

# State-of-the-art InGaAs sensor with 512 and 1k resolution.



The allPIXA SWIR is the first short-wave infrared (SWIR) linescan camera in Chromasens' allPIXA family. The state-of-the-art InGaAs sensor in a compact footprint allows its integration for multiple machine vision applications. It offers an uncooled sensor with 512 or 1k resolution and 25x25 or 12.5x12.5 µm pixel size for high resolution, high sensitivity and a line rate of 40 kHz. GenICam compliant GigE Vision and CameraLink interfaces allow an easy integration into existing machine vision systems.

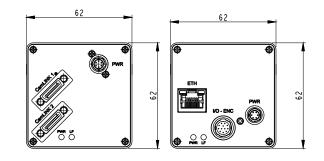
## CAMERA OVERVIEW:

- Line Scan InGaAs sensor with a resolution of 512 pixels (25 µm x 25 µm pixel size) or 1024 pixels (12.5 µm x 12.5 µm pixel size)
- SWIR spectrum: From 950 to 1700 nm
- High speed: Up to 40 kHz line rate
- GigE Vision or CameraLink interface
- Internal FPGA for image pre-processing
- Compact size: 62 x 62 x 52 mm

#### 53:8:1 51.8 N.4 M2 "C" mount prof chromasens-18.0.1 Ø 39 53-0.1 18.0.1 aliPiXA SWIR h 48:0:1 <u>N.4 M4</u> prof.5 <u>N.8 M4</u> prof.5 6.25 43.3

#### **FUNCTIONALITY / INTELLIGENCE:**

- Horizontal binning to increase responsivity
- ▶ 8, 10 or 12 Bits per pixel
- Internal DSNU, PRNU, and TRC LUT or gamma correction
- Frequency converter for external line trigger
- Adjustable CameraLink clock
- Tested with many popular frame grabbers and GenICam SDKs
- Free Chromasens software tools and SDK available for easy setup and seamless integration









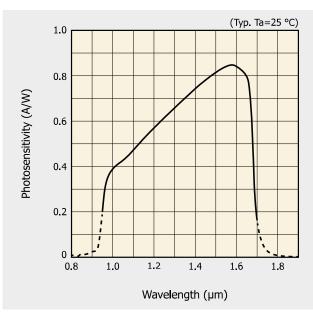




## **APPLICATIONS:**

- Sorting
- Recycling
- Semiconductor Inspection
- Solar Panel Inspection
- Moisture Detection
- Chemical Identification
- Anti-counterfeiting
- Medical / Biomedical

## SPECTRAL SENSITIVITY:



## Customized Cameras and Imaging Systems:

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

### **SPECIFICATIONS:**

Sensor	Linear InGaAs (uncooled)
Resolution	512 x 1 pixels / 1024 x 1 pixels
Active pixel size	25 μm x 25 μm (512) / 12.5 μm x 12.5 μm (1k)
Spectral band	950 nm to 1700 nm
Image Circle	12.8 mm
Lens Mount	C-Mount (others on request)
Interface	CameraLink Base or GigE Vision
Order Codes	CameraLink: CP000700-IR-01K-CL-001 CP000700-IR-512-CL-001 GigE: CP000700-IR-01K-GE-001 CP000700-IR-512-GE-001
Max. line rate	40 kHz
Camera link pixel clock	32.5 / 65 MHz
Sync	External trigger / Software trigger signal / Free run
Data format	8, 10, 12 Bit
Digital inputs	3 x RS422 (only GigE version)
Digital outputs	2 x RS422 (only GigE version)
Power supply	12 to 24 V DC ±10%
Power consumption	6 W
Dimensions	L=62 mm, H=62 mm, D=52 mm
Weight	170 g
Operating temperature	-10°C +50°C
Protection Class	IP40
Certifications	CE, RoHS, REACH