HIGH SPEED GATED INTENSIFIED CCD CAMERA

Model 214-8

- Very high image quality
- High resolution CCD, 2K x 2K pixels, 12 bit dynamic range
- Extremely short exposure time, down to 5 ns
- Very high sensitivity, enabling very short exposures in moderate light or microscope configurations
- Very high framing rate, minimum interframe times equivalent to 200 million frames per second
- Independent control of gain, exposure time and time delay for each channel
- Display adjustment sliding scale to view 8 bit subsamples of full 12 bit images on the fly

The Cordin Model 214-8 gated, intensified multi-channel CCD camera offers the best image quality of any multi-channel intensified camera available. It is a powerful and easy to use tool for studying events in the nanosecond to millisecond time domain. The camera system is based around a beam splitter optical system that distributes the image from a single objective lens to four separate imaging channels without vignetting, parallax or ghosting. Each channel has an MCP device fiber-optically coupled to a 4MPixel CCD, and can capture two images per channel, for a total of eight images captured by the system. Time between exposures on adjacent channels can be as short as five nanoseconds. Time between exposures on a single channel can be as short as one microsecond.

Operation of the camera is controlled via USB 2.0 with user-friendly software that allows the user to set timing, sequence, gain and triggering. 12 bit images can be saved as TIFF or RAW files, and any 8 bit subsampled image can be saved as BMP or JPG files. Camera settings can also be saved and reloaded later to duplicate a set-up.

The 214-8 is a thoroughly new design, building on Cordin's 15 years of experience in this technology for improved performance, stability and reliability.

OPTIONS

Model 212-4 - Two channel configuration for four frames, upgradable
Microscope integration
Tele-focus macro objective lens
Alternate photocathode materials for choice of wavelength range sensitivity
UV configuration
SPECIFICATIONS

CCD
- Pixels: 2000 x 2000
- Device Type: Full resolution progressive scan
- Dynamic Range: 12 bit

INTENSIFIER
- Device: 18 mm Ø MCP
- Photocathode: Super S25
- Gain: 10,000 watts/watt
- Shutter Ratio: 107:1
- Grey Scale: 42 dB to 48 dB
- Resolution: 40 lp/mm

OPTICS
- Number of Images: 8 images on 4 channels
- Objective Lens: Nikon F mount
- Beam Splitter: Pellicle mirror system

TRIGGERING AND INTERFACE
- Interframe Times: 5 ns to 10 ms in 5 ns steps with independent control of each frame
- Exposure Times: 5 ns to 1 ms in 5 ns steps
- System Response: 65 ns maximum
- Jitter: ±3 ns
- Input Triggers: Logic Level, direct and isolated; Analog and Optical with threshold
- Outputs: Monitor, two programmable LVDS outputs on common time base with images
- Interface: USB 2.0