

#### Key Features

- 1/2" Progressive scan CCD imager (R, G, B primary color filters)
- 659 x 494 active pixels
- 10-bit RS-644 (LVDS) / Camera Link output
- Full frame shutter
- <56 dB
- Asynchronous reset
- 110 Hz frame rate
- 40 MHz pixel clock
- RS232C interface control
- C-mount lens



#### Description

The UC-685/UC-685CL is a high frame rate, color digital CCD camera using progressive scanning interline-transfer technology with R, G, B primary color mosaic filters (Bayer arrangement). A frame grabber collects digital, raw data and displays color images by software conversion. This color camera is useful for applications where color, high frame rate and high speed are required. With the asynchronous capture control, high speed moving objects can always be captured. The square pixels are especially suitable for processing, measuring, and analyzing tasks. 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

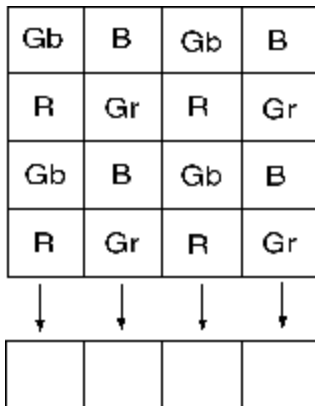
UC-685/UC-685CL applications include machine vision, automated inspection, motion capture and analysis, medical imaging, biomedical imaging, non-contact measurement, and other scientific and industrial applications where color image and high frame rate are needed.

## Specifications:

Model	UC-685	UC-685CL
CCD Sensor	1/2" Progressive scan CCD (R, G, B primary color mosaic filters)	
Chip Size	7.48 mm x 6.15 mm	
Effective Pixels (H x V)	659 x 494	
Unit Cell Size (H x V)	9.9 $\mu$ m x 9.9 $\mu$ m	
Pixel Clock	40 MHz (80 MHz for master clock)	
Frame Rate	110 fps	
Sync.	HD: 55.6 KHz; VD: 110.0 Hz	
Digital Video Output	10-bit RS-644	Camera Link Format
Analog Video Output	1 V p-p, 75ohm (BNC or 12 pin Hirose)	
S/N Ratio	<56 dB	
Min. Illumination	3 lux	
Gain	MGC	
Gamma	1.0	
Electronic Shutter	1/110 ~ 1/110,000 selectable	
Lens Mount	C-Mount	
Operating Temperature	-10 $^{\circ}$ C ~ +50 $^{\circ}$ C	
Power Requirement	12V DC, 280 mA, 3.4 W	
Dimension	50mm x 39mm x 83mm	
Ext. Sync.	Internal/External Auto Switch	
Asynchronous Reset	Standard	
Weight	200 g	

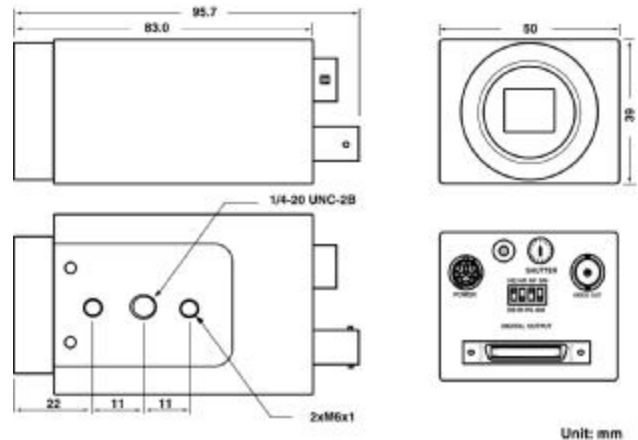
Note: Custom cameras are available upon request.

## Color Coding Diagram:



The bottom left pixel is the first signal output

## Dimension:



Note: Specifications are subject to change without notice