

## Component / OEM



## OUTLINE

Ideal for high speed image processing, the XC-HR300 is a small-sized B/W C-Mount camera featuring a 1/2 type progressive scan CCD. The XC-HR300 can capture excellent quality images at high speeds. By doubling the drive frequency of the CCD, full frame SVGA images can be obtained at 50 frames/s on 1 output (progressive 1N MODE) or 100 frames/s on 2 outputs (interlaced 2I MODE). Further speed increase up to four times can be achieved by reducing the number of transmitted lines (partial images). In addition, excellent vibration and shock characteristics make the camera also suitable for Factory Automation applications.

## FEATURES

- High frame rate
  - 2I MODE: 100 frame/s Interlaced (2 outputs) scanning
  - 1N MODE: 50 frame/s Progressive scanning (1 output)
- High rate scanning to increase vertical scan frequency
  - 2I MODE: approx. 400 frame/s
  - 1N MODE: approx. 200 frame/s
- Progressive scanning, square pixels.
- External trigger shutter
- Rugged Construction structure for Factory Automation application
  - Vibration and shock-resistant structure
  - Settings can be made at rear panel
  - The 12 pin connector complies with new EIAJ standards

## SPECIFICATIONS

<b>XC-HR300</b>	
Image device	1/2 type IT progressive scan CCD
Effective picture elements	782 (H) x 582 (V)
CCD Horizontal drive frequency	29.5 MHz
CCD Vertical drive frequency	31.25 KHz
Cell size	8.3 μm (H) x 8.3 μm (V)
Chip size	8.10 mm (H) x 6.33 mm (V)
Effective sensing area	6.4 mm (H) x 4.8 mm (V)
Lens mount	C mount
Flange back	+/- 17.526 mm
Sync system	Internal/External (auto)
External Sync system	HD/VD (2 - 5 Vp-p) * Input signal automatically detected when switch on rear panel in [EXT] mode.
Jitter	less than 35 ns
Scanning system	625 lines 1N MODE (1 video output) 2I MODE (2 video outputs)
Horizontal resolution	600 TV lines
Minimum illumination	6.0 lx (F1.4/Gamma Off/Gain + 18 dB)
S/N ratio	58 dB (with 2I MODE)
Gain	Manual (0-18 dB) / Fixed (0 dB) selectable
Gamma	OFF (Fixed only)
External trigger shutter	1/4 - 1/25,000 s
Trigger polarity	Positive only (H: 5 V / L: 0 V)
Power requirements	DC +12 V (+10.5 V - +15.0 V)
Power consumption	4.0W
Dimensions	44 (W) x 33 (H) x 75 (D) mm (1 3/4 x 1 5/16 x 3 inches)
Mass	175 g (6 oz)
Operation temp./humidity	-5°C - 45°C / 20 - 80%
Storage temp./humidity	-30°C - 60°C / 20 - 95%
Vibration	10 G (20-200Hz)
Shock resistance	70 G
Regulations	UL 1492, FCC Class A Digital Device, IC Class A Digital Device, CE (EN50081-2 + EN50082-2), EMC AS3548 (Class A)
Supplied accessories	Lens mount cap (1), Operation instructions (1)

## DIMENSIONS & REAR PANEL

(unit: mm)

- Scanning mode select switch
- Gain select switch
- Restart Reset/ External trigger shutter mode select switch
- 75Ω termination select switch
- HD/VD input/output select switch
- 12 pin multi-connector
- High frame rate control switch
- Shutter speed select switch

### ◆ 12 PIN ASSIGNMENT

Pin NO.	IN/OUT signal	Pin NO.	IN/OUT signal
1	GND	7	VD IN / OUT
2	+12 V	8	VIDEO 2 (GND)
3	VIDEO 1 (GND)	9	VIDEO 2
4	VIDEO 1	10	WEN OUT
5	HD IN / OUT (GND)	11	TRIG IN
6	HD IN / OUT	12	VD IN (GND)

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