

allPIXA Color Line Scan Cameras

Precision in Color



The Chromasens allPIXA is an outstanding fast tri-linear CCD color line scan camera. It combines the excellent image quality of CCD sensors with extremely high line rates.

Camera overview

- ▶ High sensitivity tri-linear RGB sensors
- ▶ Scan rates up to 60 kHz for standard configurations (up to 110 kHz in special OEM configurations)
- ▶ True RGB at excellent signal-to-noise ratio

Color quality

- ▶ Continuous white balancing
- ▶ Large 10µm CCD pixels for best image quality
- ▶ Internal 14 bit A/D conversion per color channel
- ▶ Multiple Color Conversion Matrix (CCM) supported
- ▶ Internal gamma correction

Functionality / Intelligence

- ▶ Internal keystone correction for multiple angle positioning of the camera
- ▶ Automatic insertion of machine and camera data inside the image (e.g. time stamp; CRC, encoder position; scanning speed, checksum)
- ▶ Sub-pixel accuracy for registration error compensation (patented)
- ▶ Precise multiple camera synchronization
- ▶ Comprehensive trigger options
- ▶ Test image generator
- ▶ Adjustable Camera Link clock
- ▶ Grey image output (at individual color weights)
- ▶ 100% quality checked and calibrated to provide best quality and consistent camera performance

Applications

- Measurement/Quality control
- Print inspection
- Surface inspection
- Document scanning
- Web inspection
- General machine vision
- Sorting processes



Print

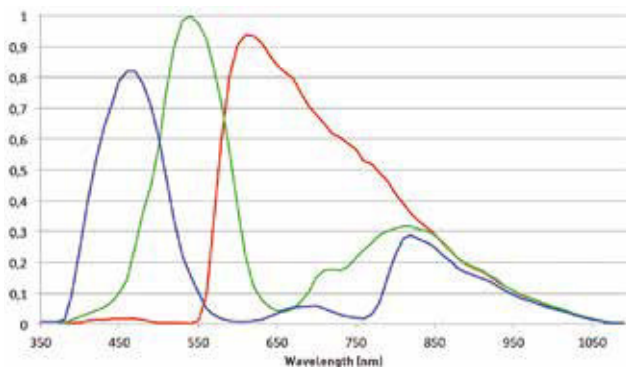


Pharma



Food

Spectral sensitivity:



Camera specifications:

Sensor	Tri-linear CCD scan line
Number of Pixels	2048 x 3 pixels 4096 x 3 pixels 7300 x 3 pixels (3 x 1024 and other resolutions on request)
Active Pixel Size	10 µm x 10 µm
Data Rate	510 MBytes/s 3 x 170 MHz
Max. Line Rate	2048 x 3 Pixel with up to 60,7 kHz 4096 x 3 Pixel with up to 34,4 kHz 7300 x 3 Pixel with up to 21,2 kHz
Data Format	3 x 8 Bit color or 1 x 8/10/12 Bit mono mode with 3 x 14 Bit on board A/D converter
Video Output	Camera Link @ 85MHz Medium, Base
Interfaces	Camera Link Medium/Base Power supply (Hirose) External I/O (15pin DSub) RS232
Certifications	CE, FCC, RoHS
Power Supply	24 V DC +/- 10%; <16W
Operating Temperature	0°C to 60°C, 32°F to 140°F (housing temp.)
Dimensions	L=102 mm, H=126 mm, D=68 mm
Lens Mounts	Large variety of adapters: F-Mount, C-Mount, M39x1/26", M42x1, M72x0.75

Customized Cameras and Imaging Systems (OEM)

Chromasens offers fully customized light, camera and scanner solutions. Some examples include:

- Special pre-processing functions or image information statistics inside the camera to save CPU resources
- Customized housing design for cameras
- Flexible I/O signals synchronize other system components, including lighting
- Customized scanner modules including optics, light, sensors, image processing mechanics and software.