

chromaPIXA Color Line Scan Camera

Internal color conversion to all standard color spaces



Applications

- ▶ Measurement/Quality control
- ▶ Print
- ▶ Surface
- ▶ Document scanning
- ▶ Web
- ▶ Sorting processes

The new Chromasens chromaPIXA line scan camera enables stable inline color measurement in a wide variety of extended color spaces, greatly simplifying downstream color processing. The chromaPIXA's output in LAB format allows for the determination of color differences in respect to the perception of the human eye. The chromaPIXA is calibrated by using the new, fast, and intuitive chromaCalc software and is compatible with all standard color charts.

Features

- ▶ Highly-sensitive CCD line scan sensor
- ▶ Line length up to 7.3k
- ▶ Scan rates up to 92.7 kHz
- ▶ Color calibration allows internal conversion in sRGB, eciRGB, AdobeRGB, CIE-L*a*b* or CIE-XYZ in real time
- ▶ Calibration with ColorChecker and other color targets
- ▶ Stable white point is guaranteed by continuous white balancing
- ▶ Measurement for every single pixel without interpolation

Functionality / Intelligence

- ▶ Fully synchronized multi-channel LED flash control
- ▶ Internal keystone correction for multiple angle positioning of the camera
- ▶ Automatic insertion of machine and camera data inside the image (e.g. time stamp; encoder position; scanning speed, checksum)
- ▶ Sub-pixel accuracy for registration error compensation (patented)
- ▶ Precise multiple camera synchronization
- ▶ Adjustable Camera Link clock
- ▶ Grey image output (at individual color weights)
- ▶ 100% quality checked and calibrated to provide best quality and consistent camera performance
- ▶ Graphical user interface for easy parameter setting, control and integration of the camera
- ▶ Rigorously tested with all popular frame grabbers
- ▶ Supports line and frame trigger similar to area cameras



Print

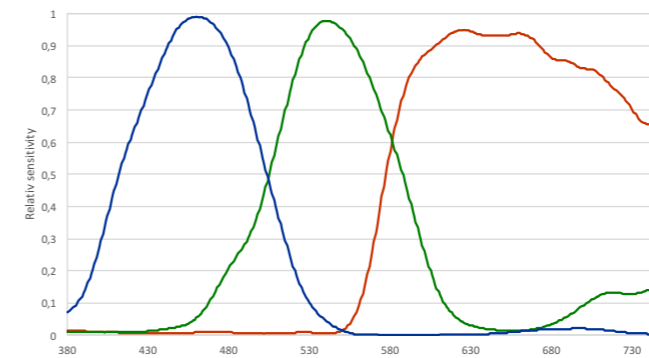


Wood



Textile

Spectral sensitivity:



Specifications:

Sensor	Tri-linear CCD color line scan sensor
Number of pixels	2048 x 3 pixels 4096 x 3 pixels 5120 x 3 pixels 6000 x 3 pixels 7300 x 3 pixels
Active pixel size	10 µm x 10 µm
Color output spaces	sRGB, eciRGB, AdobeRGB, CIE-L*a*b*, CIE-XYZ
Max. line rate	2048 x 3 pixels with up to 92.7 kHz 4096 x 3 pixels with up to 50.8 kHz 5120 x 3 pixels with up to 40.9 kHz 6000 x 3 pixels with up to 34.3 kHz 7300 x 3 pixels with up to 29.7 kHz
Data format	3 x 8/10 Bit color or with internal 3 x 14 Bit A/D converter
Output	Camera Link @ 85 MHz, Full (80/64 Bit), Medium, Base
Interfaces	Camera Link Base/Medium/Full External I/O (15 pin D-Sub) RS232
Certifications	CE; FCC compliant; RoHS
Power supply	24 V DC +/- 10%; < 19W
Trigger mode	Free run / external trigger Line trigger Frame trigger
Software	chromaCalc software generate calibration data to calculate color output
Light source	Recommend Chromasens Corona II D50 for best performance
Operating temperature	0°C to 60°C, 32°F to 140°F (housing temp.)
Dimensions	L=102 mm, H=100 mm, D=77 mm
Lens mount	F-Mount, C-Mount, M39x1/26", M42x1, M72x0.75

Customized Cameras and Imaging Systems

Chromasens offers fully customized light, camera and scanner solutions. All systems are 100% adaptable to customer requirements.