

# Imagista corporation

## X-ray CMOS TV camera

### X-Point SUPER ZERO-DD



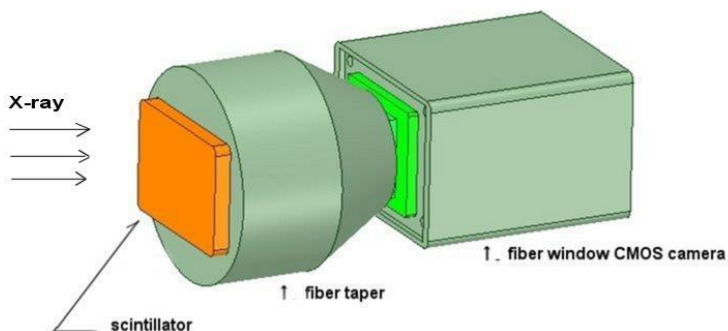
#### Overview

**X-Point SUPER ZERO-DD** is X-ray CMOS TV camera for industrial purpose. Considering operation and environment of X-ray inspection machine, robust and small housing camera keeps safe and reliable work on the manufacturing factory. Employing latest CMOS camera technology, high-definition X-ray image can be captured with cost effective mini focus X-ray source and variety of camera setting menu can be adaptable for difficult samples. This CMOS X-ray TV camera could be the best option for next digital TV camera system.

#### General Specification

Model name	<b>X-Point SUPER ZERO-DD</b>
interface	GigE, PoE support
Frame rate	47 fps at full resolution
X-ray power range	10KV – 70KV
Scintillator	CsI (TI) on Fiber Optic Plate
Image sensor	CMOS image sensor with global shutter
Number of effective pixels	1920 (H)×1200 (V) Approx. 2.3M pixels at full resolution
F.O.V.	22mm×16mm
Resolution	16.7 Line pair /mm ,30micron
dimension	66 mm (H) × 66mm (V) × 87mm (D)

#### Schematic design of X-ray CMOS camera



X-ray irradiates on scintillator' surface first.

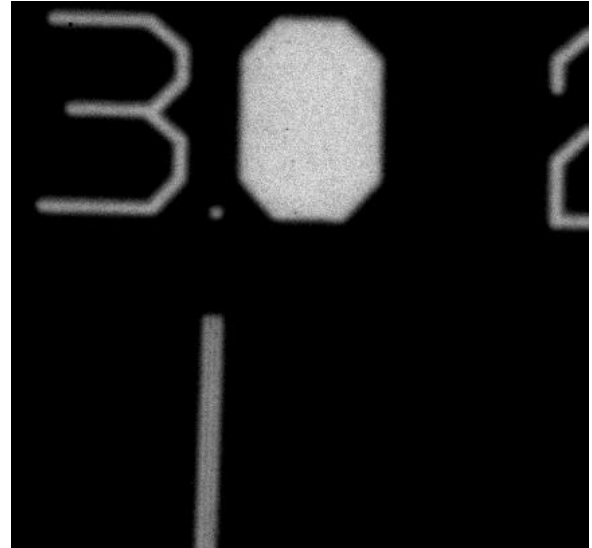
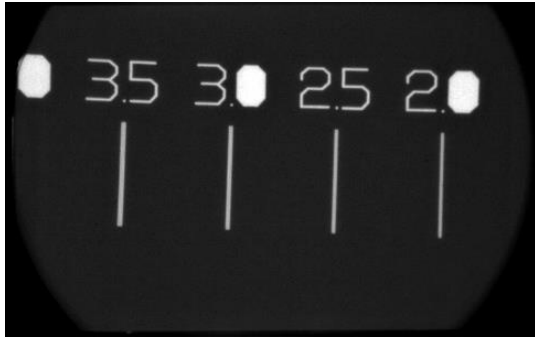
Scintillator converts X-ray to light and reproduced radiographic image on scintillator pass to CMOS image sensor through fiber taper. By direct contact coupling, CMOS camera could be capturing clear and distortion free images. At the same time fiber taper becomes X-ray shield to protect CMOS image sensor which is susceptible to radiation damage.

# Imagista corporation

## High resolution

X-Point SUPER ZERO-DD attain 30micron resolution without geometric image enlargement.

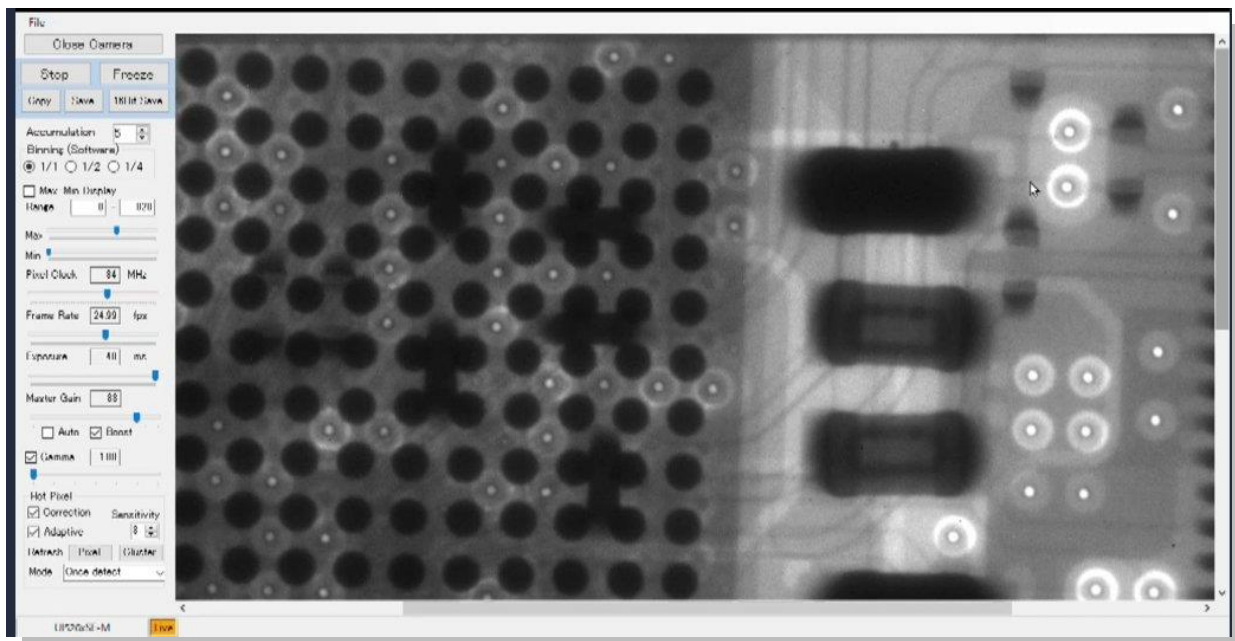
X-ray resolution chart × 1/100mm scale



Pick up image center →

## Appropriate image viewer for X-ray application

Normally X-ray image captured by X-ray TV camera has inherent grainy noise. In addition TV camera working condition has to be varied according to sample physical property. For technical backup X-Point SUPER ZERO is preparing original image viewer for X-ray image capturing.



camera configuration setting table