



CM-LED

EDGE-LIGHT DETECTION SYSTEM

1. Equipment Overview

The CM-LED Edge Light Inspection System is a glass surface defect inspection device developed by Qinhuangdao Xianhe Technology Development Co., Ltd.

The instrument adopts a high-stability LED edge-light illumination method. Light is introduced from the glass edge, creating high-contrast visual effects on the glass surface when internal or surface defects are present.

It is designed for fast and intuitive detection of defects such as bubbles, stones, scratches, cracks, and inclusions. The system is suitable for quality inspection of architectural glass, tempered glass, and further processed glass products.

2. Inspection Principle

During inspection, the LED light source enters uniformly from the glass edge. When defects exist inside or on the surface of the glass, light scattering or abnormal reflection occurs at the defect location.

This creates visible contrast variations on the glass surface. Operators can quickly identify and evaluate defects through direct visual observation or assisted viewing methods.



4. Main Functions

- Edge-light inspection for glass surface defects
- Detection of bubbles, stones, scratches, cracks, and other defects
- Uniform and stable LED edge illumination
- Fast and intuitive manual visual inspection

5. Application Areas

- Surface quality inspection of architectural glass
- Defect inspection of tempered glass
- Quality control during deep glass processing
- Glass production and laboratory quality testing

6. Main Technical Specification

Light Source Type	LED Edge Illumination
Illumination Method	Light introduced from glass edge
Applicable Glass Types	Architectural glass / Tempered glass / Processed glass
Sample Fixing Method	Dedicated inspection platform
Equipment Structure	Integrated frame structure
Power Supply	AC 220V / 50Hz
Operation Method	Manual visual inspection

7. Operating Environment

Ambient Temperature	10 °C – 40 °C
Relative Humidity	≤ 85%
Vibration Condition	No significant vibration
Installation Location	Indoor laboratory or inspection workshop

Technical Support & Enquiries

For technical enquiries, installation support, or operational assistance, please contact:

Mobile: +44 7377366178 /+44 7939992902

Contact Person: Lu Lin

Email: Admin@luari.uk