

SONY
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Image Sensing Solutions



Sony have designed, developed and manufactured a range of imaging products that you can depend upon, even in the most demanding applications. From factory automation, microscopy and inspection to security and process control, we thoroughly understand your requirements and the specialised environments in which our products need to operate.



XC series

NON-TV FORMAT

XC-HR90



- 1/3-type PS CCD
- Full pixel read-out, SXGA size
(Effective lines: 1,280 (H) × 960 (V))
- Image output: (selectable) 30 fps, 15 fps
- Vertical frequency
 - 49.302 MHz (30 fps)
 - 24.651 MHz (15 fps)
- Analog output
- Partial scan function
- Binning function
- External control possible (RS-232C)
- C mount system
- High shock and Vibration Resistance

XC-HR70



- 1/3-type PS CCD
- Full pixel read-out, XGA size
Effective lines: 1,024 (H) × 768 (V)
- Image output: 30 fps
Effective picture element: XGA size
1,034 (H) × 779 (V)
- Partial scanning
(at restart/reset ON, Binning OFF)
Up to 120 fps (Effective line: 152 lines)
- External trigger shutter
1/4 sec to 1/100,000 sec
- Electronic Shutter
1/100 sec to 1/20,000 sec
- Synchronization Internal/External (HD/VD)
- C mount system
- High shock and Vibration Resistance

XC-HR50



- 1/3-type PS CCD
 - Double Scan CCD
 - The CCD has square pixels eliminating the need for aspect ratio conversion.
 - VGA resolution (648 × 494 pixels) image capturing at a speed of 60 fps.
- Partial scanning
(at restart/reset ON, Binning OFF)
Up to 240 fps. (Effective line: 102 lines)
- Compact and lightweight
29 (W) × 29 (H) × 30 (D) mm, 50 g
- External trigger shutter
1/4 sec to 1/100,000 sec
- Electronic Shutter
1/100 sec to 1/20,000 sec
- Synchronization Internal/External (HD/VD)
- C mount system
- High shock and Vibration Resistance

XC-HR57



- 1/2-type PS CCD
 - Double Scan CCD
 - The CCD has square pixels eliminating the need for aspect ratio conversion.
 - VGA resolution (648 × 494 pixels) image capturing at a speed of 60 fps.
- Partial scanning
(at restart/reset ON, Binning OFF)
Up to 240 fps. (Effective line: 102 lines)
- Compact and lightweight
29 (W) × 29 (H) × 30 (D) mm, 50 g
- External trigger shutter
1/4 sec to 1/100,000 sec
- Electronic Shutter
1/100 sec to 1/20,000 sec
- Synchronization Internal/External (HD/VD)
- C mount system
- High shock and Vibration Resistance

XC-HR58



- 1/2-type PS CCD
 - Double Scan CCD
 - The CCD has square pixels eliminating the need for aspect ratio conversion.
 - SVGA class resolution (767 × 580 pixels) image capturing at a speed of 50 fps.
- Partial scanning
(at restart/reset ON, Binning OFF)
Up to 200 fps. (Effective line: 90 lines)
- Compact and lightweight
29 (W) × 29 (H) × 30 (D) mm, 50 g
- External trigger shutter
1/4 sec to 1/100,000 sec
- Electronic Shutter
1/100 sec to 1/20,000 sec
- Synchronization Internal/External (HD/VD)
- C-mount system
- High shock and Vibration Resistance

XC-56



- 1/3-type PS CCD
- Non-TV format
- Square pixel/Full pixel read-out
- VGA-class resolution
- Image output: 30 fps
- Partial scanning function
- External trigger shutter
 - Restart/Reset
 - Mode 1 (Non-reset mode)
 - Mode 2 (Reset mode)
- Various settings are available on the rear panel
- C mount system
- High shock and Vibration Resistance

XC-56BB



- 1/3-type PS CCD
- Non-TV format
- Square pixel/Full pixel read-out
- VGA-class resolution
- Image output: 30 fps
- Partial scanning function
- External trigger shutter
 - Restart/Reset
 - Mode 1 (Non-reset mode)
 - Mode 2 (Reset mode)
- Various settings are available on the rear panel
- Cable Length: 2 m
- C mount system
- High shock and Vibration Resistance

XC series

TV FORMAT B/W series

XC-ES50
XC-ES51
XC-ES30



- XC-ES50/ES50CE: 1/2-type IT CCD
- XC-ES51/ES51CE: 1/2-type IT CCD High sensitivity
- XC-ES30/ES30CE: 1/3-type IT CCD
- External trigger shutter function
- Electronic shutter function
- 2:1 Interlaced/non-interlaced
- Frame/Field accumulation
- Restart/Reset function
- Sync system: Internal/external (HD/VD)
- C mount system
- High shock and Vibration Resistance

XC-EI50
XC-EI30



- XC-EI50/EI50CE: 1/2-type IT CCD
- XC-EI30/EI30CE: 1/3-type IT CCD
- Near-IR sensitivity
- High sensitivity: F1.4
- XC-EI50/EI50CE: 0.1 lx
- XC-EI30/EI30CE: 0.2 lx
- Electronic shutter function
- External trigger shutter function
- 2:1 Interlaced/non-interlaced
- Frame/Field accumulation
- Restart/Reset function
- Sync system: Internal/external (HD/VD)
- C mount system
- High shock and Vibration Resistance

XC-EU50



- 1/2-type IT CCD
- Near-UV sensitivity
- High S/N ratio: 60 dB
- Electronic shutter function
- External trigger shutter function
- 2:1 Interlaced/non-interlaced
- Sync system: Internal/external (HD/VD)
- Frame/Field accumulation
- Restart/reset function
- C mount system
- High shock and Vibration Resistance

XC-ES50L



- 1/2-type IT CCD
- Electronic shutter function
- External trigger shutter function
- 2:1 Interlaced/non-interlaced
- Frame/Field accumulation
- Restart/Reset function
- IR cut filter
- Sync system: Internal/external (HD/VD)
- C mount system
- High shock and Vibration Resistance

XC-ST70
XC-ST51
XC-ST50
XC-ST30



- XC-ST70/ST70CE: 1/3-type IT CCD
- XC-ST51/ST51CE/ST50/ST50CE: 1/2-type IT CCD
- XC-ST30/ST30CE: 1/3-type IT CCD
- Dimensions (WxHxD): 44 x 29 x 57.5 mm
- Mass: 110 g
- Flexible trigger shutter functions
- High sensitivity
- XC-ST51/ST51CE: 0.2 lx (F1.4)
- XC-ST70/ST70CE/ST50/ST50CE/ST30/ST30CE: 0.3 lx (F1.4)
- 2:1 interlaced/non-interlaced (during external sync input)

- High S/N ratio : 60 dB (XC-ST70/ST50/ST51); 58 dB (XC-ST30)
- Electronic shutter function (1/100 to 1/10,000 s)
- Synchronization: internal/external (HD/VD, VS)
- Frame/Field exposure
- Restart/Reset function
- C mount system
- High shock and Vibration Resistance

TV FORMAT Colour

XC-505



- 1/3-type IT CCD
- Dimensions (WxHxD): 22 x 22 x 64 mm
- Mass: 51 g
- External synchronization HD/VD, VS, VBS
- VBS and Y/C outputs
- CCD IRIS function
- NR function
- Built-in Test Pattern
- Compact NF lens and lens mount
- RS-232C interface to control camera

XC series - Accessories

NF-Mount Lens

VCL-03S12XM



Focal length	3.5 mm
Aperture (F-number)	F1.8 to F16
Minimum object distance (MOD)	300 mm
Mass	40 g

VCL-06S12XM



Focal length	6 mm
Aperture (F-number)	F1.4 to F16
Minimum object distance (MOD)	298 mm
Mass	25 g

VCL-12S12XM



Focal length	12 mm
Aperture (F-number)	F1.4 to F16
Minimum object distance (MOD)	298 mm
Mass	25 g

Adaptor

DC-700



- Compact, lightweight
- External sync input/output
- Trigger input/WEN output
- Built-in high-performance switching power supply

Cable

CCXC-12P02N CCXC-12P10N CCXC-12P05N CCXC-12P25N



- Camera cable (for XC series)
This 12-pin camera cable is used for connecting an XC camera to a DC-700/700CE camera adaptor or JB-77 junction box.
- Shielded

Junction Box

JB-77



- This junction box enables simple conversion from 12-pin camera cable to BNC. Also, 12V DC can be supplied from general purpose power supply to the junction box's power terminal.

C-Mount Adaptor

LO-999CMT



Mass	12 g
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- When a C-mount type lens is attached, a C-mount adaptor (LO-999CMT) is required.

Connector

PC-XC12



- 12-pin/female

Tripod Adaptor

VCT-333I



- Material: ABS resin
- Insulated type

VCT-55I



- Material: ABS resin
- Insulated type

VCT-ST70I



- Material: ABS resin
- Insulated type