

## XC-ES50/ES30 XC-ES50CE/ES30CE XC-EI50/EI30 XC-EI50CE/EI30CE

Preliminary

Component/OEM



### OUTLINE

The XC-ES50/50CE and XC-ES30/30CE are compact, light-weight one-piece black and white camera modules incorporating the latest 1/2" Interline (IT) CCD which produces new levels of picture detail. With dimensions of 29mm x 29mm x 32mm, these units can easily be installed in places where installation was previously difficult for other larger cameras.

Similar to the XC-ES50/ES30 cameras, the XC-EI50/50CE and XC-EI30/30CE cameras also have near-infrared sensitivity. When used with an IR LED illuminator, these cameras can capture clear images in very low light environments. All four models have identical dimensions and controls, making it easy to interchange them. A variety of settings are available for differing subject and lighting conditions. All camera control switches are accessible from the outside of the camera. Excellent vibration and shock characteristics make these cameras ideal for demanding machine vision applications.

### FEATURES

- XC-ES50/EI50/CE: 1/2" IT CCD
- XC-ES30/EI30/CE: 1/3" IT CCD
- Small and light weight: 29mm x 29mm x 32mm, 60g
- Infrared capability (XC-EI50/EI50CE, XC-EI30/EI30CE)
- Sensitivity at F1.4
  - 0.3 lx (XC-ES50/ES50CE, XC-ES30/ES30CE)
  - 0.1 lx (XC-EI50/EI50CE)
  - 0.2 lx (XC-EI30/EI30CE)
- High S/N Ratio: 60 dB
- Flexible trigger shutter functions
- 2:1 interlace/non-interlace
- Frame/field exposure
- Restart/Reset function
- Synchronization: internal/external (HD/VD, VS)
- High shock and vibration tolerance

### ACCESSORIES

Compact camera adaptor

#### DC-700/700CE

- Compact, lightweight (700 g)
- Two video outputs
- External sync IN / OUT
- Trigger input / WEN output
- New EIAJ standard 12 pin connector
- Dimensions: 110(W) x 53(H) x 160(D) mm



12 pin camera cable (CE standard)

- CCXC-12P02N (2m)
- CCXC-12P05N (5m)
- CCXC-12P10N (10m)
- CCXC-12P25N (25m)



Tripod adaptor

#### VCT-ST333I

- Isolated type
- Approx. 6.1 g
- Dimensions: 27(W)x18(H)x25(D)mm

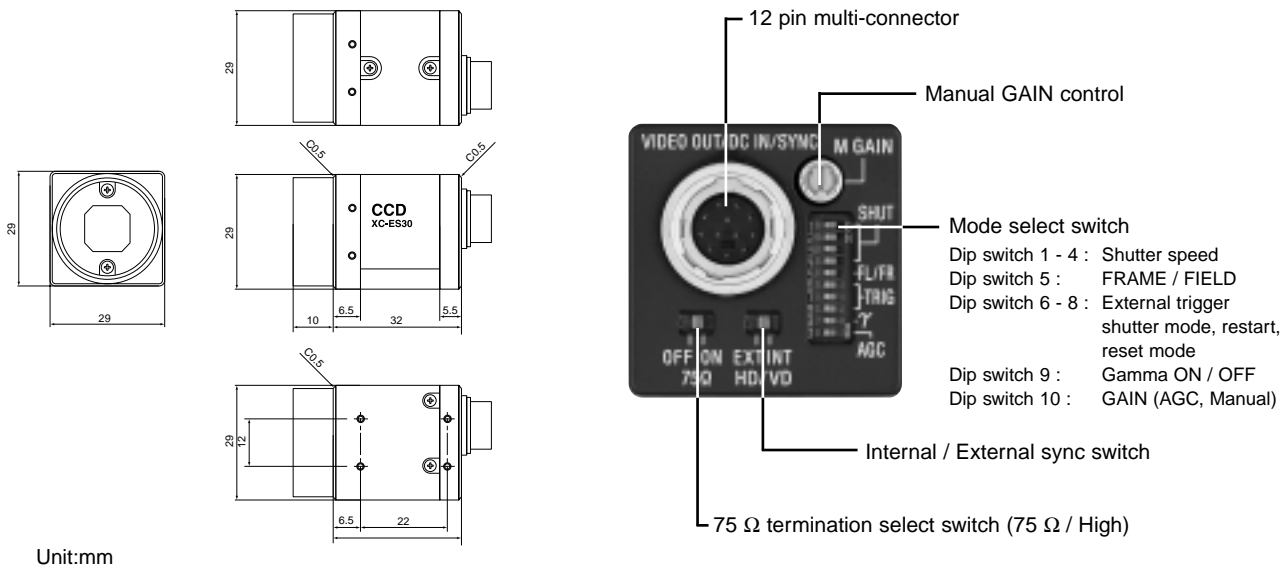


## SPECIFICATIONS

	XC-ES50	XC-ES50CE	XC-ES30	XC-ES30CE	XC-EI50	XC-EI50CE	XC-EI30	XC-EI30CE
Image device	1/2" IT CCD		1/3" IT CCD		1/2" IT CCD		1/3" IT CCD	
Effective picture elements	768 (H) x 494 (V)	752 (H) x 582 (V)	768 (H) x 494 (V)	752 (H) x 582 (V)	768 (H) x 494 (V)	752 (H) x 582 (V)	768 (H) x 494 (V)	752 (H) x 582 (V)
Signal system	EIA (standard)	CCIR (standard)	EIA (standard)	CCIR (standard)	EIA (standard)	CCIR (standard)	EIA (standard)	CCIR (standard)
Horizontal frequency	15.734 kHz	15.652 kHz	15.734 kHz	15.652 kHz	15.734 kHz	15.652 kHz	15.734 kHz	15.652 kHz
Vertical frequency	59.94 Hz	50 Hz	59.94 Hz	50 Hz	59.94 Hz	50 Hz	59.94 Hz	50 Hz
Cell Size	8.4 x 9.8 μm	8.6 x 8.3 μm	6.35 x 7.4 μm	6.5 x 6.25 μm	8.4 x 9.8 μm	8.6 x 8.3 μm	6.35 x 7.4 μm	6.5 x 6.25 μm
Lens mount	C mount							
Flange back	17.526 mm							
Sync system	Internal / External (auto)							
External Sync system	HD / VD (2 ~ 5 Vp-p), VS							
External Sync frequency	+/- 1%							
Jitter	less than +/- 50 nsec							
Scanning system	2:1 Interlaced							
Video output	1.0 Vp-p, negative, 75 Ω unbalanced							
Horizontal resolution	570 TV lines	560 TV lines	570 TV lines	560 TV lines	570 TV lines	560 TV lines	570 TV lines	560 TV lines
Minimum illumination*	0.3 lx		0.3 lx		0.1 lx		0.2 lx	
S/N ratio	60 dB							
Gain	AGC (0-18 dB) / Manual (0-18 dB) Selectable							
Gamma	ON / OFF							
Normal shutter	1/100 ~ 1/10,000 S	1/120 ~ 1/10,000 S	1/100 ~ 1/10,000 S	1/120 ~ 1/10,000 S	1/100 ~ 1/10,000 S	1/120 ~ 1/10,000 S	1/100 ~ 1/10,000 S	1/120 ~ 1/10,000 S
External trigger shutter	1/4 ~ 1/10,000 S	1/4 ~ 1/8,000 S	1/4 ~ 1/10,000 S	1/4 ~ 1/8,000 S	1/4 ~ 1/10,000 S	1/4 ~ 1/8,000 S	1/4 ~ 1/10,000 S	1/4 ~ 1/8,000 S
Power requirements	DC12 V (+9 ~ 16 V)							
Power consumption	1.6 W		1.4 W		1.6 W		1.4 W	
Dimensions	29 (W) x 29 (H) x 32 (D) mm (1 3/16 x 1 3/16 x 1 5/16 inches)							
Mass	60 g (2 oz)							
Operation temp./mois.	-10 ~ +50°C / 20 ~ 80%							
Storage temp./mois.	-20 ~ +60°C / 20 ~ 95%							
Vibration	10 G (20 ~ 200 Hz)							
Shock resistance	70 G							
Regulations	UL1492, FCC Class A Digital Device, CE (EN50081-2 + EN50082-2), AS4251.1 + AS4252.2							
Supplied accessories	Lens mount cap (1), Operating instructions (1)							

\* (F1.4, AGC ON, without IR cut filter)

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