

The ultimate on-line measurement solution

Low Birefringence Analyzer (LBA)

BA 7000

FIBERPRO announces its latest innovative tool for polarization analysis. The new Low Birefringence Analyzer (LBA) is designed to offer an accurate field analysis of birefringence. This new solution is a major breakthrough for enabling glass manufacturers to overcome difficulties in the production line while also providing faster and more accurate birefringence measurement in the laboratory.

The LBA offers the industry's highest precision measurements at the fastest available speeds. For example, with 80 Hz of measurement speed at sub-micro radian accuracy, it can provide precise data for 2000-mm glass in just 30 seconds. While others measure in time, **FIBERPRO** measures in frequency.

FIBERPRO LBA is uniquely designed to provide accurate birefringence analysis, based on balanced detection—even in harsh environments, including factories and mechanical labs where extreme noise and vibration might present issues for other measurement equipment.

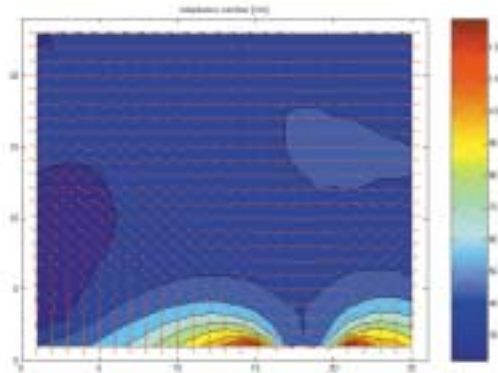
The LBA's micro radian-grade capabilities make it extremely versatile for working with most transparent materials, such as glass and semiconductors.

With LBA, **FIBERPRO** helps ensure the success and competitiveness of glass manufacturers.



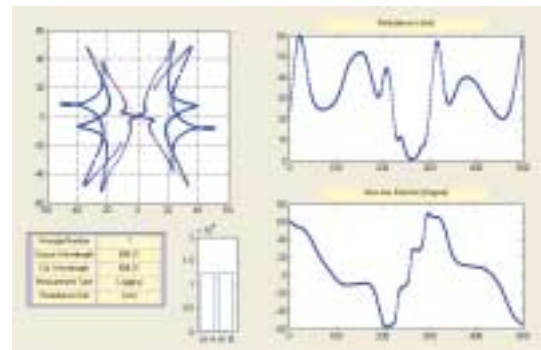
Key Features

- Fastest available speeds (80Hz)
- High resolution (urad / sqrt(Hz))
- Intensity noise-free
- Modular design for moving head
- Selectable light source by application
- Versatile use - i.e. glass, semiconductor, wave plates, visible, infrared materials
- Light weight
- All-in-one feature with integrated circuit
- Custom-made graphical user interface (GUI)



Applications

- On-line measurement for glass plate
- Defect-induced localized birefringence
- Big glass plate measurement
- Finding excess stress at edge
- Glass cutting
- Stress analysis of optical materials, including polymer films
- Metrology for quality control
- Wafer/photolithography components analysis
- Finding small defects in the plate
- High-accuracy birefringence analysis in laboratory



Example : PMMA plate

Specifications

Parameters	Specifications	Note
Wavelength(λ)	680nm, SLD ¹⁾	Other wavelengths are available according to applications
Retardance range	$0 \sim \pi$	2π radian is equivalent to λ
Retardance resolution	<10 uradian	@ 80 Hz measurement
Maximum measurement speed	80 Hz	
Spot size	<1mm	
Communication	GPIB	
Structure	Modular	X-Y moving stage can be supplied upon request
Physical dimension		
Power input	90-250V AC @50-60Hz	

¹⁾ Spectral width 10nm