

#### Key Features

- 1/3" Progressive scan CCD imager
- 659 x 494 active pixels
- 10-bit RS-644 (LVDS)/ Camera Link output
- Analog output
- Full frame shutter
- <56 dB
- Asynchronous reset
- 110 Hz frame rate
- 40 MHz pixel clock
- RS232C interface control
- C-mount lens



#### Description

The UP-610/UP-610CL is a 10-bit, 659 x 494 full frame resolution digital CCD camera using progressive scanning interline-transfer technology. The square pixels are especially suitable for processing, measuring, and analyzing tasks. High speed moving objects can easily be captured with the external asynchronous capture control. This compact and lightweight camera offers excellent signal to noise performance. It's compatible with most popular frame grabbers in the market. The "user-friendly" RS-232C interface control allows users to control all camera functions without physically touching the camera.

#### Applications

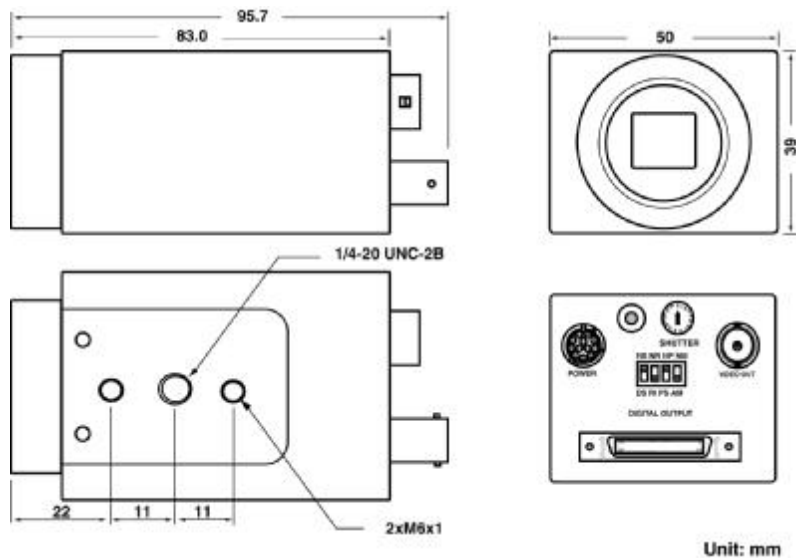
UP-610/UP-610CL applications include high-speed machine vision, automated inspection, motion capture and analysis, and other industrial applications.

## Specifications:

Model	UP-610	UP-610CL
CCD Sensor	1/3" Hyper HAD progressive scan interline-transfer CCD	
Chip Size	5.79 mm x 4.89 mm	
Effective Pixels (H x V)	659 x 494	
Unit Cell Size (H x V)	7.4 $\mu$ m x 7.4 $\mu$ m	
Pixel Clock	40 MHz (80 MHz for master clock)	
Frame Rate	110 FPS	
Sync.	HD: 55.554 KHz; VD: 110.0 Hz	
Digital Video Output	10-bit RS-644 (LVDS)	Camera Link format
Analog Video Output	1 V p-p, 75ohm (BNC or 12 pin Hirose)	
S/N Ratio	<56 dB	
Min. Illumination	0.5 lux	
Gain	MGC	
Gamma	1.0	
Electronic Shutter	1/110 ~ 1/110,000 selectable 16 steps	
Lens Mount	C-Mount	
Operating Temperature	-10 $^{\circ}$ C ~ +50 $^{\circ}$ C	
Power Requirement	12V DC, 280mA, 3.4W	
Dimension	50mm x 39mm x 83mm	
Ext. Sync.	Internal/External Auto Switch	
Asynchronous Reset	Standard	
Weight	200 g	

Note: Custom cameras are available upon request.

## Dimension:



Note: Specifications are subject to change without notice