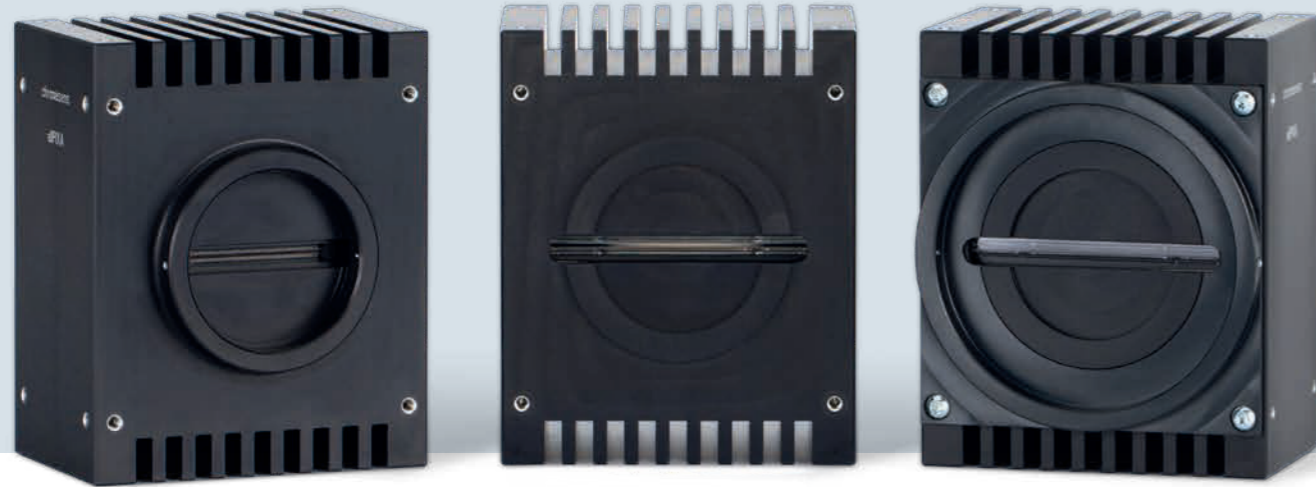


# allPIXA Color Line Scan Cameras

## 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.



### Applications

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



Print



Pharma



Food

### Camera overview

- ▶ High sensitivity tri-linear RGB sensors
- ▶ Scan rates up to 34 kHz for standard configurations (up to 110 kHz in special OEM configurations)
- ▶ True RGB at excellent signal-to-noise ratio

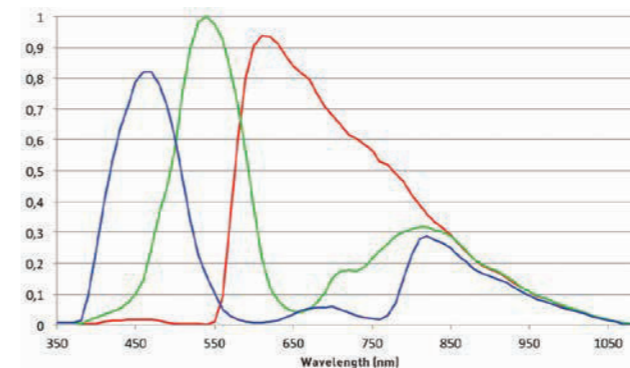
### Color quality

- ▶ 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; 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
- ▶ Graphical user interface for easy parameter setting, control and integration of the camera
- ▶ Rigorously tested with all popular frame grabbers.

### Spectral sensitivity:



### Specifications:

Sensor	Tri-linear CCD scan line
Number of Pixels	4096 x 3 pixels 7300 x 3 pixels (other resolutions on request)
Active Pixel Size	10 µm x 10 µm
Data Rate	510 MBytes/s   3 x 170 MHz
Max. Line Rate	4096 x 3 pixels with up to 34.4 kHz 7300 x 3 pixels 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
Output	Camera Link @ 85 MHz 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
Trigger mode	Free run / external trigger Line trigger Frame trigger
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.