

PV320A



Near Visible IR 800-1.5 μm

Shortwave 1-3 μm

Midwave 3-5 μm

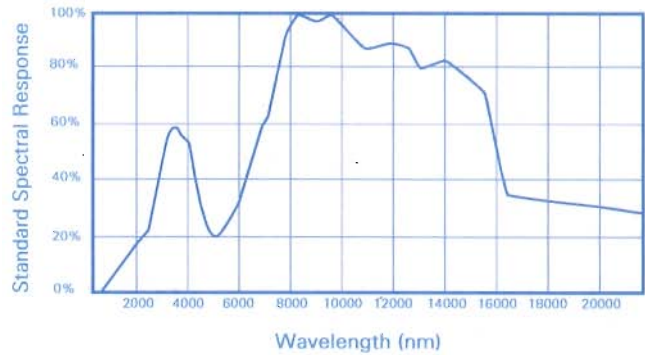
Longwave 7-16 μm



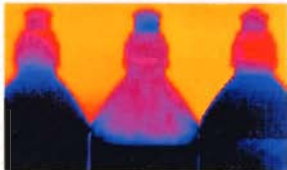
PV320A shown with 35mm objective lens

PV320A

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 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.



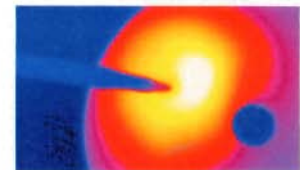
Machine Vision



Night Vision



Medical Thermal Imaging



NDT

Features

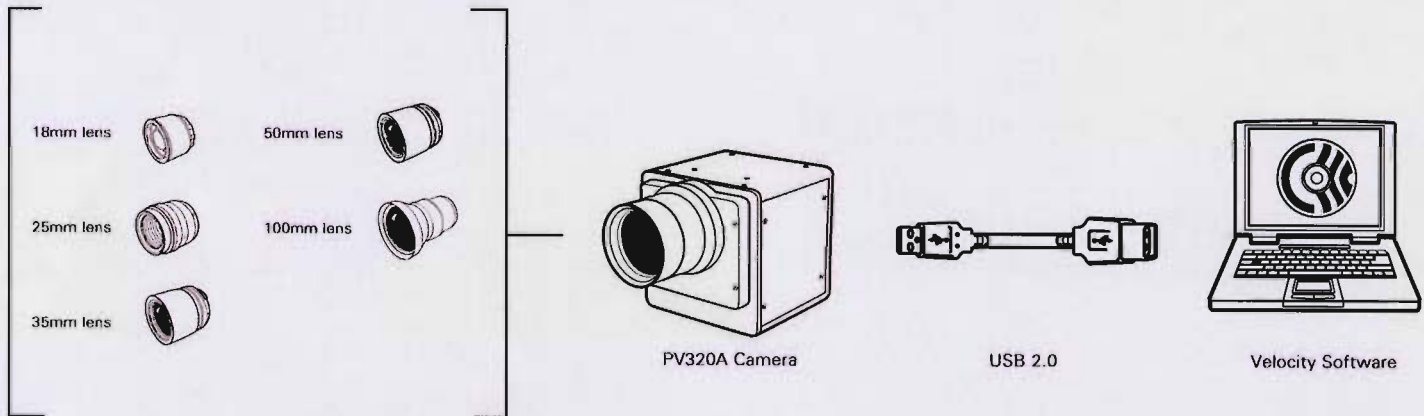
- Low Cost
- 320 x 240 uncooled focal plane array
- Automatic Normalization Process
- USB 2.0 High Speed Serial Output
- 0.08°C Sensitivity
- Automatic Ambient temperature compensation
- Real-time software availability
- Interchangeable lens mount with wide selection of optics offered

Benefits

- Makes infrared imaging affordable for many new applications
- Great image quality with fine spatial detail
- Continuous normalization reduces requirement for nonuniformity correction
- Interface to a wide range of PC types
- Visualize minute temperature variations
- Camera can operate in a wide range of ambient temperatures
- Collect and analyze images easily
- Optimize the camera system for many different applications

SPECIFICATIONS

Sensor	Uncooled BST	Internal/External Synchronization	Included
Resolution	320 x 240 pixels	Power Consumption	<10 watts nominal
Pixel Size	48.5 x 48.5µm	Camera Control	USB 2.0
Thermal Sensitivity	0.08°C	Video Output Connector	BNC
Spectral Response	7-14µm	Real Time Digital Output Connector	USB 2.0 High Speed
Lenses	Optional (See Ordering Info below)	On Camera Control	4-button panel, on/off
Video Palettes (in camera)	4 color, 2 grayscale	Operating Temperature	-20° to 50°C
Zoom (in camera)	2x	Storage Temperature	-20° to 60° C
Real Time Digital Output	USB 2.0	Humidity	0-95% non-condensing
Video Output	NTSC (PAL optional)	Dimensions	14cm (L) x 11.4cm (W) x 11.4cm (H)
Voltage	12 VDC on 2.5mm power plug 110 -240 VAC / 50-60 Hz on included AC power supply	Weight	1.2kg (3lbs)
Dynamic Range	12 bits	Tripod mount	¼" - 20 TPI
Frame Rate	30 Hz PV320A 25 Hz PV320AE	Lens Mount	2"-32 TPI



ORDERING INFO

ITEM	PART NUMBER	DESCRIPTION
PV320A (NTSC)	914333	Includes 60 Hz camera and AC power supply
PV320AE (PAL)	914334	Includes 50 Hz camera and AC power supply
Velocity Software – Basic	914376	
Velocity Software – Advanced	914377	
Velocity Software Toolkit VB	914381	
Velocity Software Toolkit C++	914380	
Velocity Software Toolkit LabView	914379	
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
Carrying Case	914384	

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