

## New X-ray Flat Panel Sensor Delivers High-Quality Images for Non-Destructive Inspection

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Hamamatsu Photonics has launched a new X-ray flat panel sensor that delivers real-time, high-quality images for non-destructive testing (NDT) and digital radiography applications.

The C16401SK-51 features high speed, high resolution, and a wide dynamic range. It has a generous photosensitive area of 140.0 x 122.8 mm, making it ideal for capturing detailed images. The sensor's robust construction incorporates cutting-edge CMOS technology and a GOS scintillator, which enhances its durability and image quality. This combination ensures optimal performance and reliability, even when used with X-ray tube voltages of up to 160 kV, making it suitable for demanding imaging applications.



*The C16401SK-51 X-ray flat panel sensor*

This new device offers exceptional versatility with two selectable scan modes and seamless switching between them. The 1x1 flexible partial mode features 1272 x 1104 effective pixels (100x100  $\mu\text{m}/\text{pixel}$ ), delivering a high resolution of 4.5 lp/mm (typ.). The 2x2 flexible partial mode provides 636 x 552 effective pixels (200x200  $\mu\text{m}/\text{pixel}$ ) and a wide dynamic range, ensuring superior image quality.

The combination of low noise and low defects reduces interference and sensor flaws, ensuring the reliability and accuracy of X-ray images for precise inspection.

Hamamatsu's application programming interface, DCAM-API, supports 16-bit output via a Gigabit Ethernet interface. The API package includes driver software and DLL files. For OEM users, Hamamatsu offers the DCAM-SDK with comprehensive function manuals and sample software to facilitate integration and development.

For further information on our new flat sensor panel:

<https://www.hamamatsu.com/eu/en/product/optical-sensors/image-sensor/x-ray-flat-panel-sensor/C16401SK-51.html>

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