

# ProView™ LD – for connectors

## 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  $\mu\text{m}$ . 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 connector 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 radius and angle 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 angle and radius 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 connectors is delivered with a pre-mounted standard SMA, FC/PC, ST/PC or LD80 connector holder. There is also an optional universal v-groove clamp assembly available for inspection of bare fibers. Custom made holders or clamps 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, polishing stations, ultrasonic cleaners 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).

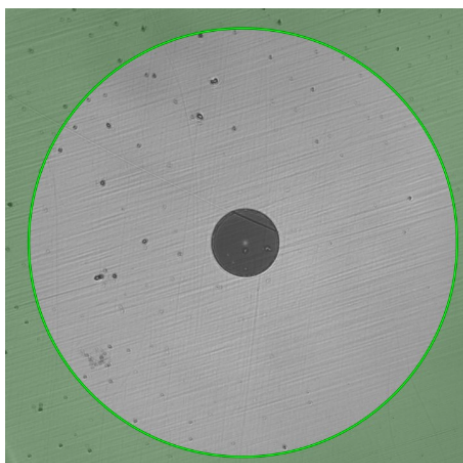
### Key Features

- For end faces with diameters from 125 to 800  $\mu\text{m}$
- 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 radius and angle indication
- Inspection of end face properties such as flatness, perpendicularity, hackles and contamination
- Grab and save 2D and 3D images and connector data

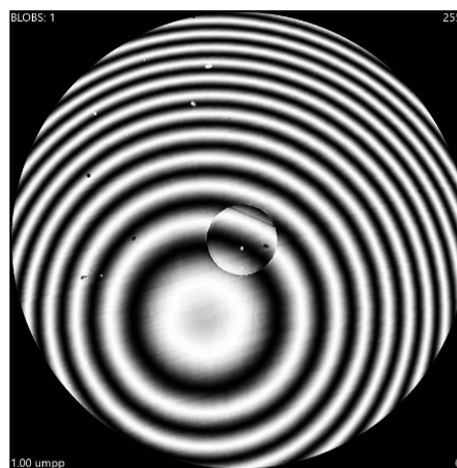


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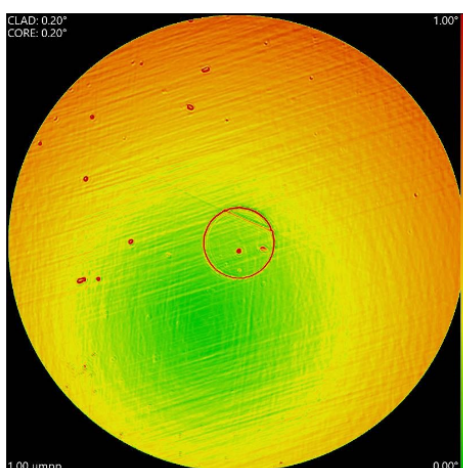
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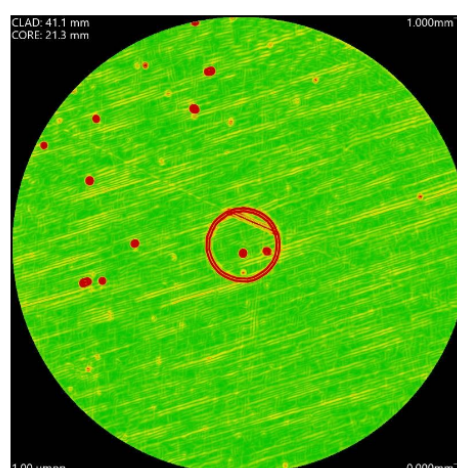
Microscope view



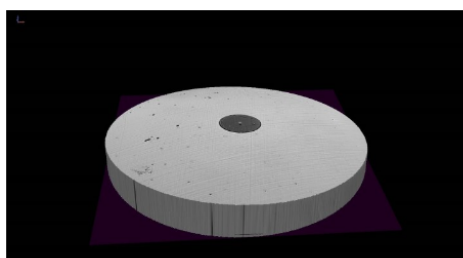
Interferometer view



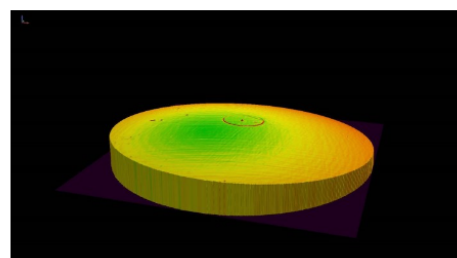
Angle map view



Curve map view



3D model view



3D model view

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### Technical Specifications

<b>Dimensions:</b>	86(W) x 127(D) x 93(H) mm 86(W) x 140(D) x 97(H) mm (incl. focus knob and rubber feet)
<b>Weight:</b>	1 kg
<b>Power Source:</b>	Through USB port
<b>PC connection:</b>	Super Speed USB (USB 3.0) Type-A with 2 m cable
<b>Environment:</b>	Operating temperature: 10 °C ~ 40 °C Storage temperature: -20 °C ~ 50 °C Humidity: 5% ~ 95% RH (non-condensing)
<b>Fiber diameter:</b>	125 µm – 800 µm
<b>Field of view:</b>	~800 µm
<b>Resolution:</b>	2560 x 1920 (4.92 MP)
<b>Sensor:</b>	CMOS (monochrome)
<b>Image file format:</b>	JPEG, PNG, TIFF, GIF

### System Acquisition Range and Accuracy

<b>Height, peak to valley:</b>	15 µm
<b>Angle, 125 µm fiber:</b>	up to 5.0°
<b>Angle, 220 µm fiber:</b>	up to 3.9°
<b>Angle, 400 µm fiber:</b>	up to 2.1°
<b>Angle, 720 µm fiber:</b>	up to 1.2°
<b>Absolute accuracy:</b> <sup>(1)</sup>	0.03° standard deviation (<400 µm, ROI = 90%) 0.02° standard deviation (>400 µm, ROI = 90%)
<b>Relative accuracy:</b> <sup>(1)</sup>	5% up to 2°

<sup>(1)</sup> Using software calibration compensation.

### System Requirements

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

<sup>(2)</sup> 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 SMA connectors	IF-02-01001	
NorthLab ProView™ LD – for FC/PC connectors	IF-02-01002	
NorthLab ProView™ LD – for ST/PC connectors	IF-02-01003	
NorthLab ProView™ LD – for LD80 connectors	IF-02-01004	
<b>Standard Package</b>		
USB 3.0 Cable	N/A	1
User's Manual & PC Software	N/A	1
<b>Accessories and Spares</b>		
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.*