

## High-Energy X-ray Line-Scan Camera Series

# XH8800 Series

The X-Scan Imaging XH8800 series of linear array x-ray cameras offers high performance for high-energy x-ray and gamma-ray scanning applications. A compact design combines scintillation for conversion of high-energy photons to visible light, and fiber optics for conveying the visible light to a shielded, off-axis linear imaging diode array. At the heart of a XH8800 camera are X-Scan Imaging's CMOS silicon imaging diode array chips providing wide dynamic range and solid-state reliability. Heavy metal housing shields diode array and electronics ensuring long-life reliability under extreme radiation conditions. The close proximity of the analog-to-digital converters (ADC) to the detector chips and the use of low-voltage-differential-signal (LVDS) technology minimize interference noise. A collection of hardware for interfacing to computers and software including drivers, an intuitive application programming interface (API), example code software, and standard inspection application expedite developments of x-ray scanning systems.

### Key Features

- Off-axis, fiber-optic design for high-energy reliability
- 100 KeV to 450 KeV energy range with option for MeV applications
- Wide range of resolutions & selection of lengths
- Incorporates X-Scan Imaging's proprietary XB8800 Photodiode Detectors
  - Selectable resolution
  - Low noise, wide dynamic range, high sensitivity
  - High MTF
- 16-bit analog-to-digital conversion
- Up to 9000 lines/second
- Supports variable scan speed with position synchronization
- Software development kit
  - Device drivers, libraries, standard API
- Rugged housing construction

### Applications

- Security and cargo screening
- Industrial non-destructive testing (NDT)



# XH8800 High-Energy X-ray Line-Scan Camera Series

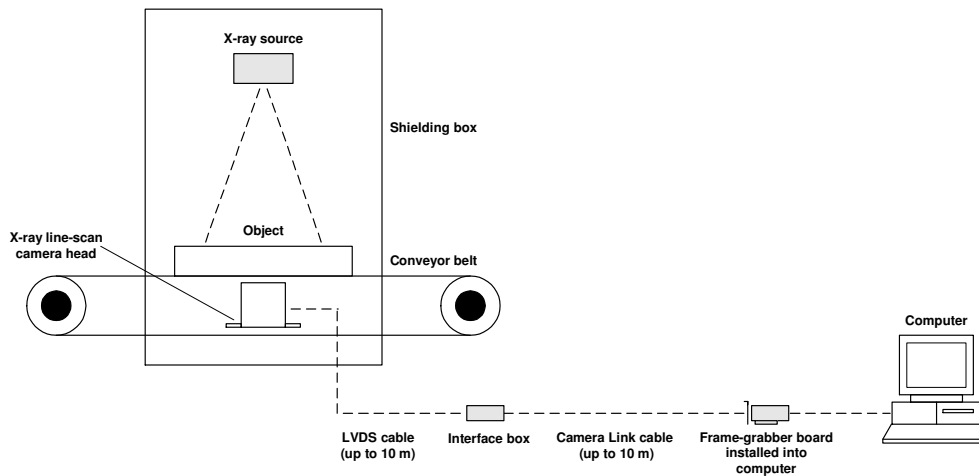
## Models

Model	Active length (mm) <sup>i</sup>	Number of pixels					
		XH8850 series		XH8804 series		XH8808 series	XH8816 series
		High resolution	Low resolution	High resolution	Low resolution		
XH88 <sub>low</sub> -06	154	3072	1536	384	192	192	96
XH88 <sub>low</sub> -12	308	6144	3072	768	384	384	192
XH88 <sub>low</sub> -18	463	9216	4608	1152	576	576	288
XH88 <sub>low</sub> -24	617	12288	6144	1536	768	768	384
XH88 <sub>low</sub> -36	925	18432	9216	2304	1152	1152	576
XH88 <sub>low</sub> -48	1234	24576	12288	3072	1536	1536	768
XH88 <sub>low</sub> -60	1542	30720	15360	3840	1920	1920	960

<sup>i</sup> Other detector lengths are available upon request. Multiples of 51 mm; minimum active length is 154 mm; no maximum length limit.

## Setup

The XH8800 series camera system includes a camera unit, an interface box, a software development kit, power adapter and cabling. The frame-grabber to be installed in the computer is provided optionally. The objects to be scanned should be passed between the x-ray source and the camera.



Information furnished by X-Scan Imaging is believed to be accurate and reliable. However, no responsibility is assumed by X-Scan Imaging Corporation for its use. Users are responsible for their products and applications using X-Scan Imaging components. To minimize the risks associated with users' products and applications, users should provide adequate design and operating safeguards. No responsibility is assumed by X-Scan Imaging Corporation for any infringements of patents or other rights of third parties that may result from the use of the information. No license is granted by implication or otherwise under any patent or patent rights of X-Scan Imaging Corporation.

Camera Link® is a registered trademark of the Automated Imaging Association, Ann Arbor, Mich.

Tel: +1 408 432 9888

70 Bonaventura Dr., San Jose, CA 95134, U.S.A.  
Fax: +1 408 432 9889

www.x-scanimaging.com