

#### Key Features

- 0.001 lux min. illumination (AGC max.)
- 1/2" Progressive scan CCD imager
- 659 x 494 active pixels
- 10-bit RS-644 (LVDS) or Camera Link output
- Full frame shutter
- <58 dB
- Asynchronous capture
- 60 Hz frame rate (120Hz binning)
- 25 MHz data clock
- Long-term frame integration
- External exposure control
- RS232C interface control
- C-mount lens



#### Description

The USS-680/USS-680CL 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

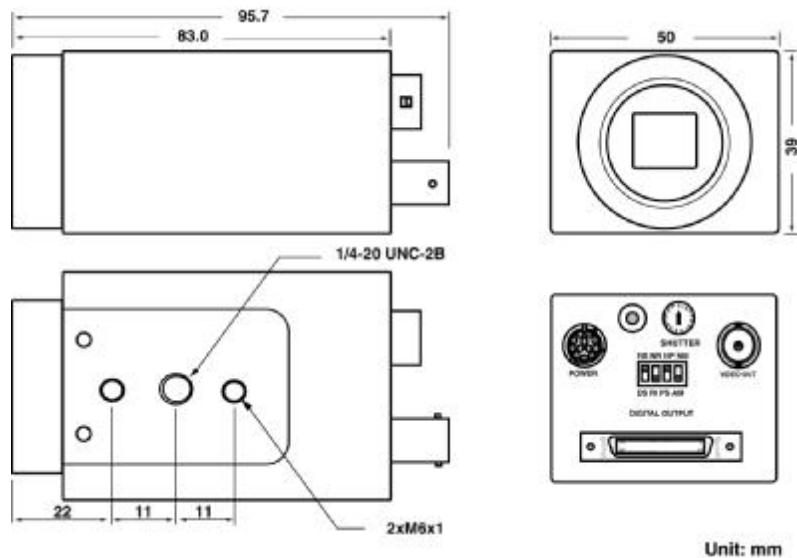
USS-680/USS-680CL applications include low light surveillance, X-ray imaging, military, and scientific applications.

## Specifications:

Model	USS-680	USS-680CL
CCD Sensor	1/2" Hyper HAD progressive scan interline-transfer CCD	
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 $\mu\text{m}$ x 9.9 $\mu\text{m}$	
Pixel Clock	25 MHz (50 MHz for master clock)	
Frame Rate	60 FPS (120 FPS Vertical binning)	
Sync.	HD: 31.485KHz; VD: 59.972 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	<58 dB	
Min. Illumination	0.001 lux (AGC max.)	
Gain	AGC/MGC selectable	
Gamma	1.0	
Electronic Shutter	1/60 ~ 1/62,000 selectable 16 steps	
Lens Mount	C-Mount	
Operating Temperature	-10 $^{\circ}\text{C}$ ~ +50 $^{\circ}\text{C}$	
Power Requirement	12V DC, 250mA, 3.0W	
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