



## allPIXA Color Line Scan Cameras

### PRECISION IN COLOR

Chromasens allPIXA high-performance color line scan cameras feature the latest generation in image processing technology and electronics. This allows for an increase in line frequency to a previously unattainable 110 kHz, or approximately three times as fast as standard line scan cameras.



#### CAMERA OVERVIEW

- High sensitivity trilinear RGB sensors from 2048 x 3 pixels to 7300 x 3 pixels
- Scan rates up to 60 kHz for standard configurations (up to 110 kHz @ 1024 pixel sensor length in special OEM configurations)
- True RGB at excellent signal-to-noise ratio
- 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
- Shading correction, several modes supported
- Adjustable Camera Link clock
- Programmable I/O (encoder, trigger, control)
- Area scan mode
- Grey image output (at individual color weights)

#### 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
- Intelligent digital shutter
- Multiple sets of shading/off set correction
- Internal gamma correction

#### FUNCTIONALITY / INTELLIGENCE

- Ideal sensor alignment for absolute consistency
- 100% quality checked and calibrated to provide best quality and consistent camera performance

#### APPLICATIONS

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

# allPIXA Color Line Scan Cameras

PRECISION IN COLOR

CUSTOMIZED CAMERAS AND IMAGING SYSTEMS (OEM)

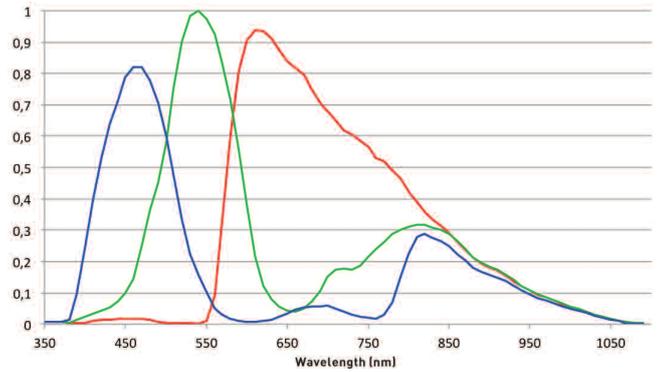
## CAMERA SPECIFICATIONS

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 $\mu\text{m}$ *10 $\mu\text{m}$
Data Rate	510 MBytes/s   3x170 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 8/10/12 Bit mono mode with 3 x 14 Bit on board A/D converter
Video Output	Camera Link @ 85MHz Medium, Base
Trigger Mode	Free run / external trigger
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

In addition to its standard components 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.

## SPECTRAL SENSITIVITY



## DIMENSIONS (in mm)

allPIXA 2k & 4k

allPIXA 7k

