

## PicAI - AI-driven Probe Inspection Control

Patent-pending system that verifies ICT fixtures by analysing probe marks on PCBs with unmatched speed and accuracy.

Dual-sided inspection with synchronized high-resolution linear cameras.

AI-driven adaptability to inspect any PCB, regardless of size, color, or material.



## PRODUCT DESCRIPTION

**PicAI - AI-driven Probe Inspection Control** is the world's first fully automated inspection system designed to eliminate manual ICT fixture verification.

This patent-pending system integrates a dual-sided vision module, with adaptive Artificial Intelligence (AI) software to analyze probe marks and verify probe conformity. This system captures the entire PCB to detect punctures at each Test Point (TP), measuring deviations from TP's center with  $\sim 7 \mu\text{m}$  per pixel accuracy. It then transforms inspection data into actionable insights, generating detailed reports with statistical analysis, traceability, and trend monitoring.

## KEY FEATURES

### / Dual-Sided Inspection

Simultaneous top and bottom PCB inspection with synchronized camera and lighting modules.

### / Adaptive Computer Vision

AI-driven recognition automatically adjusts inspection parameters, reducing false detections and adapting to different PCB sizes, colors, or materials.

### / High Precision

$\sim 7 \mu\text{m}$  per pixel resolution detects subtle probe misalignments, poor contacts, or early wear that would be invisible during manual inspections.

## CONFIGURATION

**/ Hardware:** Compact, all-in-one unit with a rugged, industrial-grade built for durability in demanding production environments.

**/ Optical System:** Integrated, dual-sided, high-resolution linear camera and lighting system for precision inspection.

**/ Software:** PC-based software with a user-friendly interface and AI-driven analysis for detailed reporting, traceability and process optimization.

## MAIN APPLICATIONS

PicAI's versatility allows for a range of applications within the electronics manufacturing lifecycle.

On the production floor, it serves as a critical quality gate, ensuring that ICT fixtures are perfectly aligned to the PCBs, detecting defects before they cause costly reworks.

In R&D and design, the system offers precise data on fixture performance, accelerating PCB developments and preventing future failures.

Ultimately, it delivers objective, repeatable inspection data and reports to quality control teams, ensuring consistent quality and compliance across all production batches.

## TECH SPECS

### Dimensions (in mm)

1050 (w) x 1150 (l) x 1600 (h) mm

### Power

/ Voltage: 230 V

/ Frequency: 50Hz

/ Current: 25 A

Mod. 239PICAL.EN.D



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