



CMOS TECHNOLOGY

XCU-CG160 / XCU-CG160C

The XCU-CG160 (black & white) & XCU-CG160C (Colour) combines the best of Sony technology in a convenient form factor which is optimised for use within both the Industrial Vision and non-manufacturing vision markets

Drawing upon Sony's market leading Global Shutter CMOS sensor technology, combining the IMX273 1.6MP sensor in SXGA resolution with a rich heritage of complete camera technology, bringing the best combination of performance and quality from a brand you can trust.



KEY FEATURES

- Sony IMX273 1.6MP
- Approx. 100fps
- Compact size
- USB3.0 Vision 1.0.1
- Area Gain
- Advanced Image Processing
 - Defect Pixel Correction
 - Shading Correction

KEY SPECIFICATIONS

| | XCU-CG160 / XCU-CG160C |
|------------------------------------|---|
| Dimensions (W x H x D) | 29 x 29 x 30 mm (excluding protrusions) |
| Number of effective pixels (H x V) | 1,456 x 1,088 |
| Weight | 56 g |
| Frame rate (8 bit) | 100 fps |
| Power consumption | 3.0 W (typical) |

Migration from Sony CCD to Sony CMOS, the advantages of IMX273 over ICX445

Our new XCU-CG160/C and XCG-CG160/C cameras include the Sony IMX273 1.6MP SXGA resolution sensor which provides a low-disruption pathway to move from CCD to GSCMOS.

The XCU-GC160/C and XCG-CG160/C cameras are therefore an ideal replacement for industrial cameras using the highly-regarded Sony ICX445 CCD sensor.

As the table opposite shows, the IMX273 shares comparable sensor and pixel size characteristics with the ICX445, but offers significant technological improvements in sensitivity, dynamic range, noise reduction and frame rate capability. The camera's performance is further enhanced through Sony's world renowned know how in camera design.

| | IMX273 B&W/Colour | ICX445 B&W/Colour |
|-------------------------------|----------------------------|-----------------------|
| Optical format | 1/2.9-type | 1/3-type |
| Resolution (H x V) | 1,456 x 1,088 | 1,296 x 966 |
| Sensor type | CMOS | CCD |
| Pixel size (µm) | 3.45 x 3.45 | 3.75 x 3.75 |
| Frame rate (fps) | 75/75 with GigE (Sony XCG) | 30/22 with GigE |
| Shutter type | Global Shutter | Global Shutter |
| Saturation signal (min.) (mV) | 1001 | 350 |
| Sensitivity (min.) (mV) | 790 (F8) / 970 (F5.6) | 300 (F8) / 300 (F5.6) |
| Dark signal (Max.) (mV) | 0.19 | 2 |
| Dynamic range (dB) | 73.6 | 59.6 |
| SNR (max.) (dB) | 40.4 | 39.4 |



looks familiar. performs better.



The new SXGA range from Sony; worthy of everyone's attention

Available with a choice of GigE and USB 3.0 interfaces and using our brand new IMX273 Pregius sensor the new XCU-CG160 & XCG-CG160 provide an ideal digital upgrade path from your current ICX445 CCD-based camera, along with all the performance and long-term durability you'd expect in a complete camera from Sony. With a resolution of 1.6MP crisp & detailed SXGA colour or monochrome images from 75fps to 100fps become a reality, making them suitable for a wide range of imaging applications, from general inspection and alignment, to robotics, medical and ITS.

Take a closer look today at image-sensing-solutions.eu