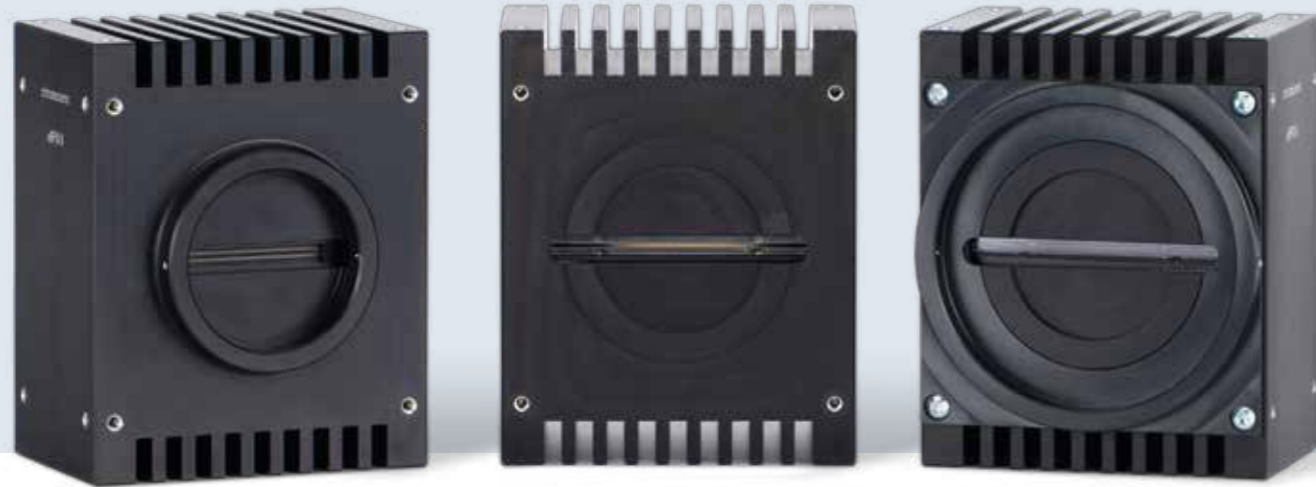# allPIXA Color Line Scan Cameras

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)
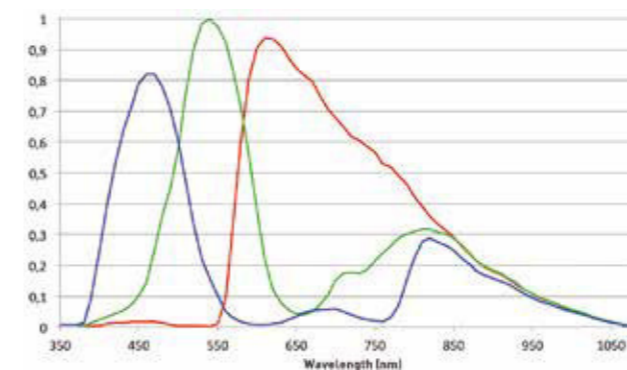▸ True RGB at excellent signal-to-noise ratio

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; 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 qua...

Spectral sensitivity:

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.

Camera specifications:

Sensor	Tri-linear CCD scan line
Number of 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 I 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
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