



# Solvision

## Defect and pattern inspections with AI

**Solvision** offers a simple and intuitive tool to solve complex machine vision problems. The software, built on layers of advanced neural networks, is best used to recognize irregular patterns and features. Detecting defects such as stains, scratches, burrs, cracks, identifying missing components or items, or sorting similar looking objects are examples of applications easily manageable using Solvision.

### Advantages

- **Easy to learn and implement**

Using Solvision to recognize defects or patterns simply requires labeling them, programming skill is not required. Solvision has a simple and intuitive user interface.

- **Export detection results**

Machine builders and system integrators can easily send Solvision's inspection results to their own software.

- **Recognize differences difficult for eyes to see**

Subtle differences in colorations, contents, and appearances can be easily identified.

- **Learn from good sample only**

For inspections of objects with highly consistent good sample, it's possible to train with only good sample instead of having to label individual defects.

- **Support robot pick and place**

Inspection results can be sent to robot for sorting the objects. The optional module supports twenty major robot, cobot, SCARA brands.

## OCR



## Fast Item Identification



## Recognizing Features and Location

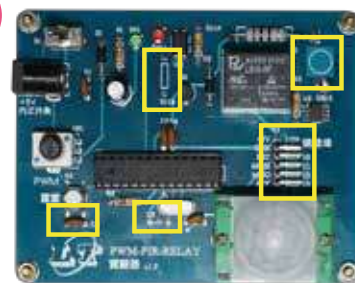


## Pattern Matching and Categorization

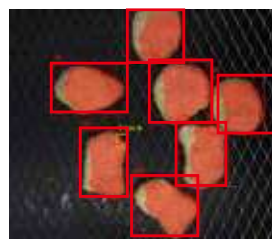
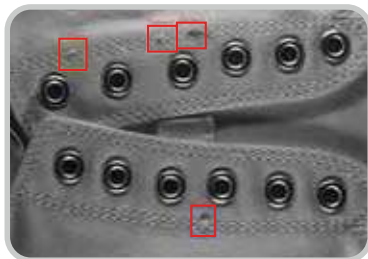
A



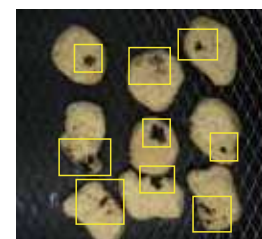
B



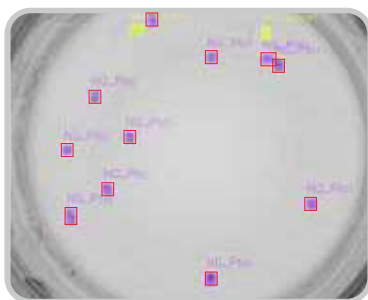
## Defect Inspection



OK



NG



Contact lens



OK



NG

## Applications

- Sealing
- Inspection
- Assembly
- Rubber & Plastic
- Packaging
- Logistics
- E-Commerce
- Warehouse
- Pick & Place
- Assembly QC
- Chip Packaging
- Electronics
- Food & Beverage
- Medical Devices
- Pharmaceutical
- Human Gesture Detection
- Textile
- Deburring

# Solvision

## Hardware Requirements

Module Name	SLM VISAI-S100
Operating System	Windows 10 (64bit)
CPU	Minimum : Intel Core i5 / Recommended : Intel Core i7
GPU	Minimum : Nvidia GTX 1070 (RAM $\geq$ 8GB) / Recommended : Nvidia RTX 2080 Ti
RAM	Minimum : 16GB / Recommended : 32GB
Camera Interface	USB 3.0, GenICam 3.0
Output Interface	TCP / IP, Modbus TCP
Coding Interface	• NET Framework 4.8
Coding Language	C #
Compatible With	MVtec Halcon, NI LabVIEW
Language	English
Image Format	PNG, BMP, JPG, JPEG, JPE, JFIF, TIF, TIFF

Specifications subjects to change without notice.

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