

High-resolution x-ray cameras of the HR series



*Cost-performance optimised setup for x-ray applications for
inspection and science*

APPLICATIONS

- ❖ PCB Inspection and Drilling Control
- ❖ Inspection of Small Objects
- ❖ Quality Control
- ❖ Diffraction Pattern
- ❖ Laue Diffraction
- ❖ Beam Analysis and Adjustment

FEATURES

- ❖ High Resolution
- ❖ Compact Design
- ❖ High Sensitivity
- ❖ Different Camera Interfaces
- ❖ 250 eV to 100 keV
- ❖ Customised Versions Available

Model	µHR0 x-ray	HR25 x-ray	HR40 x-ray	HR75 x-ray
				
PN	PN 105561	PN 106076	PN 104902	PN 106191
Pixel	752 x 582	752 x 582	1380 x 1024	2048 x 2048
Field of view	15mm x 20mm	15mm x 20mm	24mm x 36mm	45mm x 45mm
Output	CCIR (analog)	CCIR (analog)	GigE (digital)	GigE (digital)
Framerate	50 fields/sec interlaced 2:1	50 fields/sec interlaced 2:1	15 or 30 frames/sec progressive scan	15 frames/sec progressive scan
Dimensions	Ø 38 mm x 68 mm	Ø 55 mm x 99 mm	Ø 63 mm x 122 mm	Ø 99 mm x 143 mm

OPTIMISED SETUP FOR HIGH EFFICIENCY & HIGH RESOLUTION

- ❖ P43 is a very efficient phosphor screen for a wide spectral range 250 eV to 100 keV.
- ❖ Fiber-optical taper used as optical guide with high efficiency and radiation protection of the camera sensor to optimise lifetime and noise.
- ❖ Fiber-optical taper allows compact setup to save space.
- ❖ Setup optimised for high resolution up to 20 lp/mm / 25µm
- ❖ Different phosphor thicknesses available from 4 to 100µm.

SIMPLE INTEGRATION

- ❖ The x-ray cameras are operated as industrial cameras and can easily be integrated into existing computer hardware environment by software drivers or SDK for Windows and Linux OS.
- ❖ Synchronisation with external events.

ADVANTAGES OF ANALOG OUTPUT

- ❖ Analog output allows for plug & play replacement of existing customer hardware.
- ❖ Analog cameras allow for live imaging without PC environment.

ADVANTAGES OF DIGITAL OUTPUT

- ❖ Digital interface with GigE allows for high data rate, extended cable length and simple integration.
- ❖ Convenient features and camera control is available for digital camera, such as
 - > subarray readout for increasing speed
 - > binning for increases sensitivity
 - > trigger input for synchronizing with external equipment
 - > exposure time for increasing sensitivity
 - > 8 or 12 bit depth

YOU NEED A CUSTOMISED VERSION ? OK !

- ❖ ProxiVision GmbH is manufacturing, integrating and designing electro-optical components and more complex setups.
- ❖ Customizing for special requirements
 - > phosphor thickness
 - > input window
 - > field of view
 - > pixel number
 - > image intensified version
 - > peltier-cooling