

# Lumina L100 Al Based LED DETECTION Test Handler





# Lumina L100

# Artificial Intelligence Driven, Provide Optimum Performance



Our L100 is a "6-Sided Appearance Inspection Machine," crafted for visually scrutinizing surface features of various components, including surfacemount LEDs, passive components, semiconductors, and analogous devices.

This automated device, developed by our R&D streamlines the visual inspection process for regular products. Employing a motion control acquisition card and a high-speed vibration bowl feeder, the machine efficiently transports materials onto a high-transparency glass turntable. The materials are meticulously arranged on the turntable, moving uniformly past six high-speed cameras that capture images of all six sides of the products.

## **Key Features**

- Al Intelligence Precision Detection
- LED0603: 180k/hour; Capacitors0402:600k/hour; Inductors2520:90k/hour
- Error Rate ≤0.03%, Mis-judgement rate ≤0.08%

## **Productivity**

- Equipment Operating at 98% Efficiency Rate
- 4-6 Bin Available
- Detect bubbles, impurities, impurities, reversed wire, overflow glue, surface, offsets etc

#### **Specification**

Power Supply : ACC220V +/- 10%

Air Pressure : 0.4-0.6MPa

Dimension : 1055 x 958 x1900mm

Weight : 500kg

Material : No Burr, No Dust

Temperature : 18°C - 32°C; with 25-60% Humidity

Air Cleanliness : Level 5 (In Accordance with GB50073-2001)

Environment : No Vibration, No Corrosive Media, No Strong Magnetic Field

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# Lumina L300

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# **Al Technology Precision Detection**

Six-sided Visual Inspection Machine Leakage Detection Rate ≤ 0.03%

Our Ai-based LED detection tester is to enhance accuracy. Deep learning algorithms are employed to identify and categorize materials, indicating good or defective. The sorted materials are then directed into designated "OK" and "Fail" collection boxes with the use of high-speed solenoid valves.





# **High-transparency Glass Turntable**

Materials are adsorbed onto the glass turntable through vacuum and high pressure, ensuring that they are neatly arranged on the same trajectory, guaranteeing accurate photography and blowing.



#### Material Collection for 4~6 Bins

Using high-speed solenoid valves, the product can be quickly and accurately blown into the corresponding collection box without affecting the state of adjacent materials. The air pressure for each can be freely adjusted and monitored, ensuring the stability of material blowing.



## Vision System

Using deep learning algorithms, the images captured by six cameras are subjected to appearance detection and classification. Compared to traditional algorithms, there are no complex parameter settings, reducing user intervention.