CPL High Speed CCD Cameras

The CPL Mega Speed series of cameras are capable of recording speeds from 190 fps to 10,200 fps in continuous mode and up to 250,000 fps in burst mode.



CPL-Mega Speed Series CCD Camera

Product Description

The CPL-Mega Speed Digital Camera System is a high performance high speed CCD camera for use in many scientific & industrial imaging applications including Machine Vision.

One of the many advantages of the Mega Speed System is its design flexibility that allows the customer to choose several capture rates with its on screen menu bars.

A software package comes with each system that allows control of several camera functions like frame rate, frame #, shutter speed, trigger type, playback rate, forward, reverse, single frame advance, loading & saving files and various set-up commands.

Design Features

The CPL-Mega Speed Digital Camera System is very small and compact which allows easy integration and placements into all types of imaging environments. The universal "C" Mount on the front of the camera body allows a simple connection to be made to any "C" Mount lens. This mounting method allows end users to use readily available lenses.

The CPL-Mega Speed Digital Camera System uses a Personal Computer Interface slot (PCI) to interface with any 500 Mhz computer for outstanding flexibility and ease of use. Complete turn key packages are also available which includes a pre setup computer, camera cables, software, power supply and lighting.

Specifications Subject To Change Without Notice.

Capture Up to 10,200 FPS!

- Built in Electronic Shutter
- Standard "C" Mount Interface
- B/W & Color Models Available
- Easy Operation & Quick Set Up
- Compact & Light Weight Design
- □ Quantum Efficiencies Of Up to 70%
- High Resolution Linear Imaging Surface
- Several High Speed Models Available up to 250K fps
- Powerful Full Feature Image Capture Software Included

Portable High Speed Image Capture

The CPL MSP5K Is a completely portable high speed image capturing system capable of up to 5000 fps. Ask for further details.

Performance Features

The CPL-Mega Speed Digital camera System comes complete with every performance feature one might expect from a professional grade CCD imaging system. Some of these features include a built in electronic shutter, low noise readout, high quantum efficiency & high dynamic range.

The CPL-Mega Speed is available in b/w 8 bit or 24 bit color.

Image acquisition is accomplished by direct digital data transfer to your PC. Once images are captured they are sent to your PC where detailed image analysis can be preformed. Data is transferred via a high speed cable directly to your host PC's RAM in real time, ready for instant viewing.

Several camera options are available including models that will deliver from 190 fps to 10,200 fps. For extremely high speed events, camera are available with burst rates of over 250,000 fps. To determine the best camera for your individual application please feel free to speak to our application engineers for an exact recommendation.

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Mega Speed Series CCD Specifications





CPL-Mega Speed 1000

190 through to 10,200 fps (Model Dependant). User selectable frame sizes

TTL 3 to 5 VDC via BNC connector center pin positive active high.

Approximately 17.5mm from CCD surface to outer face of thread barrel

User selectable from factory defaults or by manual selection

Auto-matic or manual modes. Start/stop by trigger or hot keys.

CPL-Mega Speed Series CCD Cameras

1us to 200 us in burst mode

- **CCD** type:
- Frame transfer 640 x 480
- □ Pixel array: □ Frame rates:
- □ Shutter speed:
- 400nm to 1000nm □ Spectral response:
- **Quantum efficiency :** Typically 60% at 530nM 8 bits
- □ A-D converter:
- □ Window material:
- **Trigger type:**
- □ Software:
- □ Camera size:
- **Camera weight**:
- □ Camera cable:
- Optical interface:
- Back focus:
- □ Power requirements:
- Gain adjustments: User selectable from 0 to 400
- □ Image sizes:
- **Capture modes:**
- □ File saving: User can save in AVI format or BMP format.
- □ Image enhancement Bitmaps can be sharpened to bring out better details in captured files.

Crown glass with double sided AR coated

6 meters standard, 10, 20 & 30 meters available.

Windows 2000 professional edition.

60mm x 60mm x 140 mm max

530 grams max

15 V DC

Standard "C" Mounts

- □ Memory allocation: User can add or allocate as much or as little memory as required
- □ Frame marking: Last frame in captured sequence is tagged for quick & easy reference.
- \Box Sample frame rate (a) 200 x 200 = 1151 frames per second with 10 seconds record time

Industrial Applications

Other Applicable Fields

- Crash Testing
- □ Line Inspection
- Phase Contrast
- Ballistic Testing **Component Wear**
- Component Placement

- Biology Genetics Geology □ Forensics Cell Biology
- Biophysics
- Biochemistry Pathology Neuroscience Microbiology Pharmacology

Plant Science

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