

# Integrated Collection Solution Expert

## High-Precision Optical Collection Platform

# Daguan Series Line Laser Sensor

Specifically designed for battery electrode inspection, enabling ultra-fast detection of various defects to enhance production quality.

## Product Advantages

Smart adaptation,  
compatible with  
multiple devices

Ultra-fast scanning at  
15,000 lines per  
second

Multi-exposure modes,  
adaptive to different  
surfaces

## Product Profile

The sensor employs high-precision line laser scanning technology for fast and accurate surface inspections. It requires no additional module configurations, operates independently, and provides stable data output. The software allows flexible adjustments to exposure modes to accommodate different surface materials and inspection needs.

### Product Parameter:

13.4~16.5

X Resolution ( $\mu\text{m}$ )

0.2

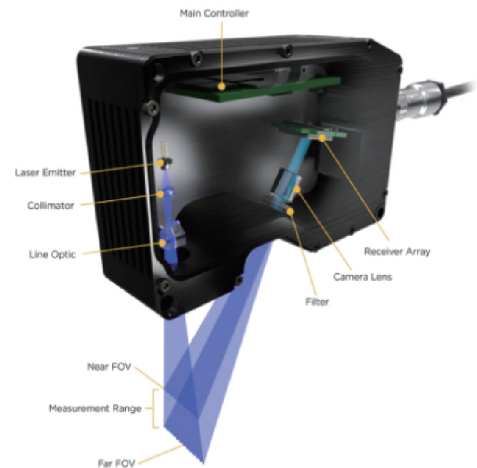
Z-Axis Repeat-  
ability ( $\mu\text{m}$ )

24.6

Measurement  
Range (mm)

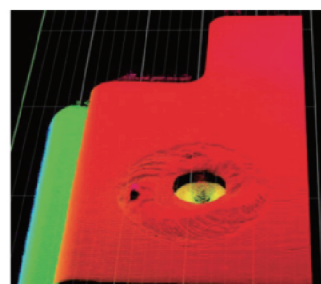
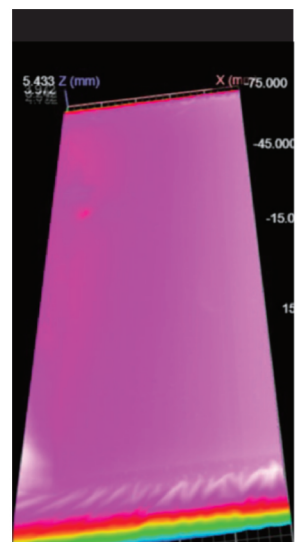
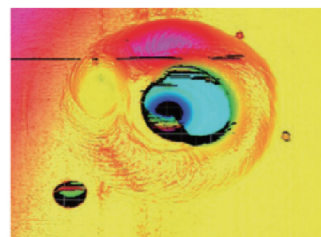
46\*80\*110

Dimensions (mm)



## Applications

Ideal for high-precision surface inspections in fields such as automotive parts, electronic components, and precision machinery processing.



# Spectral Confocal Sensor

A high-speed, high-precision 3D profile measurement device, suitable for demanding industrial inspection requirements.

## Product Advantages

Ultra-fast line scanning

Sub-micron resolution

Multi-layer measurement of transparent materials

## Product Profile

The spectral confocal sensor utilizes white light confocal technology to achieve precise height and surface defect measurements by focusing multiple wavelengths at different depths. It effectively detects transparent and reflective materials while avoiding interference from reflection and refraction, making it ideal for high-precision microscopic inspection scenarios.

### Product Parameter:

5.6  $\mu\text{m}$

X-Axis Resolution

0.13  $\mu\text{m}$

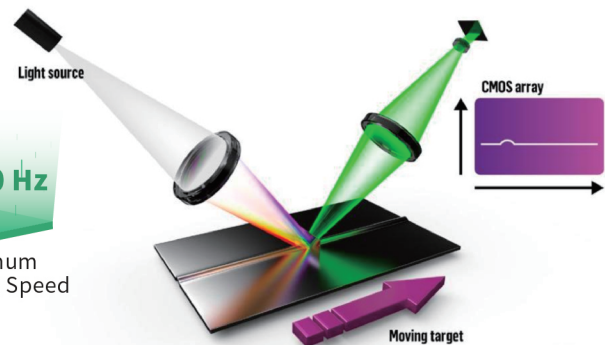
Z-Axis Repeatability

20.6 mm

Working Distance

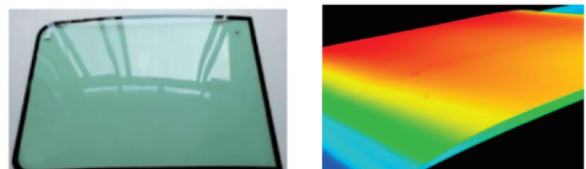
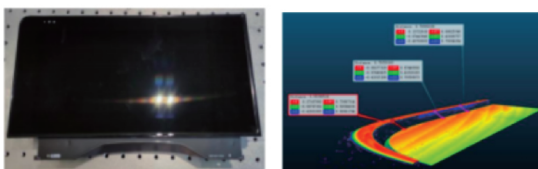
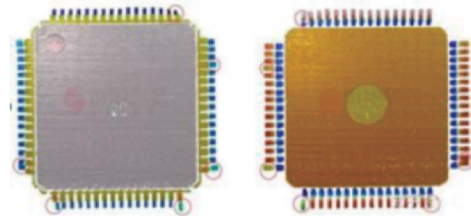
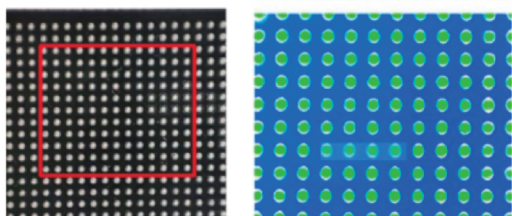
4000 Hz

Maximum Scanning Speed



## Applications

Glass thickness measurement: Non-contact, high-precision inspection; Semiconductor and electronic component inspection: Surface and defect detection; Composite material inspection: Precise analysis of complex structures



# Jimu Series Spectral Line Scanner

Advanced AI algorithms and time-based imaging for precise classification of micro-defects in battery electrodes.

## Product Advantages

Compatible with all materials, effective transparent material detection

Wide-angle precision, suitable for complex structures

Color adaptive technology, adaptable to various scenarios

## Product Profile

The spectral line scanner utilizes high-speed scanning technology to capture high-precision 2D data in real-time, suitable for inspecting various materials and complex structures. Equipped with an integrated white light source and spectral analysis system, it precisely detects microscopic defects in transparent and reflective materials, offering sub-micron resolution and excellent inspection performance.

### Product Parameter:

1.5 mm

Depth of Field

2  $\mu\text{m}$

Lateral Resolution

16K \* 3.5 $\mu\text{m}$

Camera Pixels

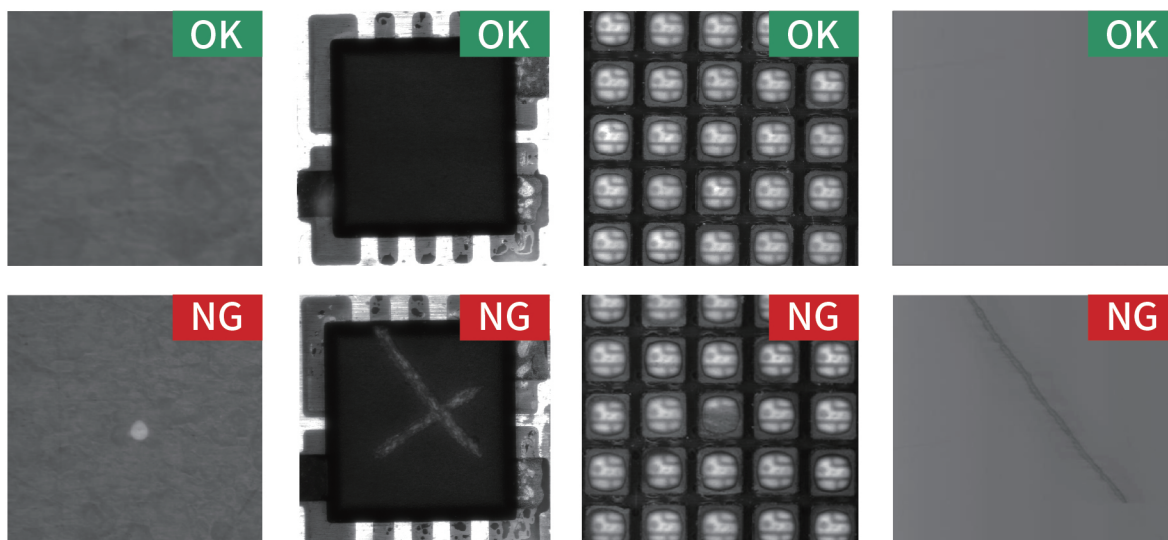
80 KHz

Sampling Speed



## Applications

Widely used in semiconductor manufacturing, optical lens inspection, and high-precision weld seam inspection, requiring high accuracy and sensitivity.



# Dual Dome Multi-Zone Programmable Light Source

High brightness and independent control of multiple zones, suitable for complex inspection environments that require precise adaptation to diverse needs.

## Product Advantages

Intelligent brightness control, adaptable to various scenarios

Multi-zone light control for precision inspections

Compact design with high compatibility across multiple interfaces

## Product Profile

The dual dome multi-zone programmable light source provides high brightness and independent control of multiple areas to optimize image quality in optical inspections. With a maximum brightness of up to 100,000 Lux and flexible light source settings that adapt to various inspection environments, it is compact and suitable for a wide range of industrial applications, ensuring efficient and stable illumination.

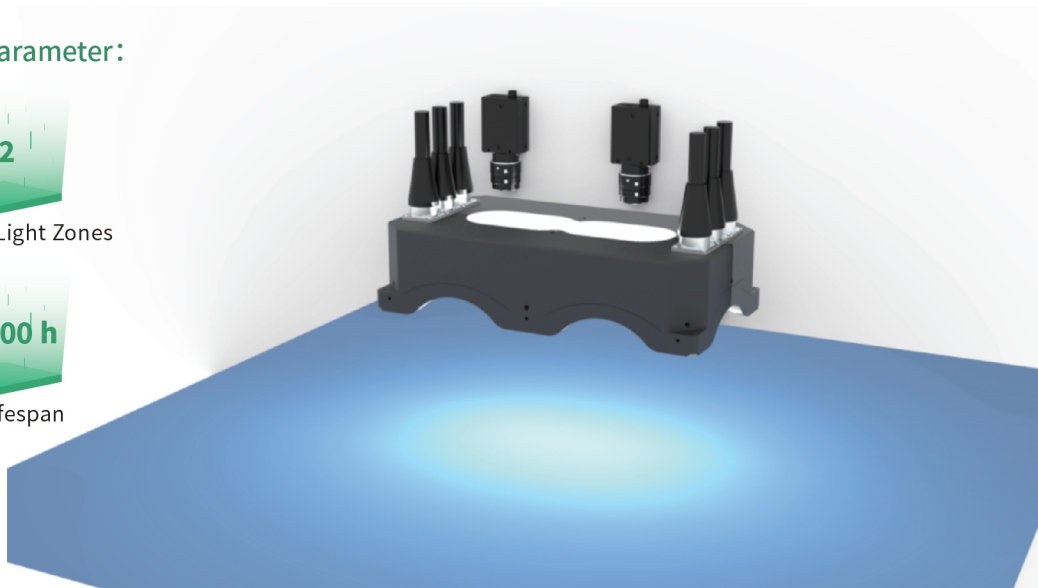
### Product Parameter:

72

Number of Light Zones

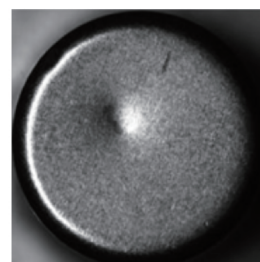
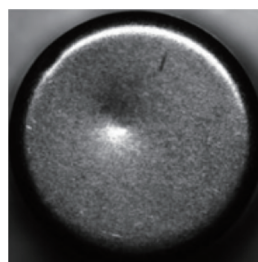
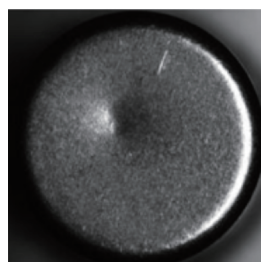
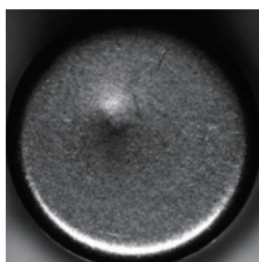
50,000 h

LED Lifespan



## Applications

Surface defect inspection: Scratches, dents on metal; Multi-layer structure inspection: Defects in electronic components and PCBs; Adaptation to complex environments: Interference resistance, stable and efficient.





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