

IntelliBlink™

IntelliBlink™ is a powerful visual inspection prototyping software, which makes it simple to address sophisticated vision applications. With a future-oriented design that users can flexibility combine various algorithm tools to meet needs. It helps users improve time and costs to market.

Our software offers users an excellent experience with secure efficiency and great quality. We also offer support and training in the entire product life cycle.



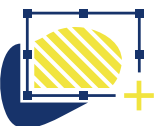
Abundant Vision Tools

Multiple types of algorithm modules such as 3D algorithms, 3D display, stereo vision system etc, providing solutions to typical machine vision problem.



UDT (User Defined Tool)

Capable of dealing with requirements specially in terms of customized algorithm tools across various fields.



WYSIWYG

Drag-and-drop Interaction simplifies development difficulty.

Further information

Flexible Extension

Convenient Calibration Tools

Comprehensive Applications



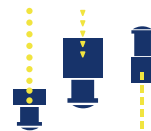
High-Performance in Inspection

Significant improvement in performance of basic algorithms, enabling the activation of high-speed mode and supporting user-defined configurations for algorithm outputs.



Configurable Drawing

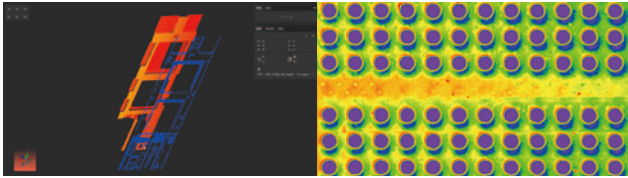
Enable customized drawing attributes for algorithm tools on the canvas.



Powerful Hardware Compatibility

Supports massive brand cameras and common communication protocols, including the standalone camera library product, LPC.

Abundant Vision Tools : Powerful 3D Modules



3D Display

Hardware acceleration, supporting 50 million+ point-cloud data rendering.

3D Algorithms

- ◆ **Calibration:** Supports same-side, opposite shooting, and user-defined point pairs.
- ◆ **Pre-processing:** Image conversion among gray image/depth images/point-cloud data/normal vector, supporting image downsampling, mean filtering, statistical filtering, pass-through filtering, Laplace filtering, radius filtering, voxel filtering, and Tobin filtering.

- ◆ **Geometry:** Capable of planes / line / spheres,/spatial circles/ cylindrical surface fitting, along with the calculation of intersections among points/ lines/planes, and of angular bisector.
- ◆ **Measurement:** Capable of distance calculation among Point / Line / Plane / Spherical / Cylindrical / Ellipsoid, angle calculation, curvature, parallelism, point cloud data statistics.
- ◆ **Location:** 3D blob, 2D coordinate conversion.

Stereo Vision System

Lower cost with equivalent accuracy.

- ◆ Capable of image acquisition synchronicity and stability in stereoscopic camera.
- ◆ Supporting sub-pixel location in Monocular reconstruction as well as cross-task data exchange functionality, for 3D coordinate mapping and 3D measurements.

*For details on other vision algorithm tools, please refer to the Leaper Vision Toolkit brochure.

High-Performance in Inspection

Significant Improvement in Performance of Basic Algorithms

35% average performance improvement



Embedded with basic algorithms such as matrix operations, image filtering, morphology, image transformation, and histogram computation.

- ◆ Upgraded instruction set to AVX/AVX2.
- ◆ Optimization of parallelism and thread control.
- ◆ Improves the performance of most commonly used algorithms such as line/circle location, pattern matching, and blob analysis.

High-Speed Mode



7 ~ 30% UP

One-click optimization of overall solution performance overhead.

- ◆ Automatically analyzes task configurations and decides the necessary output of each algorithm tool.
- ◆ Supports efficient switching between normal and high-speed modes.

Configurable Algorithm Output

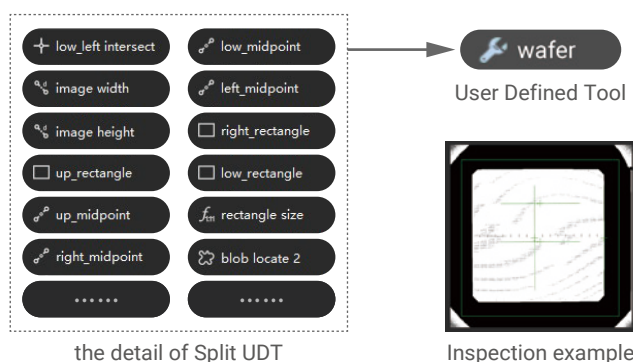
Supports user-defined configuration of algorithm output.

3 ~ 10% UP
(For algorithms with additional output overhead)

- ◆ Avoid unnecessary result calculations.
- ◆ Simplifies the output interface content.
- ◆ Unifies the control logic and interface of algorithm output.

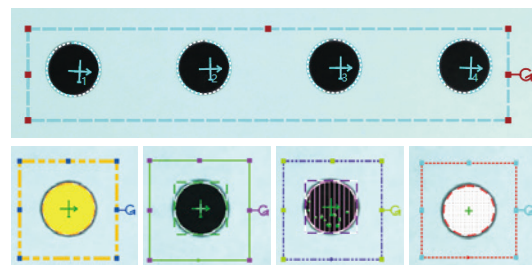
UDT (User Defined Tool)

- ◆ Encapsulation of complex functions.
- ◆ Easy to upgrade.
- ◆ Pre-installed process packages for specific fields.

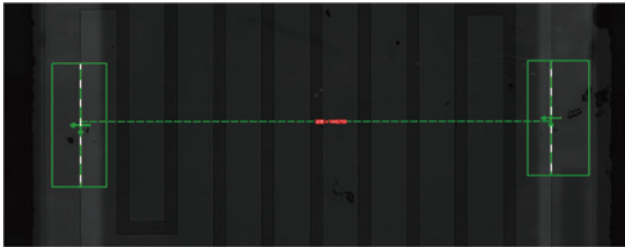


Configurable Drawing

- ◆ Controls whether overall/individual outputs are used for canvas display.
- ◆ Supports the configuration of colors/ fonts/and other properties changing for individual, or multiple outputs.
- ◆ Supports configuring the color and fill of ROI.
- ◆ Provides a customizable operational interface.

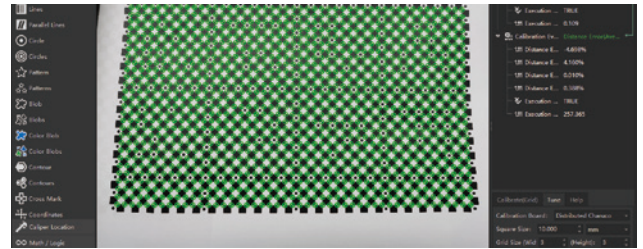


WYSIWYG



The results are displayed intuitively due to drag-and-drop Interaction with no prior programming experience required.

Convenient Calibration Tools



The calibration operation is more convenient through a built-in visual calibration window.

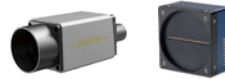
Powerful Hardware Compatibility



Supports Ethernet port, USB and CameraLink capture card.



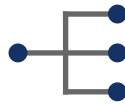
Supports multi-brand motion controllers.



Supports multi-brand area scan / line scan cameras.



Supports multi-brand I/O devices.



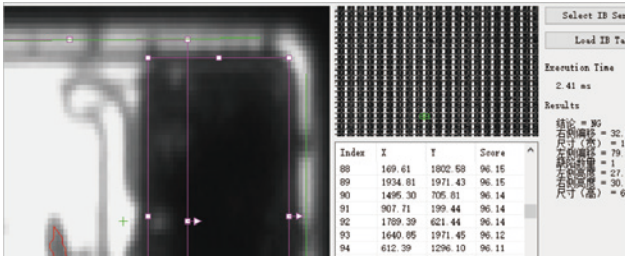
Supports PLC protocols such as MC, S7, etc.

Standalone Camera Library Product LPC

- ◆ Easily switch among multiple camera brands in connection.
- ◆ Supports specialized functions such as synchronous image triggering, splitting, and stitching.
- ◆ Embedded with high-performance, high-quality BAYER conversion algorithms.
- ◆ Supports multiple programming language including C, C++, and C# for callable interfaces.

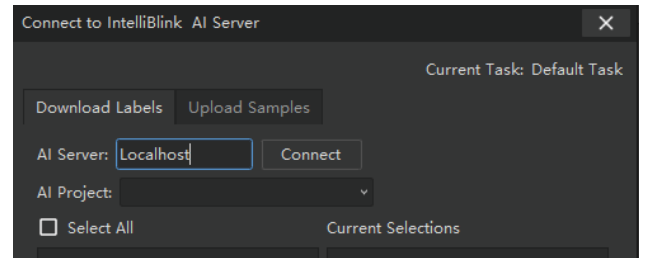
Flexible Extension

SDK



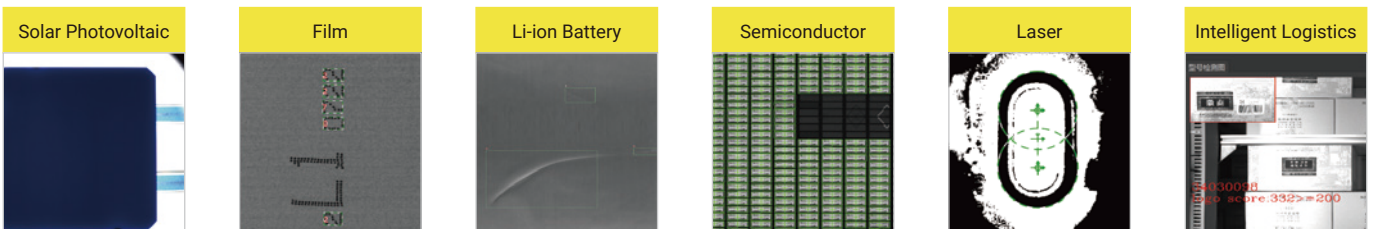
Leaper Vision Toolkit can directly invoke vision tasks developed on IntelliBlink™, significantly reducing the amount of code.

Integration of Traditional AOI and AI



Data interconnection has been realized between IntelliBlink™ and IB-AI Tool.

Comprehensive Applications



Hangzhou Leaper Technology Co., Ltd.

Add. : Building 3, LinkPark, No.17, Binhe Road, Lin'an District, Hangzhou, Zhejiang, China

Tel : +86 571-61109729 (8:30-17:30, UTC+08:00)

E-mail : leaper@hzleaper.com

Web(Co) : en.hzleaper.com



Website



YouTube