

**An affordable
PC solution for
high-speed video
applications**



Photron's PCI is the next generation of high-speed video camera systems, offering superior image quality at a realistic price.

Recording rates range from 60 to 250 frames per second (fps) at the maximum resolution of 512 x 480-pixels, and up to 10,000 fps at reduced resolutions. Recorded images are stored in the PCI board's memory and accessed by the host PC's PCI bus for display and analysis. Because the images are stored on the PCI board, they can be transferred rapidly to the PC disk drives for archiving.

The PCI comes equipped with Photron Motion Tools™ software. This powerful suite of software allows you to automatically track the motion of any point within a recorded sequence. Optional modules can synchronize high-speed imagery with external load cell data, automatically download image sequences, annotate, record IRIG/GPS time codes and expand image analysis capabilities.

For engineers or OEMs wishing to develop a customized motion analysis system, a Visual Basic/Visual C++ SDK is supplied with each camera.

SPEED

FEATURES

- Combination of a high-speed camera and PCI board for image display, control and processing
- 250 full frames, up to 10,000 partial frames per second in both color and monochrome models
- Four Photron PCI cameras can be simultaneously operated within a single PC
- Only one PCI slot required per camera
- Live Mode allows images to be viewed on a PC monitor during recording
- User interface similar to other Photron products allowing easy training on multiple camera systems
- Photron Motion Tools software provides matchless performance and choice through a selection of optional modules



PHOTRON™



Frame Rates in frames per second

30	60	125	250	500	1,000	2,000	3,000	5,000	10,000
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Resolution 8-bit monochrome, 24-bit color

Frame Rate (fps)	Resolution Max		Available Shutter Range
	H	V	
250	512	480	4 ms to 16.7 μ s
500	512	240	2 ms to 16.7 μ s
1,000	256	240	1 ms to 16.7 μ s
2,000	256	120	0.5 ms to 16.7 μ s
3,000	128	120	0.33 ms to 16.7 μ s
5,000	128	80	20 μ s to 8.33 μ s
10,000	128	34	100 μ s to 8.33 μ s

Record Time in seconds (and frames)

Frame Rate (fps)	Record Duration
250	8.7s (2,176)
500	8.7s (4,352)
1,000	8.7s (8,704)
2,000	8.7s (17,408)
3,000	11.6s (34,816)
5,000	10.4s (52,224)
10,000	12.3s (122,880)

Playback Speeds in frames per second

1	2	3	4	5	10	15	30	60	125	250
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Sensor	7.4 μ m square pixel, progressive-scan CCD
Shutter	Global electronic shutter from 4ms to 8.33 μ s
Saved Image Formats	JPEG, AVI, TIFF, BMP, RAW (compressed or uncompressed)
PC Control	Live image during record, camera control, digital data transfer, file management and image analysis
Phase Lock	Enables cameras to be synchronized precisely together to a master camera or external source
Triggering	Switch closure, open collector and TTL
Lens Mount	C-mount standard. CS optional
Camera Cable	20' (6m) standard. 50' (16m) optional
Data Display	Frame Rate, Shutter Speed, Trigger Mode, Date or Time (can be switched), Status (Playback/Record), Real Time, Frame Count and Resolution
PC Specifications	CPU: Pentium3 750 Mhz recommended; Pentium2 333 Mhz minimum. 128 MB or more of RAM. 16 MB or more of V-RAM recommended OS: 2000/XP, 98SE/98, ME and NT 4.0
Dimensions and Weight	Camera Head: 2" (51mm) H x 2" (51mm) W x 4.5" (114mm) D Weight: 1.8 lb (0.82kg)

Specifications subject to change without notice.

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