

#### Features

- 1/2" Super HAD CCD\* Imager
- High resolution  
768 x 494 (EIA); 752 x 582 (CCIR)
- Auto electronic shutter control  
(1/60 – 1/100000 sec.)
- Fast Response time
- High sensitivity with micro lens
- 56 dB (AGC Off)
- Compact Size and lightweight
- AGC/MGC selectable
- Gamma 1.0/0.45 selectable
- Frame/Field mode selectable



#### Description

**Auto electronic shutter control** – UM-400/UM-401 family is a high resolution EIA/CCIR B/W CCD camera with the auto electronic shutter built-in, which allows to change the iris level automatically without using the auto iris lens. The camera is capable of detecting any shutter range from 1/60sec to 1/31000sec to a fixed exposure level at all time within 1 seconds. This is excellent for airborne, automobile, and outdoor applications where light level is constantly changing.

**Easy access** - The rotary switch located on rear plate can easily change various shutter speeds for asynchronous reset applications. The asynchronous reset input pinout is located on 12-pin connector. AGC/MGC, Gamma 1.0/0.45, and Frame/Field mode selections are also available on the rear plate.

**Camera Interface** – UM-400/UM-401 is compatible with all-standard RS-170 frame grabbers, TV monitors, and VCR compatible recording devices.

#### Applications

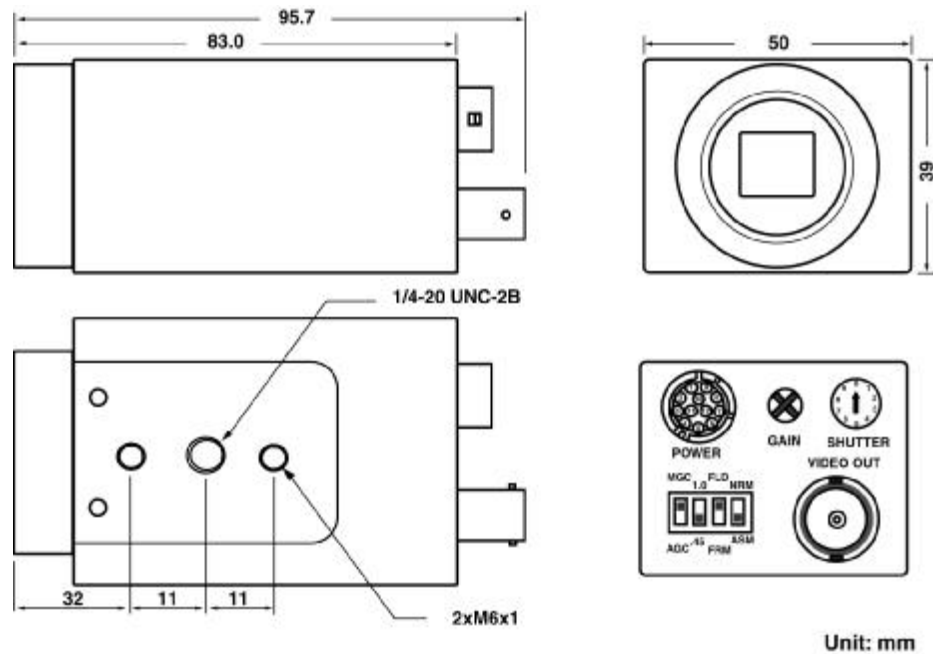
UM-400/UM-401 applications include airborne and automobile monitoring, traffic inspection, outdoor surveillance, and other applications where auto iris is applied.

\* Super HAD CCD is a registered trademark of Sony Corporation.

## Specifications:

Model	UM-400 (EIA)	UM-401 (CCIR)
CCD Sensor	1/2" Interline-Transfer Super HAD CCD	
Chip Size	6.4 mm x 4.8 mm	
Effective Pixels (H x V)	768 x 494	752 x 582
Unit Cell Size (H x V)	8.4 μm x 9.8 μm	8.6 μm x 8.3 μm
Scanning	525 TV lines, 2:1 Interlaced or Non-interlaced	625 TV lines; 2:1 Interlaced or Non-interlaced
Synchronization	HD: 15.734KHz; VD: 59.94.0Hz	HD: 15.625KHz; VD: 50Hz
TV Resolution	H: 570 TV Lines; V: 375 TV Lines	H: 560 TV Lines; V: 450 TV Lines
S/N Ratio	56dB (AGC OFF, Gamma 1.0)	
Min. Illumination	0.05 lux	
Video Output	1 V p-p, 75ohm (BNC or 12 pin Hirose)	
AGC	AGC/MGC selectable	
Gamma	Gamma 0.45/1.0 selectable	
Frame Mode	Frame/Field Mode selectable	
Auto Electronic Shutter	1/60 ~ 1/100,000 selectable	
Lens Mount	C-Mount	
Operating Temperature	-10 °C ~ +55 °C	
Power Requirement	12V DC, 210mA, 2.5W	
Dimension	50mm x 39mm x 83mm	
External Synchronization	Internal/External Auto Switch	
Asynchronous Capture	Standard	
Low Speed Shutter	2 FLD ~ 16 FLD (Optional)	
Long Term Integration	1/30 sec. ~ 2 sec. (user control)	
Weight	155 g	

## Dimensions:



**Note: Specifications are subject to change without notice**