chromasens
Imaging for Professionals

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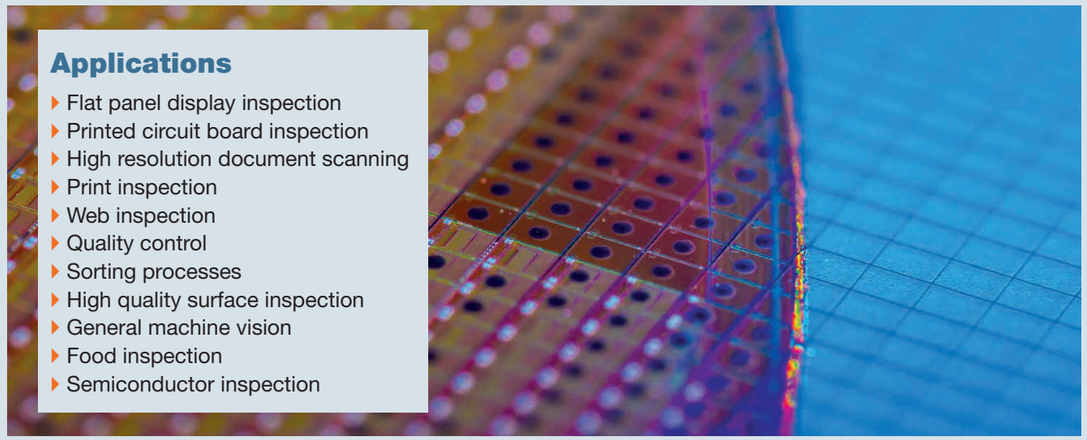
allPIXA wave Color Line Scan Cameras

New high-resolution 10k and 15k quad-linear cameras with speeds up to 47.72 kHz line rate

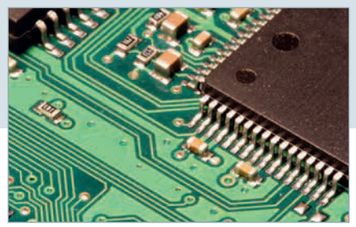
Introducing the world's first quad-linear true color rgb line scan sensor in ultra-high resolution with up to 15360 pixels: The Chromasens 10k and 15k allPiXA wave cameras. Both deliver CCD image quality with CMOS performance, plus offer added system flexibilty of increased scan line lengths up to 15k, along with line frequencies topping out at a maximum speed of 47.72 kHz.

Applications

- Flat panel display inspection
- Printed circuit board inspection
- High resolution document scanning
- Print inspection
- Web inspection
- Quality control
- Sorting processes
- High quality surface inspection
- General machine vision
- Food inspection
- Semiconductor inspection



Food



Electronics

Pharma

Features

- Quad-linear 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 tri-linear RBG 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
- Ultra-fast line-rates up to 47.72 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

OEM – Solutions for Machine Vision

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

Specifications:

Sensor	Quad-linear CMOS line scan sensor
Number of pixels	10240 pixels x 4 lines 15360 pixels x 4 lines
Active pixel size	5.6 µm x 5.6 µm
Max. line rate (Camera Link Full)	RGB: 10240 pixels x 3 with 25.48 kHz* RGB: 15360 pixels x 3 with 18.43 kHz* mono: 10240 pixels x 1 with 25.48 kHz* mono: 15360 pixels x 1 with 25.48 kHz* * Up to 47.72 kHz in ROI mode (ROI ≤5000)
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 Full/Medium/Base Power supply (Hirose) External I/O (15 pin DSub) RS232
Certifications	CE; FCC compliant; RoHS
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