPECIFICATIONS**

Sensor	Uncooled BST	Internal/External Synchronization	Included
Spectral Response	2–14µm	Power Consumption	<10 watts nominal
Pixel Size	48.5 x 48.5µm	Camera Control	USB 2.0
Thermal Sensitivity	0.08°C (32.144°F)	Video Output Connector	BNC
Resolution	320x240 pixels	Real-time Digital Output Connector	USB 2.0 High Speed
Lenses	Optional (see ordering information below)	On-camera Control	4-button panel, on/off
Video Palettes (in camera)	4 color, 2 grayscale	Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Zoom (in camera)	2x	Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Real-time Digital Output	USB 2.0	Humidity	0 to 95% non-condensing
Video Output	NTSC (PAL optional)	Tripod Mount	¼" to 20 TPI
Voltage	12 VDC on 2.5mm power slug 110–240 VAC / 50–60Hz on included AC power supply	Lens Mount	2" to 32 TPI
Dynamic Range	12 bits	Size (LxWxH)	14 x 11.4 x 11.4 cm
Frame Rate	30Hz: PV320A 25Hz: PV320AE	Weight w/o Lens	1.2kg (3 lb.)

**ORDERING INFORMATION**

ITEM	PART NO.	DESCRIPTION
PV320A (NTSC)	914333	Includes 60Hz camera and power supply
PV320AE (PAL)	914334	Includes 50Hz camera and power supply
18mm Wide-angle Objective Lens	901000	Manual focus lens with 50° x 38° H x V, F1.0, no iris
25mm Wide-angle Objective Lens	901001	Manual focus lens with 36° x 27° H x V, F1.0, no iris
35mm Wide-angle Objective Lens	914366	Manual focus lens with 25° x 19° H x V, F1.0, no iris
50mm Wide-angle Objective Lens	901003	Manual focus lens with 18° x 13° H x V, F1.0, adjustable iris
100mm Telephoto Objective Lens	901008	Manual focus lens with 9° x 7° H x V, F1.0, no iris
Velocity Software-Basic	914376	
Velocity Software-Advanced	914377	
Velocity Software-Toolkit VB	914381	
Velocity Software-Toolkit C++	914380	
Carrying Case	914384	

Because of ongoing product enhancements, specifications are subject to change without notice. Export of this product is controlled by the US Government. Prior authorization is required for re-export or transfer.

Contact us today to discuss how the PV320A can meet your application requirements.



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