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.

XCG series B/W Models

DIGITAL INTERFACE GIGE VISION

2/3-type EXView HAD CCD II™ sensor
XCG-H280E

Resolution	Frame rate *1	
	2ch*2 (default)	4 ch *2
1,920 (H) x 1,080 (V) (16 :9, default)	32 fps	64 fps *3
1,920 (H) x 1,440 (V) (4 :3)	26 fps	52 fps *3

*1 Approx. value in free run mode
*2 Readout mode of image sensor
*3 Frame rate of image sensor. Some image data may not be transferred when the frame rate exceeds transmission capacity.

The XCG-H280E incorporates the GigE Vision interface standard, based on Gigabit Ethernet technology. In response to the growing demand for large-scale systems, this interface enables the camera to transfer a large amount of data over long distances. The use of an Ethernet cable and availability of a wide variety of peripheral devices contribute to significant cost cutting benefits when designing a complete vision system. By utilizing the features and benefits of the GigE Vision, the XCG-H280E is ideally suited to the demanding requirements of ITS (Intelligent Transportation System) and machine-vision applications.

- Gigabit Ethernet (1000BASE T)
- GigE Vision® Ver.1.2
- GenIcam™ Ver.1.0
- Bulk Trigger Mode
- Sequential trigger Mode
- Readout mode: Normal/Partial scan/ Binning
- High Frame Rate Image Transfer
- High Sensitivity: 400 lx F8 (0 dB)
- Auto-exposure
- Chunk data
- Image Buffer
- Strobe Delay
- Auto Gain Control
- C mount
- Minimum illumination: 0.5 lx
- Compact Design :
  Dimensions (W×H×D): 50× 50× 57.5 mm
- Mass: 200 g
- Low Power consumption: 5.3 W

"GigE Vision" is a registered trademark of AIA (Automated Imaging Association)
"GenIcam" is trademark of EMVA (European Machine Vision Association)

2/3-type PS CCD (5 megapixel 15 fps)
XCG-5005E

1/1.8-type PS CCD (UXGA 15 fps)
XCG-U100E

2/3-type PS CCD (SXGA 27 fps)
XCG-SX99E

2/3-type PS CCD (SXGA 16 fps)
XCG-SX97E

1/3-type PS CCD (VGA 90 fps)
XCG-V60E

- Gigabit Ethernet (1000BASE-T)
- GigE Vision® Ver.1.0
- GenIcam™ Ver.1.0
- Special trigger mode (Bulk trigger / Sequential trigger / Trigger delay)
- Readout mode: Normal/Partial scan (V/H)
- Binning
- Frame Rate Control
- Strobe Delay
- Auto Gain Control
- C mount
- Sensitivity:
  XCG-5005E, XCG-U100E, XCG-V60E: 400 lx F5.6 (0 dB)
  XCG-SX97E : 400 lx F11 (0 dB)
  XCG-SX99E : 400 lx F8 (0 dB)
- Minimum illumination
  (Gain +18 dB, F1.4)
  XCG-5005E, XCG-U100E, XCG-V60E: 1 lx
  XCG-SX97E: 0.2 lx, XCG-SX99E: 0.4 lx
- Dimensions (W×H×D): 44 × 33 × 67.5 mm
- Mass: 145 g
- Power consumption (Max.)
  XCG-U100E, XCG-SX97E, XCG-V60E: 3.1W
  XCG-SX99E : 3.6 W
  XCG-5005E: 4.3 W

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XCG series Colour Models

DIGITAL INTERFACE GIGE VISION

2/3-type EXView HAD CCD II™ sensor
XCG-H280CR

Resolution	Frame rate *1	
	2ch*2 (default)	4 ch *2
1,920 (H) x 1,080 (V) (16 :9, default)	32 fps	64 fps *3
1,920 (H) x 1,440 (V) (4 :3)	26 fps	52 fps *3

*1 Approx. value in free run mode
*2 Readout mode of image sensor
*3 Frame rate of image sensor. Some image data may not be transferred when the frame rate exceeds transmission capacity.

The new XCG-H280CR incorporates a 2/3-type EXview HAD CCD II™ colour sensor which provides great sensitivity with a full-HD high frame rate image transfer capability with 8-, 10-, or 12-bit video data output.

In addition to inheriting some of the unique features of Sony's XCD Series, such as Bulk Trigger and Sequential Trigger modes, the XCG-H280CR supports useful features for ITS (Intelligent Transportation System) applications such as Chunk Data and Auto Exposure.

- Gigabit Ethernet (1000BASE T)
- GigE Vision® Ver.1.2
- GenIcam™ Ver.1.0
- Bulk Trigger Mode
- Sequential trigger Mode
- Readout mode: Normal/Partial scan
- High Frame Rate Image Transfer
- High Sensitivity: F8 (2000lx, Gain:0 dB)
- Auto-exposure
- Chunk data
- Image Buffer
- C mount
- Minimum illumination (50%): 6 lx (Iris:F1.4, Gain:+18dB, Tentative)
- Compact Design: Dimensions (W×H×D): 50× 50× 57.5 mm
- Mass: 200 g
- Low Power consumption: 5.8 W (max.)

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2/3-type PS CCD (5 megapixel 15 fps)
XCG-5005CR

1/1.8-type PS CCD (UXGA 27 fps)
XCG-U100CR

	XCG-5005CR	XCG-U100CR
Progressive Scan IT CCD	2/3-type	1/1.8-type
Cell size (H) x (V)	3.45 µm x 3.45 µm	4.4 µm x 4.4 µm
Standard picture size (H) x (V) and High Frame Rate Image Transfer	2,448 x 2,048 at 15 fps	1,600 x 1,200 (UXGA) at 27 fps

Sony proudly introduces two new raw colour GigE cameras to its popular XCG Series: the high-quality, high-performance XCG-5005CR and XCG-U100CR.

These cameras incorporate the GigE Vision® interface, which is specifically standardized for machine-vision applications based on Gigabit Ethernet technology.

- Gigabit Ethernet (1000BASE-T)
- GigE Vision® Ver.1.2
- GenIcam™
- Special trigger mode (Bulk trigger / Sequential trigger / Trigger delay)
- Readout mode: Normal/Partial scan
- Frame Rate Control
- Strobe Delay
- Auto Gain Control
- C mount
- Sensitivity:
  XCG-5005CR: 2000 lx at F8 (0 dB)
  XCG-U100CR: 2000 lx at F5.6 (0 dB)
- Minimum illumination
  XCG-5005CR, XCG-U100CR: 6lx (F1.4, +18dB, Shutter: off, 50% video level)
- Dimensions (W×H×D): 44 × 33 × 67.5 mm
- Mass: 145 g
- Power consumption (Max.):
  XCG-U100CR: 3.5W
  XCG-5005CR: 4.3 W

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