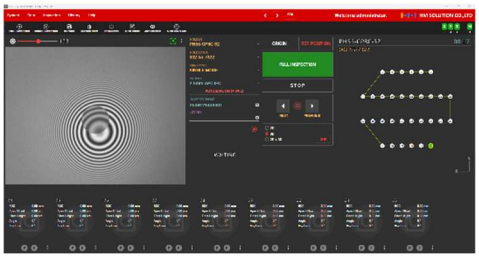
HM SOLUTION CO.,LTD

Interferometry Fiber Auto Inspection System (i-FAIS)

(PRELIMINARY VERSION)

KEY FEATURES

- Fully Automated Measurement
- End Face Visual & Geometry Measurement on Polishing Fixture
- Multi-Layer Measurement & Wide Fixture Compatibility
- Fast & Consistent Measurement
- Intuitive Pass/Fail Judgment
- Centralized Data Collection & Data Management & Analysis
- Barcode Scanning for Automation (Optional)



APPLICATIONS

- Manufacturing Quality Control & Inspection
- Final Product Inspection & Acceptance
- Multi-Layer & Advanced Structure Measurement
- Quality Assurance (QA) and Traceability
- Process Efficiency & Automation

i-FAIS (Interferometry Fiber Auto Inspection System) is an advanced automated solution for simultaneous end-face inspection and geometry measurement of polished optical components. Supporting a wide range of devices from ferrules and connectors to optical transceivers and active devices.

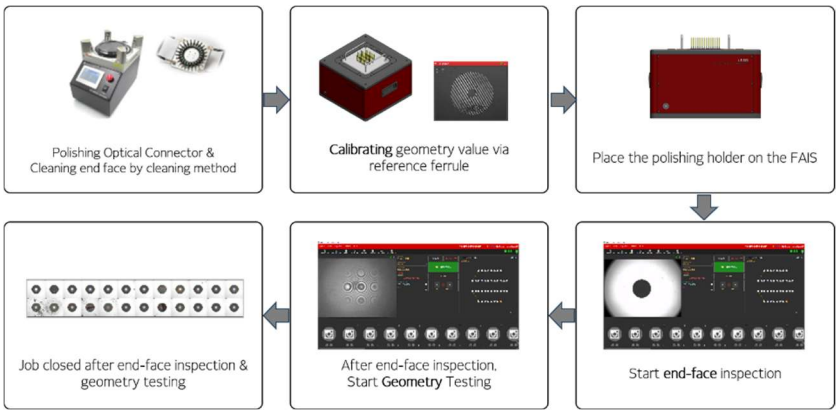
i-FAIS delivers unparalleled efficiency to the manufacturing and production lines of the optical industry. it features full Auto Focus, Auto Centering, and Auto Positioning capabilities without limitations. This ensures seamless inspection for components on any type of Polishing Fixture. Furthermore, all measurements are performed in strict compliance with IEC Standards or user-defined Customized Standards, guaranteeing the highest level of reliability.

The **CDM (Central Data Management) tool** is a centralized platform designed to automatically aggregate inspection results from multiple i-FAIS systems via a seamless network integration.

Advanced Traceability: Beyond end-face quality, CDM monitors the condition and performance of **Polishing Holders**, enabling predictive maintenance.

Real-time Production Insight: Managers can access a comprehensive dashboard to monitor critical KPIs, including:

- **Throughput Analysis:** Input vs. Output trends.
- **Defect Profiling:** Failure rates categorized by type.
- **Asset Management:** Performance and failure rates per specific holder.



GENERAL SPECIFICATIONS

PARAMETER	SPECIFICATION	NOTE
Dimension (mm)	320 x 320 x 220	Without Polishing Fixtures
Weight (Kg)	Approx. 13.00	
Operational Temp (°C)	0 to 50	
Storage Temp (°C)	-10 to 60	
Humidity (%)	< 80% RH, non-condensing	
Power Input	AC Input: 100 to 240VAC, 50/60Hz, DC Output: 24Vdc/5A	
Power Consumption	Typical 90W	

Note.

1. FOR INDOOR USE ONLY

TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATION	NOTE
Measurement Area (X, Y)	Typical 100mm x 100mm (depending on the type of mount)	
Method of Focus	Liquid Lens or linear adjustment (resolution less 1um)	
Max Focusable Distance(mm)	< 1.00	
Measurement FOV	400um x 400um @ single fiber, TBD @ multiple fibers	
Wavelengths of LED	447nm @ single fiber, 660nm @ multiple fiber	
Adaptive objective	X10 LWD	
Measurable ROC (mm)	2 to Flat	
Measurable Apec offset (um)	Typical 0 to 200	Depending on measurement FOV
Measurable fiber height (nm)	-500 to 500	
Calibration Method	Multi-Point Absolute and Single Relative Correction	
Holder (Products) Profiles	Acceptable all types of polishing Holder	

ORDERING INFORMATION

PART NO	DESCRIPTIONS	NOTE
iFAIS-02-01	**Interferometer Fiber Auto Inspection System** with **Only endface Inspection(2D)** Included Square shape mount, 24VDC AC/DC Adaptor, **1xDigital Camera**, USB3.0 Cable, Installation USB memory stick (Requires operational external Desktop or Laptop additionally (Windows Based)	
iFAIS-02-02	**Interferometer Fiber Auto Inspection System** with **Only Single Fiber Geometry measurement** Included Square shape mount, 24VDC AC/DC Adaptor, **1xDigital Camera**, USB3.0 Cable, Installation USB memory stick (Requires operational external Desktop or Laptop additionally (Windows Based)	
iFAIS-02-03	**Interferometer Fiber Auto Inspection System** with **Single Fiber endface & geometry measurement** Included Square shape mount, 24VDC AC/DC Adaptor, **1xDigital Camera**, USB3.0 Cable, Installation USB memory stick (Requires operational external Desktop or Laptop additionally (Windows Based)	
iFAIS-02-04	**Interferometer Fiber Auto Inspection System** with **Single & Multiple Fiber endface & geometry measurement** Included Square shape mount, 24VDC AC/DC Adaptor, **2xDigital Camera**, USB3.0 Cable, Installation USB memory stick (Requires operational external Desktop or Laptop additionally (Windows Based)	
FAIS-D-01(2)	Central Data Management Platform for multiple iFAIS's (Up to 10xiFAIS)	

Notes

(1) Requires, External PC or Laptop for operation (Windows Based)

(2) Require server or equivalent equipment