

### XCG-SX99E

Sony proudly introduces a new camera to its XCG Series of high-quality, high performance digital interface cameras: the new XCG-SX99E, a higher frame rate version of the XCG-SX97E dedicated to Security/ITS applications. The XCG camera series offers choice, flexibility, and high image quality options to match your specific inspection application requirements. By utilizing the features and benefits of the GigE Vision interface, the XCG Series expands the possibilities for factory automation and security applications, while also delivering the potential of significant cost savings.



In addition to the 1st-XCG line up (XCG-5005E, U100E, SX97E and V60E), the XCG-SX99E employs the same sensor as the XCG-SX97E realizing high speed read-out. ITS (Intelligent Transport Systems) is one of the categories in huge Security market. In many cases, specific functions of Machine Vision camera are required for ITS. - Still Image acquisition by external trigger, - High resolution sensor - Broadband transmission I/F, - Sensor with IR sensitivity. The XCG-SX99E especially targets the ITS market and realizes high-speed readout by employing sensor with IR sensitivity to meet ITS market's needs. The newly expanded XCG Series now consists of five models – the XCG-5005E, the XCG-U100E, the XCG-SX99E, the XCG-SX97E, and the XCG-V60E. Each camera varies in resolution and frame rate, and offers unique benefits that users have come to expect from Sony's camera products. These cameras retain some of the same functionality found in Sony's renowned XCD Series such as bulk trigger mode, sequential trigger mode, and a partial scanning function. In addition, the XCG-SX99E, XCG-SX97E, and XCG-5005E feature critical camera functions for security applications such as IR wavelength coverage (XCG-SX99E and XCG-SX97E) and ultra-high 5-megapixel resolution (XCG-5005E).



## Features

**Full lineup: XCG-5005E, XCG-U100E, XCG-SX99E, XCG-SX97E, XCG-V60E**

With a variety of resolutions and feature-rich benefits, it's never been easier to select the right camera for your specific factory automation, machine vision, and high-end security applications.

### GigE Vision Interface

The adoption of the GigE Vision interface adds to the outstanding value and performance of the XCG camera series. Answering the growing demand for large-scale systems, the XCG Series can transfer large data over long distances (up to 100m). In addition, the cameras are reinforced with a packet re-send mechanism that can eliminate the loss of transferred data. Furthermore, the overall cost of a vision system can be reduced with these cameras thanks to the availability of a variety of peripheral devices.

### Driver for the XCG Series

The XCG Series is equipped with a Sony-provided, dedicated driver. This image filter driver enables jumbo-packet data transfer across all industry-standard hardware. It is also capable of non-GigE Vision data transfer in GigE Vision environments.

### Bulk Trigger Mode/Sequential Trigger Mode

The XCG Series features an advanced Bulk Trigger Mode and Sequential Trigger Mode, in addition to its conventional trigger mode. Bulk Trigger Mode allows the XCG Series to capture up to 16 images in rapid succession using a single software or hardware trigger. Sequential Trigger Mode periodically sends a software or hardware trigger to the camera to capture the successive images. With the cameras' memory channel, up to 16 different settings can be called up to capture these images. Thanks to these beneficial trigger options, the XCG Series reduces the need to receive signals from the host PC.

### High Resistance to Shock and Vibration

Thanks to their robustness and vibration resistance, the XCG Series cameras deliver outstanding performance in the most challenging environmental conditions.

## Technical Specifications

Image device	2/3-type progressive scans IT CCD
Cell size (H) × (V)	6.45 x 6.45 $\mu$ m
Standard picture size (H x V)	1,360 x 1,024 pixels
Resolution	depth 8/10/12 bits/pixel
Lens mount	C mount
Standard frame rate	27 fps
Digital interface	1000BASE-T (GigE Vision compatible)
Sensitivity	400 lx at F8 (0 dB)
Minimum illumination	Less than 0.4 lx (Gain +18 dB, F1.4)
Gain control	Manual 0 dB to +18 dB, Auto gain
Readout mode	Normal/Binning/Partial scan
Binning	Vertical (1 x 2)
Partial scan	Vertical/Horizontal
Shutter speed	2 s to 1/100,000 s
External trigger shutter	Pulse-edge detection mode, Pulse-width detection mode, Special trigger mode (Bulk trigger mode/Sequential trigger mode)

### Vertical and Horizontal Partial Scanning

#### Vertical Binning

Memory channel	16 channels
Readout features	Binarisation, Gamma correction (LUT), Built-in test pattern
Power requirements	DC 10.5 V to 15 V
Power consumption	3.6 W
Dimensions	44 x 33 x 67.5 mm (1 3/4 x 1 5/16 x 2 3/4 inches)
Mass	Less than 145 g (5 3/4 oz)
Operating temperature	-5°C to +45°C (23°F to 113°F)
Storage temperature	-30°C to +60°C (-22°F to +140°F)
Operating humidity	20% to 80% (no condensation)
Storage humidity	20% to 95% (no condensation)
Vibration resistance	10 G (20 Hz to 200 Hz)
Shock resistance	70 G

#### Supplied Accessories

	Lens mount cap (1), Operating instructions (1)
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