

#### Key Features

- 2/3" Exview HAD Scan CCD Imager (R, G, B color mosaic filters)
- 1380 x 1034 active pixels
- 30 Hz frame rate
- 10-bit RS-644 (LVDS) or Camera Link digital output
- Full frame shutter
- <56 dB
- Asynchronous reset
- 50 MHz pixel clock
- RS-232C interface Control
- C-mount lens



#### Description

The UC-1800DS/UC-1800DS-CL is a high resolution 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 data and displays color images by software conversion. This color camera is useful for applications where color and high resolution 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

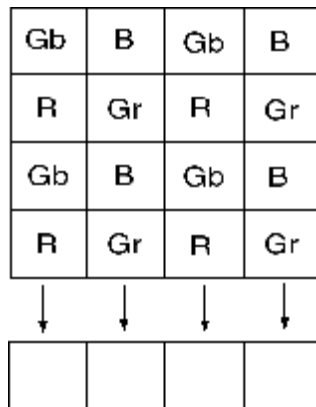
UC-1800DS/UC-1800DS-CL applications include machine vision, automated inspection, motion capture and analysis, high-resolution graphics capture, medical imaging, biomedical imaging, non-contact measurement, microscopy, and other scientific applications where color image is needed.

## Specifications:

Model	UC-1800DS	UC-1800DS-CL
CCD Sensor	2/3" Progressive scan CCD (R, G, B primary color mosaic filters)	
Chip Size	10.20 mm x 8.30 mm	
Effective Pixels (H x V)	1380 x 1034	
Unit Cell Size (H x V)	6.45 $\mu\text{m}$ x 6.45 $\mu\text{m}$	
Pixel Clock	50 MHz	
Frame Rate	30 FPS	
Sync.	HD: 31.367 KHz; VD: 30.0 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	1/30 ~ 1/62,000 selectable	
Lens Mount	C-Mount	
Operating Temperature	-10 $^{\circ}\text{C}$ ~ +55 $^{\circ}\text{C}$	
Power Requirement	12 V DC, 470 mA, 5.6 W	12 V DC, 460 mA, 5.5 W
Dimension	50mm x 39mm x 83mm	
Ext. Sync.	Internal/External Auto Switch	
Asynchronous Reset	Standard	
Weight	200 g	

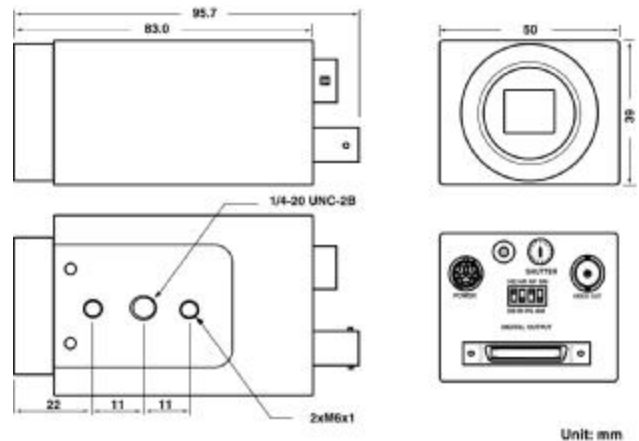
Note: Custom cameras are available upon request.

## Color Coding Diagram:



The bottom left pixel is the first signal output

## Dimension:



Unit: mm

Note: Specifications are subject to change without notice