

# truePIXA Multi-spectral Line Scan Camera

## Precision in color measurement



Add a new dimension to multi-spectral imaging with the truePIXA camera. It offers a combination of high speed and spectral color measurement for each pixel to permit color measurement on two-dimensional objects, especially for print inspection. It captures the spectral footprint of images in full size and applies to on- and off-line imaging.

### Unique Features of truePIXA Technology

- ▶ High speed line scan technology
- ▶ 12 image channels with distinct spectral content
- ▶ Allows measurements on RGB, CIE-L\*a\*b\* and spectral reflectance factor data
- ▶ High stability and excellent repeatability
- ▶ Real time color measurement
- ▶ Chromasens Chromantis software
  - ▶ User interface for image acquisition
  - ▶ Spectral and color data visualization
  - ▶ Basic data analysis
  - ▶ Data import and export
- ▶ User friendly application programming interface (API)
- ▶ Combined with Chromasens Corona II D50 illumination, truePIXA cameras achieve the highest accuracy color measurement

### Applications

- ▶ Spectral measurement
- ▶ Color measurement
- ▶ 100% quality control
- ▶ Sorting processes
- ▶ Optical density
- ▶ Surface inspection
- ▶ Defect inspection
- ▶ Web inspection



truePIXA Model Numbers	6 CHANNELS			12 CHANNELS			
	CP000518-06-C01-130	CP000464-C01-043	CP000464-C01-050	CP000464-C01-090	CP000464-C01-130	CP000464-C02-200-K4	CP000464-C02-423-K4
Optical resolution (µm/px)*	195	600	503	282	195	125	60
Optical resolution (dpi)*	130	43	50	90	130	200	423
Field of view (mm)	298	975	820	450	298	165	90
Number of pixel	1528	1625	1630	1595	1528	1320	1500
Free working distance (mm)	497.8	1509.4	1268	715.5	497.8	465.5	236
Maximum speed (m/s)	9.9	12.7	10.6	5.9	4.1	2.6	1.2
Line frequency (kHz)	50.8	21.2	21.2	21.2	21.2	21.2	21.2
Camera Link configurations	Base/Medium/Full	Base/Medium	Base/Medium	Base/Medium	Base/Medium	Base/Medium	Base/Medium
Illumination length (mm)	340	1360	1020	680	340	340	340
Dimensions LxWxH (mm)	102.3x134x126	102.3x134x126	102.3x134x126	102.3x134x126	102.3x134x126	102.3x134x126	102.3x134x126

\*optical resolution at working distance. Note: Please contact us for different resolutions and field of views.



Print



Measurement



Textile

### Specifications:

Camera	Multi-spectral line scan camera with 6 or 12 image channels
Sensor	Multi-channel CCD line sensor
Active pixel size	10 µm x 10 µm
Spectral data range	380 nm – 730 nm
Measurement functionality	Spectral reflectance, CIE-L*a*b*, CIE-XYZ, CIE-L*c*h*
Measurement geometry	Adapted 45°/0° (illumination / observation angle)
Short-term repeatability	0.05 Δ76
White reference	Absolute/relative
Light source	LED based D50, refer to Corona II D50 for best performance
Interfaces Camera	Link Base/Medium/Full External I/O Serial (RS-232) Power supply (Hirose)
Power supply	24V 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 temperature)
Software	· Chromasens truePIXA-API (TpApi) · Chromasens Chromantis for measuring, viewing and exporting spectral and multi-channel images (Windows x64)
Software output	Multi-channel-, spectral-, CIE-L*a*b*-, CIE-XYZ- and CIE-L*c*h*-images in 16 Bit TIFF and FITS format
Additional accessories	Cross polarization kit for camera and Chromasens line-lights
Certifications	CE, FCC compliant, roHS

