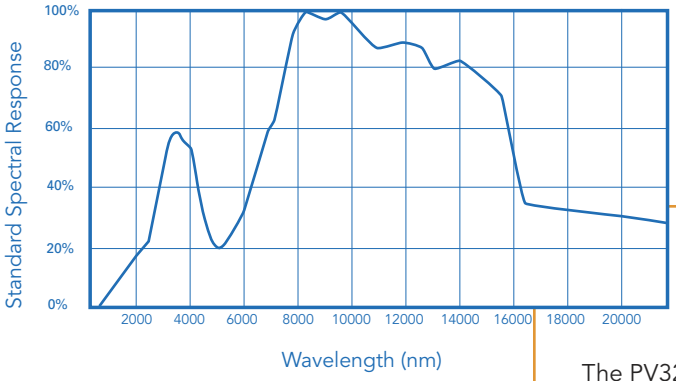
Electrophysics

PV320A

THERMAL IMAGING CAMERA

Shown with optional 35mm lens
(lens not included)



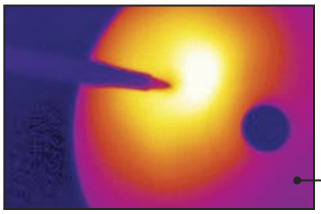
The PV320A is a low-cost thermal camera incorporating a high resolution (320x240) uncooled focal plane array and advanced features including a USB 2.0 high-speed digital output and automatic ambient temperature compensation (AATC). With over 76,000 pixels and 0.08°C (32.144°F) sensitivity, the PV320A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

Machine Vision

Night Vision

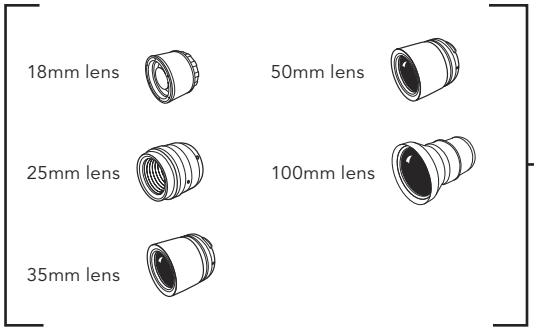
Medical Thermal Imaging

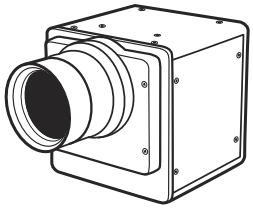


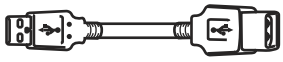
NDT

FEATURES	BENEFITS
• Low cost	• Makes infrared imaging affordable for many new applications
• 320x240 uncooled focal plane array	• Great image quality with fine spatial detail
• Automatic Normalization Process	• Continuous normalization reduces requirement for non-uniformity correction
• USB 2.0 High-Speed Serial Output	• Interface to a wide range of PC types
• 0.08°C Sensitivity (32.144°F)	• Visualize minute temperature variations
• Automatic ambient temperature compensation	• Camera can operate in a wide range of ambient temperatures
• Real-time software availability	• Collect and analyze images easily
• Interchangeable lens mount with wide selection of optics offered	• Optimize the camera system for many different applications

PV320A THERMAL IMAGING CAMERA




PV320A Camera


USB 2.0


Velocity Software

SPECIFICATIONS

Sensor	Uncooled BST
Spectral Response	2–14µm
Pixel Size	48.5 x 48.5µm
Thermal Sensitivity	0.08°C (32.144°F)
Resolution	320x240 pixels
Lenses	Optional (see ordering information below)
Video Palettes (in camera)	4 color, 2 grayscale
Zoom (in camera)	2x
Real-time Digital Output	USB 2.0
Video Output	NTSC (PAL optional)
Voltage	12 VDC on 2.5mm power slug 110–240 VAC / 50–60Hz on included AC power supply
Dynamic Range	12 bits
Frame Rate	30Hz: PV320A 25Hz: PV320AE

Internal/External Synchronization	Included
Power Consumption	<10 watts nominal
Camera Control	USB 2.0
Video Output Connector	BNC
Real-time Digital Output Connector	USB 2.0 High Speed
On-camera Control	4-button panel, on/off
Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Humidity	0 to 95% non-condensing
Tripod Mount	¼"to 20 TPI
Lens Mount	2"to 32 TPI
Size (LxWxH)	14 x 11.4 x 11.4 cm
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.

Electrophysics™
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