

**Rugged and compact,  
the SUPER 10K/10KC models  
combine affordability and  
high performance**



The Photron Super 10K and 10KC high-speed video systems offer a cost-effective, integrated solution to your most challenging imaging applications, ranging from laboratory and factory floor to onsite field testing. Our small, rugged camera with electronic shuttering to minimize motion blur, allows users to record manufacturing, industrial and military processes that often occur in hard-to-reach locations.

Record rates for the color and monochrome models range from 250 full frames up to 10,000 partial frames per second. The Super 10KC color model renders vivid 24-bit color images using Photron's proprietary color interpolation technology and a single-image sensor. Designed for portability and ease of use, this family of high-speed cameras is ideal for capturing, manufacturing, testing, R&D and design processes in action.

## FEATURES

- A fast global electronic shutter ensures the whole image is exposed simultaneously, providing crisp, blur-free images even at the fastest camera speeds
- Progressive-scan 512 x 480-pixel CCD sensor provides unparalleled image quality
- Expandable memory, to 512 Megabytes, permits long image sequences to be recorded at all frame rates
- The rugged and compact camera design enables the Super 10K to be used in applications where other cameras cannot gain access
- On-screen menus make the Super 10K easy to use with minimal training
- RS170 and S-VHS video outputs provide continuous updated imagery from the camera, even during recording
- SCSI interface facilitates easy image downloading for analysis, while the RS-232C remote control allows complete control of the camera
- Built-in reticle feature enables simple measurements to be made on recorded images without having to download image sequences

**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		Resolution Min		Available Shutter Range
	H	V	H	V	
250	512	480	128	34	4 ms to 100 $\mu$ s
500	512	240	128	34	2 ms to 50 $\mu$ s
1,000	256	240	128	34	1 ms to 50 $\mu$ s
2,000	256	120	128	34	0.5 ms to 50 $\mu$ s
3,000	128	120	128	34	0.33 ms to 50 $\mu$ s
5,000	128	80	128	34	200 $\mu$ s to 50 $\mu$ s
10,000	128	34	128	34	100 $\mu$ s to 50 $\mu$ s

### Record Time in seconds and frames

Frame Rate (fps)	Standard	Expanded	Maximum
250	2.2s (546)	5.5s (1,364)	8.7s (2,184)
500	2.2s (1,092)	5.5s (2,730)	8.7s (4,368)
1,000	2.2s (2,184)	5.5s (5,460)	8.7s (8,736)
2,000	2.2s (4,368)	5.5s (10,922)	8.7s (17,472)
3,000	2.9s (8,736)	7.2s (21,844)	11.6s (34,944)
5,000	2.6s (13,104)	6.5s (32,768)	10.4s (52,416)
10,000	2.6s (26,208)	6.5s (77,088)	10.5s (104,832)

### Playback Speeds in frames per second

	1	2	5	10	15	30	60	120	240	1,200
NTSC	1	2	5	10	15	30	60	120	240	1,200
PAL	1	2	5	10	25	50	100	200	250	

- Sensor** 7.4 $\mu$ m square pixel, progressive-scan CCD
- Input/Output** SCSI, RS170 and Y/C video (live during record), RS-232C, MCDL
- 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 and block mount optional
- Camera Cable** 20' (6m) standard. 50' (16m) optional
- Data Display** Frame Rate, Recording ID Number, Date/Time and Camera Status
- External Output** V sync signal (5V peak-peak positive going)
- Remote Control** Via RS-232C interface, communications protocol provided
- Image Download to PC** Via SCSI interface, download software provided
- Dimensions and Weight** **Camera:** 2" (5cm) H x 2" (5cm) W x 4.5" (11.4cm) D **Weight:** 1.8 lb (0.82kg)  
**Processor:** 7.1" (18cm) H x 6.3" (16cm) W x 13.2" (33cm) D **Weight:** 18 lb (8.2kg)

Specifications subject to change without notice.

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