

True  Smart Factory Solutions, Powered by AI

The foremost
True 3D AOI Solution
Powered by Artificial Intelligence

**ZENITH
ALPHA**



www.kohyoung.com






Smart & Dynamic

What is your ALPHA?

- What are you preparing to become a pioneer for introducing new technologies that are verified in preparation for future industry? ALPHA will be your partner who can promptly respond to your bold challenges and the industrial changes.
- The selection of IoT and 5G requires the change of various technologies and continuous innovation to ensure the quality of network and reliability and 3D PCB inspection will bring the evolution of technology with speed and high accuracy.
- The creation of various applications to detect the autonomous vehicles that are directly linked to life will make new standards in PCB reliability, and the IoT devices quickly surging up will require fast response for each industry sector. ALPHA guarantees high production quality and inspection results that are exclusive to the 3D inspection device and can respond quickly to the requirements by each industry sector with various line-ups and fast inspection speed.

“The era of the smart factory is here. And it brings the promise to transform manufacturing productivity and efficiency.”

 **3 Straight Years
Global Market Share
No.1
in 3D AOI**

 **12 Straight Years
Global Market Share
No.1
in 3D SPI**

Pursue Your ALPHA

Smart

Koh Young's quality optimization solution incorporates a comprehensive wealth of knowledge surrounding 3D Automated Optical Inspection (AOI). As a result, Koh Young is the inspection technology industry leader. It has concentrated this experience and insight into a powerful set of smart factory solutions that increases process performance and reduces line downtime.

Dynamic

Beyond its inherent true 3D inspection capabilities, the Koh Young KSMART software suite benefits manufactures by methodically collecting, analyzing, and managing data in real-time to dynamically formulate a multifaceted view of the process. In turn, releasing optimized results that will transform a manufacturing floor into a smart factory.

ZENITH ALPHA



High Accuracy

Combining the best mechatronics and algorithm technologies with proprietary Artificial Intelligence (AI) developments to deliver the best accuracy for any inspection challenge, such as ultra-fine component pitch and interreflection between solder joints.



High Speed

Without sacrificing accuracy or performance, the Zenith ALPHA combines high speed mechatronics with cutting-edge measurement technologies to deliver a high throughput suitable for demanding production lines.



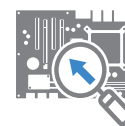
KAP (Koh Young Auto Programming)

World-class 3D profilometry technology converges with AI technology to deliver true automatic programming. The Koh Young AI-powered 3D geometry-based programming innovatively reduces programming effort and time.



FPCB Warp Compensation

Comprehensive technology considers many elements like slope, stretch, twist, bow, & shrinkage to ensure accurate measurement and to deliver accurate warp compensation – including flexible circuit applications.



WFMI (Whole Board Foreign Material Inspection, Optional)

With a fusion of 2D and 3D technologies that accurately identifies Foreign Object Debris (FOD), the Zenith ALPHA delivers a robust foreign material inspection (FMI) solution across the entire board.



High Height Inspection Capabilities (ALPHA HS+)

Using proprietary technologies, the Zenith ALPHA HS+ overcomes the challenge of perfectly balancing measurement range with performance accuracy to handle components up to 25mm tall.



Our Cutting-Edge Smart Factory Platform

Besides machine to machine connectivity, the centralized **KSMART** solution offer unprecedented efficiency and productivity gains across the factory.

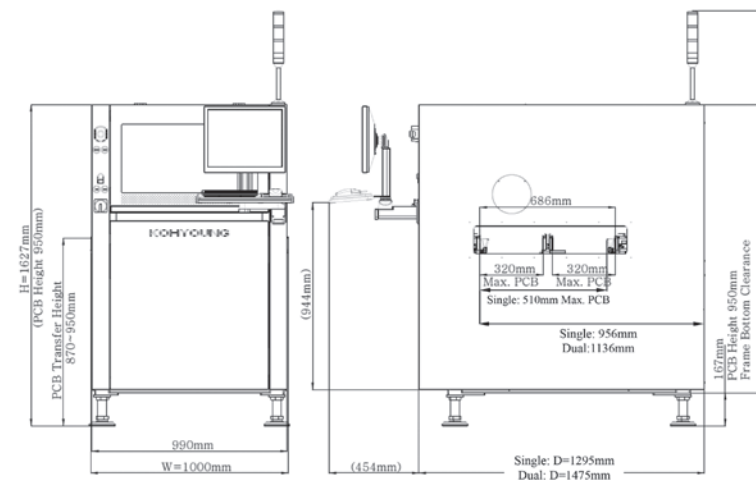


Specification

Name	Zenith ALPHA HS+	
Camera	8M15um	
FOV Size	42.2 x 42.7 mm	
Inspection Speed	0.55 sec / FOV	
Max Height	25 mm	
Min Chip Size	0402 mm (01005 inch) / 0.3 mm Pitch	
Min Lead Pitch	0.4 mm	
PCB Size	Single	Dual
	490 x 510 mm	Single : 490 x 580 mm Dual : 490 x 320 mm
Dimension (WxDxH)	1000 x 1295 x 1627 mm	1000 x 1475 x 1627 mm

Add On Solutions

- 1D & 2D Handheld Barcode Reader
- 1D & 2D Inline Barcode Reader
- Offline Programming Station
- KSMART Software Solutions
- Integrated Calibration Target
- Whole-board Foreign Material Inspection
- Review Software Package and more



※ Above specifications are subject to change without notice.

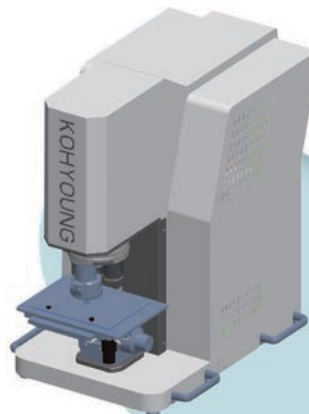
More than 2,500 customers have partnered with Koh Young to write their next chapters.

Learn about our revolutionary true 3D inspection solutions incorporating KSMART. The smart factory is a REALITY.



KY8030 series

Best-in-Class True 3D Solder Paste Inspection (SPI)



Neptune

3D Tabletop Microscope for Transparent Material Inspection



KY-P3

True 3D Automated Pin Inspection (API)

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