Solmotion

Solmotion blends 3D vision and machine learning to enhance manufacturing flexibility and productivity. Solmotion intelligently identifies work pieces randomly placed, pinpoints their positions and orientations, then commands robot to carry out specific tasks with high tracking accuracy. 3D vision guided robot (VGR) can be used for applications including sealing, inspection, welding, assembly, labeling, among others.

Advantages

● **Cut mechanical tooling costs**

Automatically identifying objects' 3D positions and orientations significantly reduce the costs of designing and making mechanical fixtures.

● **Reduce changeover time**

Robot paths are automatically adjusted for different product models passing through the production line, minimizing time required for changeover.

● **Superior return on investment**

Only partial scan of object is required to identify its orientation and position, narrowing the field of view (FOV) and space needed to capture object's image without sacrificing the accuracy.

● **Easy interface to set up the robot path**

User may determine robot path in Solmotion software, or import an object's CAD file based on which a desired robot path is designated.
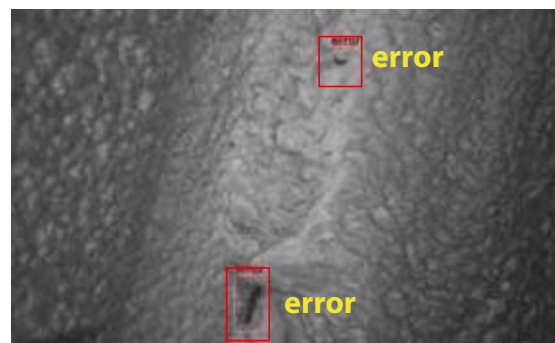
Applications

Sealing

Assembly

Inspection

Label

Solmotion

Specifications

Module Name	SLM 3DSCP-0231C	SLM 3DSCP-0501C
Pixels	2.3 M	5 M
Camera Resolution	1920 x 1200	2590 x 2048
Field of View ★★	231 x 178 ~ 1033 x 778 mm	310 x 269 ~ 1202 x 1120 mm
Working Distance ★★	450 ~ 2000 mm	
Spatial Resolution ★	0.24 ~ 1.07 mm	0.24 ~ 1.08 mm
Scanning Time	Minimum : 0.3 Sec	Minimum : 0.8 Sec
Scanning Technology	Structured Light Projection	
Projector Light Source	LED	
Interface	USB 3.0	
Dimensions	363 x 202 x 120 mm (L-W-H)	
Power	AC 100 ~ 240 V / 50 ~ 60 Hz	
Weight	3 kg	
Operating Temperature	0 - 40°C	

Hardware Requirements (Minimum) : Operating System Windows 10 (64 Bit), GPU Nvidia GTX 1070(RAM:8GB)

★★ Optional

★ The product is not applicable to the transparent objects or objects with over 50% light reflection rate.

Features

Visualized Path Planning	✓
Feature Recognition	✓
Point Clouds Match	✓
Robot Control SDK	✓
AI Recognition ★★	✓

★★ Optional

Specifications subjects to change without notice.