ProView™ LD – for fiber holders

FIBER END FACE INTERFEROMETER & MICROSCOPE

The ProView LD is a highly advanced interferometer for precise measurement and inspection of fiber end faces with diameters from 125 to 800 µm. The interferometer is specifically designed for production lines where a simple, fast and very accurate end face inspection is required. But the ProView LD is also well suited for R&D environments and for fiber cleaver maintenance purposes.

In many cases an interferometric fringe pattern can be very complicated to analyze and understand. For ease of use and optimal inspection speed the ProView LD includes highly advanced and fully automatic functions for 2D and 3D topographic analyses of the end face surface. The software automatically indicates the angle, flatness and slope direction of the end face.

To simplify the inspection process even further the ProView LD can be set to a "PASS/FAIL" mode. This function allows the operator to simply determine the end face quality via color codes on the image. In addition to cleave angle inspection the ProView LD can also be used to measure several other properties such as fiber diameters and distance between defined points etc.

The ProView LD – for fiber holders is delivered with a universal v-groove clamp assembly which can accommodate standard fiber holders from FITEL or Fujikura but also allows the use of bare fibers. There are also optional holders available for inspection of standard SMA, FC/PC, ST/PC or LD80 connectors. Custom-made clamps or adapters can be offered on request.

The ProView LD has a compact design which makes it ideal for a production bench and to be used side-by-side with cleavers, fusion splicers and other preparation tools. The ProView LD is connected and powered via an USB 3.0 cable and hosted by an external PC (not included).

Key Features

- For fiber cladding diameters from 125 to 800 µm
- 2D and 3D topography
- Fringe and inspection mode from PC Controller GUI
- Very fast inspection time with automatic angle estimation
- Optional use of PASS/FAIL cleave angle indication
- Inspection of end face properties such as flatness, perpendicularity, hackles and contamination
- Grab and save 2D and 3D images and cleave data

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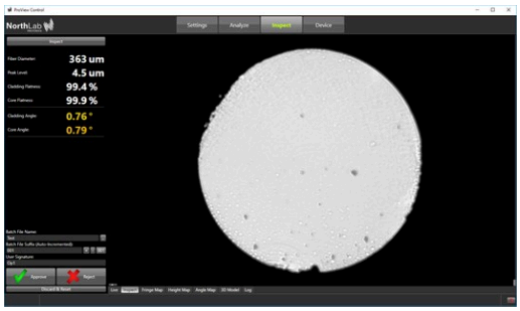
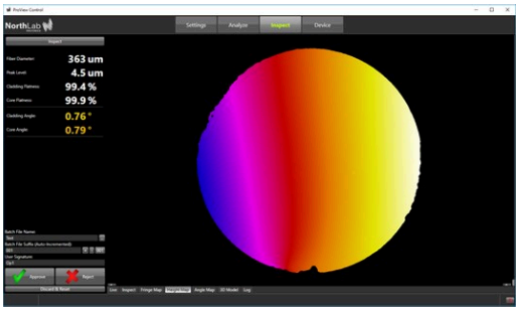
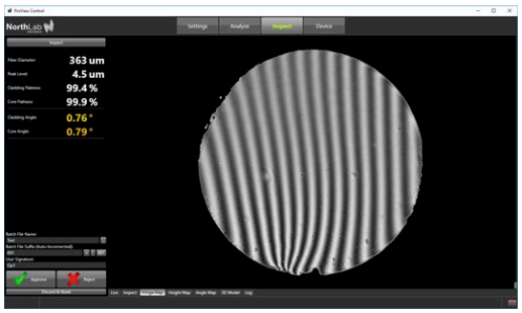


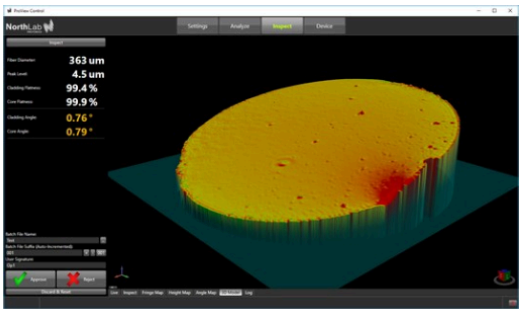
Microscope view



Height map view



Interferometer view



3D model view

FITEL/Fujikura fiber holder platform

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Technical Specifications

Dimensions:	86(W) x 127(D) x 93(H) mm 86(W) x 140(D) x 97(H) mm (incl. focus knob and rubber feet)
Weight:	1.2 kg
Power Supply:	Through USB port
PC connection:	Super Speed USB (USB 3.0) Type-A with 2 m cable
Environment:	Operating temperature: 10 °C ~ 40 °C Storage temperature: -20 °C ~ 50 °C Humidity: 5% ~ 95% RH (non-condensing)
Fiber diameter:	125 µm – 800 µm
Field of view:	~950 µm
Resolution:	2560 x 1920 (4.92 MP)
Sensor:	CMOS (monochrome)
Image file format:	JPEG, PNG, TIFF, GIF

System Acquisition Range and Accuracy

Height, peak to valley:	15 µm
Angle, 125 µm fiber:	up to 5.0°
Angle, 220 µm fiber:	up to 3.9°
Angle, 400 µm fiber:	up to 2.1°
Angle, 720 µm fiber:	up to 1.0°
Absolute accuracy: [1]	0.03° standard deviation (<400 µm, ROI = 90%) 0.02° standard deviation (>400 µm, ROI = 90%)
Relative accuracy: [1]	5% up to 2°

[1] Using software calibration compensation.

System Requirements

Computer:	PC with Intel i5 (or better)
USB: [2]	One free USB 3.0 port (Super Speed)
Memory:	4 GB RAM (16 GB RAM recommended)
Disc space:	100 MB (500 MB recommended)
Operating system:	Windows 8/8.1/10 64-bit (with .NET Framework 4.8 or later)
Graphics card:	3D graphics support (dedicated GPU recommended)
Display resolution:	1920 x 1080 (dual monitor system recommended)
Input devices:	Keyboard and a three-button scroll-wheel mouse (or equivalent)

[2] Only use USB 3.0 ports directly connected to the motherboard of the PC (i.e. a port without an internal extension cable).

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Product	Part #	Qty
NorthLab ProView™ LD – for fiber holders	**IF-02-01000**	
Standard Package		
Platform for FITEL (S712) F/H	IF-90-01001	1
Platform for FITEL (S713) & Fujikura F/H	IF-90-01002	1
Shims (100, 400, 600, 800, 1000 um)	IF-90-01003	1
USB 3.0 Cable	N/A	1
User's Manual & PC Software (USB-stick)	N/A	1
Accessories and Spares		
Universal V-groove Clamp	IF-90-01004	
SMA Connector Holder	IF-90-01010	
FC/PC Connector Holder	IF-90-01011	
ST/PC Connector Holder	IF-90-01012	
LD80 Connector Holder	IF-90-01013	

Information is subject to change without notice.

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