Fiber Sequence Detector

Core Features :

- 0.2s fast inspection cycle
- Automatic fiber sequence verification
- Visual and voice indication of misaligned fiber positions
- External trigger-free operation
- Test task storage and recall

Key Advantages :

Elimination of Manual Visual Inspection – Effectively prevents inspection errors and omissions caused by prolonged visual fatigue.

Significantly Enhanced Inspection Efficiency – A single test cycle completes in 0.2 seconds, well-suited for batch production environments.

Intelligent Judgment with Multimodal Alerts – Automatically identifies sequence anomalies, delivers voice notifications, and displays the exact position of errors on-screen.

Streamlined Operation – No extensive training required; inspection initiates automatically upon sample placement without external triggering.

High Measurement Consistency – Precision chuck positioning combined with standard sample comparison ensures reproducible results across different operators.

➤ Application Scenarios :

MPO Fiber Production Lines : Sequence quality sampling or full-scale batch inspection.

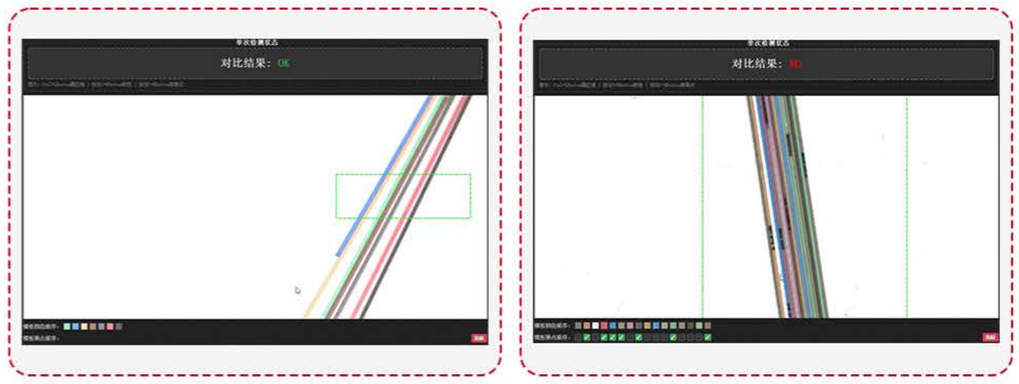
Fiber Connector Assembly Lines : Sequence verification before and after assembly processes.

Quality Assurance Departments : Incoming material inspection and outgoing shipment verification.

R&D Prototyping : Small-batch sample validation during development phases.

➤ Selection Guide :

- Rapid sampling inspection : Single-sided detection and real-time mode.
- Rigorous outgoing inspection : Double-sided detection and single precision mode.
- High-volume production line inspection : Double-sided detection and continuous fast mode.
- Frequent model changeovers : Task save and recall functionality.



Technical Details :

Imaging Method : High-magnification optical microscopy with digital imaging.
Judgment Basis : Pixel-level comparison with a standard reference image; erroneous positions are distinctly marked.
Light Source Control : Automatic brightness adjustment to maintain optimal image quality.
Chuck Design : Precision-engineered chuck for accurate and repeatable positioning.
Data Storage : Supports saving of test configurations for convenient reuse across different tasks.
Compatible Material States : With adhesive / without adhesive / with colorless transparent film.

Item Description	
Model	JL-FS500-GMP
Detection Mode	Single-sided / Double-sided
Inspection Items	MPO fiber color sequence errors (misalignment, reversal, dislocation)
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Max Inspection Size	Compatible with standard MPO connectors
Resolution	Optical microscope imaging / digital image processing
Inspection Efficiency	Single test: 0.2 seconds
Continuous mode	real-time
Inspection Accuracy	High-precision detection, eliminates human
False Miss Rate	< 1%
False Alarm Rate	< 5%
Extended Functions	Standard sample comparison, automatic brightness calibration, precision chuck positioning
Detection Principle	Optical microscopic imaging + image comparison algorithm
Light Source System	High-brightness LED (adjustable, lifespan >20,000 hours)
Camera	Industrial-grade digital camera
Operating System	Windows 7 / Windows 10 (64-bit)
Power Requirement	220V，24V
Instrument Dimensions	120W × 370H × 210D (mm)
Weight	2.5 kg