



# *CV-M300*

## *Industrial Monochrome CCD Camera*



- *2/3" monochrome CCD camera*
- *CCIR: 752 (h) x 582 (v) pixels. EIA: 768 (h) x 494 (v) pixels*
- *Increased sensitivity and improved dynamic range*
- *Reduced smear level*
- *High S/N ratio >58 dB*
- *Interlaced or non-interlaced scanning*
- *Field or frame accumulation mode*
- *Internal, external HD/VD or random synchronization*
- *Random trigger with edge pre-select, start/stop and pulse width control shutter*
- *Long time exposure with external VD pulses*
- *HD/VD input or output TTL or 75 Ohm*
- *Exposure enable (EEN) and write enable (WEN) output*
- *Pixel clock output for frame grabber friendly interface*
- *Rugged and compact construction*

*The leading manufacturer of high performance camera solutions*

# Specifications for CV-M300

Specifications	CV-M300C	CV-M300E
Scanning system	625 lines 25 frames/sec.	525 lines 30 frames/sec.
CCD sensor	Monochrome 2/3" IT CCD	
Sensing area	8.8 mm (h) x 6.6 mm (v)	
Effective pixels	752 (h) x 582 (v)	768 (h) x 494 (v)
Pixels in video output	737 (h) x 575 (v)	758 (h) x 486 (v)
Cell size	11.6 (h) x 11.2 (v) $\mu\text{m}$	
Resolution (horizontal)	560 TV lines	570 TV lines
Sensitivity on sensor	0.05 Lux, Max gain, 50% video	
S/N ratio	>59 dB (AGC off, Gamma 1)	
Video output	Composite VS signal 1.0 Vpp, 75 Ohm	
Gamma	0.45 – 1.0	
Gain	Manual – Automatic Potentiometer – AGC	
Gain range	0 to +18 dB	
Scanning	2:1 interlace – non-interlace	
Accumulation	Field – frame	
Synchronization	Int. X-tal. or Ext. HD/VD or random trigger	
HD sync. input/output	4 Vpp, 75 Ohm*	
VD sync. input/output	4 Vpp, 75 Ohm*	
Trigger input	4 Vpp, 75 Ohm*	
WEN output (write enable)	4 Vpp, 75 Ohm*	
EEN output (exposure enable)	4 Vpp, 75 Ohm*	
Pixel clock out (optional)	4 Vpp, 75 Ohm	
Trigger modes	Normal, Edge pre-select, Pulse width control and Start/stop	
Trigger input duration	>H to <1000H. (CCIR: 64 $\mu\text{sec.}$ to 1 msec., EIA: 63.5 $\mu\text{sec.}$ to 1 msec.)	
Internal and edge pre-select	1/50, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4500, 1/10,000 sec.	
Pulse width control	1H to 251H	
Start/stop	1/77 to 1/10,000 sec.	
Long time exposure	1 field to $\infty$ Duration between ext. VD pulses	
Operating temperature	-5°C to +45°C	
Humidity	20 – 80% non-condensing	
Power	12V DC $\pm$ 10%. 3.6 W	
Lens mount	C-mount	
Dimensions	40 x 50 x 80 mm (HxWxD)	
Weight	230 g	

\* HD sync., VD sync./ (Trigger) input or output by internal jumpers. Factory setting: HD/VD input. Inputs TTL or 75 Ohm terminated by internal jumpers. Factory setting: 75 Ohm terminated.

## Switch Setting

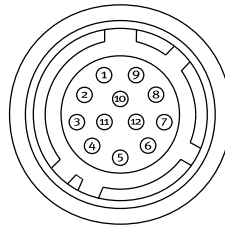
	OFF	ON	
SHUTTER	1	2	1/60
	3	4	1/100
TRIGGER	5	6	1/250
ACCUMM	7	8	1/500
INTERLACE			1/1000
GAMMA			1/2000
GAIN			1/4500
			1/10,000
			Seconds
			Normal <> External
			Field <> Frame
			Interlace <> Non-Interlace
			1.0 <> 0.45
			Manual <> Auto

## Ordering Information

CV-M300C 2/3" Industrial Monochrome Camera. CCIR  
CV-M300E 2/3" Industrial Monochrome Camera. EIA

## Connection Description

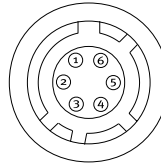
### DC-IN/SYNC.



Hirose HR10A-10R-12P. Male.

- Pin 1 Ground  
2 +12V DC  
3 Ground  
4 Video output  
5 Ground  
6 HD in/(HD output)  
7 VD input/  
8 Ground  
9 Pixel clock output (sine) optional\*\*  
10 Ground  
11 +12V DC  
12 Ground

### TRIGGER

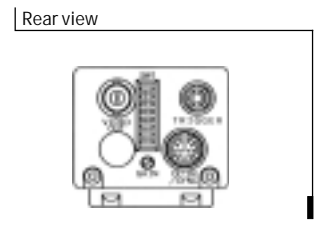
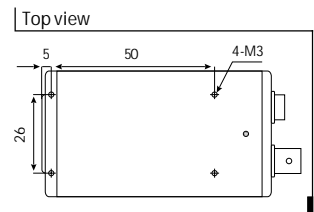
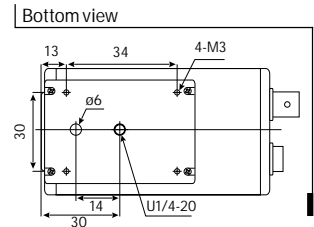
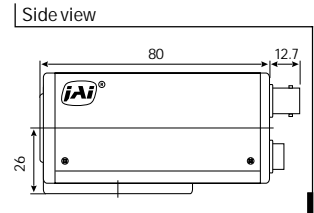
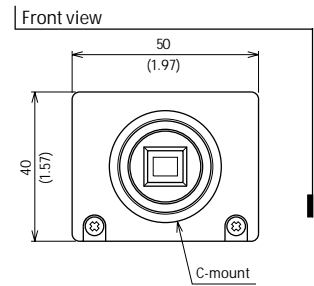


Hirose HR10A-7R-6P. Male.

- Pin 1 N.C.  
2 EEN output  
3 Ground  
4 N.C.  
5 Trig. input  
6 WEN pulse output

\*\*Pixel clock output by internal jumper setting.

## Dimensions



## Spectral Sensitivity

