

allPIXA wave

Color Line Scan Cameras

High-resolution 10k and 15k trilinear cameras with line rates up to 47.72 kHz



Introducing the world's first trilinear true color RGB line scan sensor in ultra-high resolution with up to 15,360 pixels: The Chromasens 10k and 15k allPIXA wave cameras. Both deliver CCD image quality with CMOS performance, plus offer added system flexibility of increased scan line lengths up to 15k, along with line frequencies topping out at a maximum speed of 47.72 kHz.

FEATURES

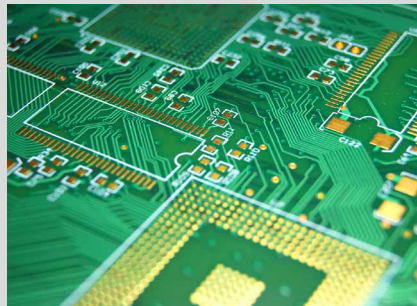
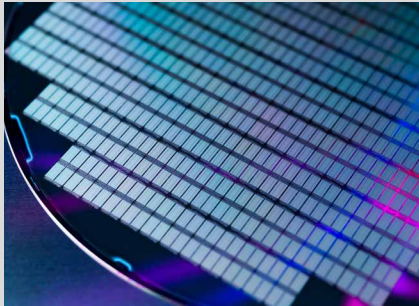
- ▶ Trilinear high speed CMOS color line scan sensor
- ▶ True RGB color with high-resolution
- ▶ High resolution sensor with line lengths up to 15k
- ▶ Speed up to 47.72 kHz line frequency
- ▶ Pixel size 5.6 μm

COLOR QUALITY

- ▶ True color with trilinear RGB CMOS line scan sensor
- ▶ Multiple Color Conversion Matrix (CCM) and offset supported
- ▶ Continuous white balancing
- ▶ Excellent signal to noise ratio for high speed image processing
- ▶ Ultra-high color resolution up to 15360 pixels x 3 lines
- ▶ Multiple sets of shading/offset correction
- ▶ Internal gamma correction

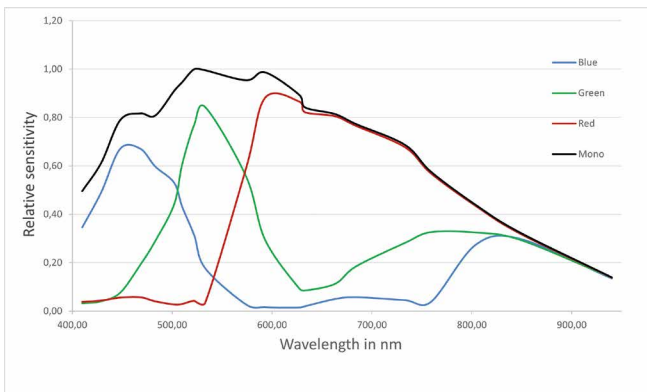
FUNCTIONALITY / INTELLIGENCE

- ▶ Multiple ROI functions for higher line rates or to reduce data volume and processing power
- ▶ Fast line rates up to 47.42 kHz with up to 850 megabyte/s throughput
- ▶ Graphical user interface for easy parameter setting, control and integration of the camera
- ▶ Internal keystone correction for multiple angle positioning of the camera
- ▶ Automatic insertion of machine and camera data inside the image
- ▶ Sub-pixel accuracy for registration error (patented)
- ▶ Integrated test image generator for easy setup and diagnostic functions
- ▶ Compact and robust design
- ▶ Precise multi-camera synchronization
- ▶ Wide-range power input from 12 - 24V for easy use and machine integration
- ▶ High strength steel mounting threads for precise and robust camera mounting
- ▶ Extended Camera Link cable length: 15m @ 85 MHz Full (80 Bit)
- ▶ Rigorously tested with all popular frame grabbers



- APPLICATIONS:**
- Flat Panel Display
 - Printed Circuit Board
 - High-resolution Document Scanning
 - Print
 - Web
 - Quality Control
 - Sorting Processes
 - High Quality Surface
 - General Machine Vision
 - Food
 - Semiconductor

SPECTRAL SENSITIVITY:



SPECIFICATIONS:

Sensor	Trilinear CMOS line scan sensor (RGB and mono)
Number of pixels	10240 x 4 pixels 15360 x 4 pixels
Active pixel size	5.6 µm x 5.6 µm
Max. line rate (Camera Link Full)	RGB: 10240 x 3 pixels with 25.33 kHz* RGB: 15360 x 3 pixels with 18.38 kHz* mono: 10240 x 1 pixels with 25.33 kHz* mono: 15360 x 1 pixels with 22.04 kHz* * Up to 47.42 kHz in ROI mode (ROI<5120)
Data format	3 x 8/10/12 Bit color or 1 x 8/10/12 Bit mono mode
Output	Camera Link @ 85 MHz Full (80/64 Bit) Medium, Base
Interfaces	Camera Link Base/Medium/Full Power supply (Hirose) External I/O (15 pin DSub) RS232
Power supply	12 – 24V DC ±10%
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	10 k : 102 x 76 x 56 mm (W x H x D) 15 k : 102 x 100 x 56 mm (W x H x D)
Lens mount	10 k: M 72 x 0.75 mm 15 k: M 95 x 1mm
Certifications	CE; RoHS

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