

#### Key Features

- 1/2" Progressive scan CCD imager
- 1392 x 1036 active pixels
- 10-bit RS-644 / Camera Link digital output
- Analog output
- RS232C interface control
- Full frame shutter
- <58 dB or better
- Asynchronous reset
- 30 Hz frame rate
- 2 x 2 (692 x 516) Binning at 55 FPS
- 50 MHz data clock
- C-mount lens
- Long-term frame integration
- External exposure control



#### Description

The UP-900DS/UP-900DS-CL is a 10-bit digital CCD camera using progressive scan sensor. 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

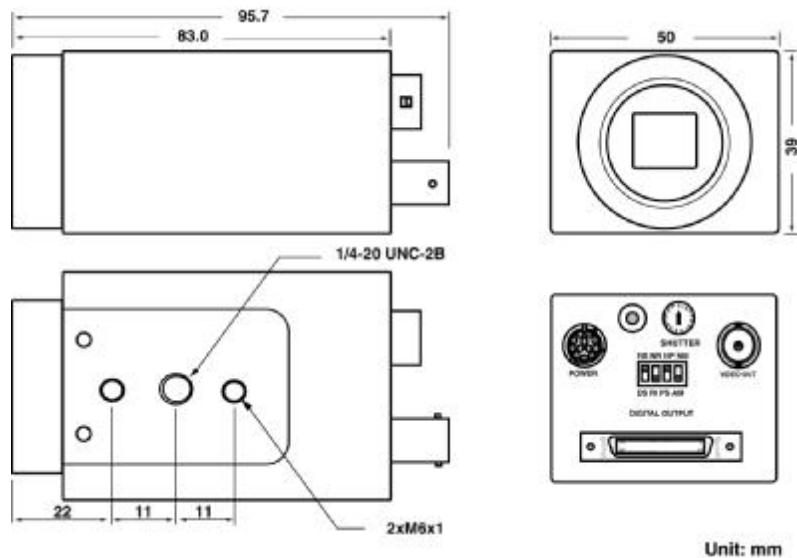
UP-900DS/UP-900DS-CL applications include machine vision, automated inspection, motion capture and analysis, high-resolution graphics capture, medical imaging, biomedical imaging, non-contact measurement, microscopy, and other scientific and industrial applications.

## Specifications:

| Model                    | UP-900DS   | UP-900DS-CL            |
|--------------------------|--|------------------------|
| CCD Sensor               | 1/2" Hyper HAD progressive scan interline-transfer CCD |                        |
| Chip Size                | 7.60 mm x 6.20 mm                                      |                        |
| Effective Pixels (H x V) | 1392 x 1036 (approx. 5:4 aspect ratio)                 |                        |
| Unit Cell Size (H x V)   | 4.65 $\mu$ m x 4.65 $\mu$ m                            |                        |
| Pixel Clock              | 50 MHz (100 MHz for master clock)                      |                        |
| Frame Rate               | 30 fps   |                        |
| Sync.                    | HD: 31.466 KHz; VD: 30.0 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                | <58 dB   |                        |
| Min. Illumination        | 0.1 lux  |                        |
| Gain                     | MGC  |                        |
| Gamma                    | 1.0  |                        |
| Electronic Shutter       | 1/30 ~ 1/62,000 selectable                             |                        |
| Lens Mount               | C-Mount  |                        |
| Operating Temperature    | -10 $^{\circ}$ C ~ +50 $^{\circ}$ C                    |                        |
| Power Requirement        | 12 V DC, 450 mA, 5.4 W                                 | 12 V DC, 430 mA, 5.2 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.

## Dimension:



Note: Specifications are subject to change without notice