QIOPTIQ
Photonics for Innovation
An Excelitas Technologies Company

Luma X-System

For X-Ray Diagnostics

The Luma X-system consists of a high performance combination of optics, mechanics and electronics. It is a modular lens system optimized for the special requirements of X-ray diagnostics.

The multi-functional mount allows easy adaptability to most image intensifiers for quick and cost effective installations.

LumaGon

How our LumaGon will support your application:

- The specially optimized Qioptiq LumaGon is an ideal lens for single port X-ray devices
- High light transfer for a minimum of X-ray dose
- The optical system compensates typical vignetting behavior of image intensifiers
- High modulation transfer function from the center to the edge of the image
- Very small external dimensions due to the compact design
- A universal interface system design allows direct coupling to most image intensifiers
- The standard C-mount camera interface makes it suitable for various camera systems
- Motorized iris
- Optional ND-filter for a high dynamic range
- Motor controller board for iris and ND-filter

This High Resolution (HR) system is ideal for use in both medical and non destructive testing applications.

LumaCam

The LumaCam is the first X-ray camera with GigE Vision technology.

How our LumaCam CCD Camera will support your application:

- Sensor: interline transfer CCD; progressive scan with microlenses
- Resolution: 1024 (H) x 1024 (V)
- Sensor format: ½ inch; 5.5 µm x 5.5 µm pixel size
- High effective dynamic range of 61dB and a full well capacity of 20.000e-
- Output/Control interface: GigE Vision
- Wire length up to 100 m and no frame grabber required
- Power consumption of 4 Watts only, 12V – 32V DC
- Very flat design in order to create a short image chain
- Easy control of ND-filter and iris via GigE Vision interface
- Asynchronous image capture and readout

How our Real Time Image Processing will support your application:

- Frame rate 30 fps
- 14 bit digital signal processing
- Bad pixel compensation
- Frame on demand
- Circular blanking window selection is changeable in diameter and location
- Shading correction: horizontal and vertical tilt and dome correction
- Gamma correction, adjustable, compensation of the non-linearity of the X-ray image intensifier
- Edge enhancement and histogram equalization for a better contrast
- Image flip horizontal and vertical
- Negative image
- Image subtraction for DSA
- Automatic gain control
- Last image hold
- Recursive filter factors 2, 4, 8, and 16 with optional Auto Motion Detection

Discover the Q!

Discover the capabilities, knowledge, equipment and technology of Qioptiq.

Photonics for Innovation

For technical information contact:

Qioptiq Photonics GmbH & Co. KG
Phone +49 (0) 89 255 458-0
LumaX-system.qpkg@excelitas.com
www.qioptiq.com
www.excelitas.com