ProView™ XD – for connectors

FIBER END FACE INTERFEROMETER & MICROSCOPE

The ProView XD is a highly advanced interferometer for precise measurement and inspection of fiber end faces with diameters from 220 to 1200 μm. The interferometer is specifically designed for production lines where a simple, fast and very accurate end face inspection is required. But the ProView XD 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 XD 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 XD 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 XD can also be used to measure several other properties such as fiber diameters and distance between defined points etc.

The ProView XD – 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 XD 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 XD is connected and powered via an USB 3.0 cable and hosted by an external PC (not included).
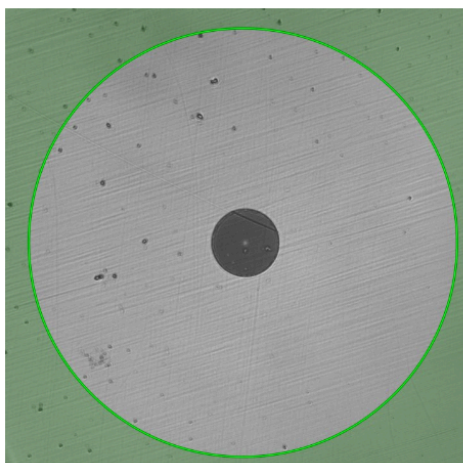
Key Features

- **For end faces with diameters from 220 to 1200 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 radius and angle indication**
- **Inspection of end face properties such as flatness, perpendicularity, hackles and contamination**
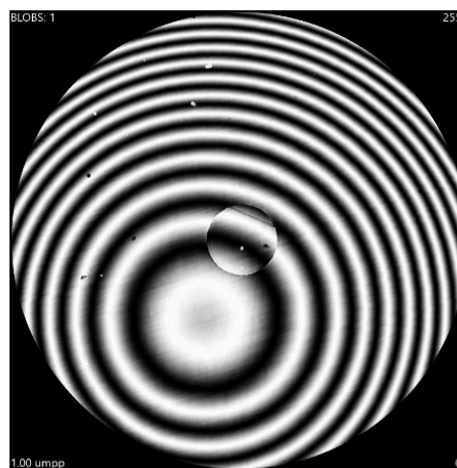- **Grab and save 2D and 3D images and connector data**
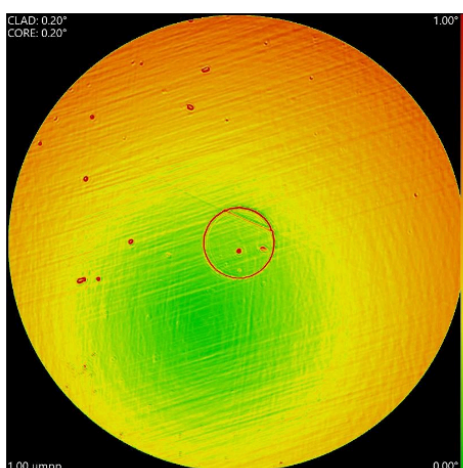
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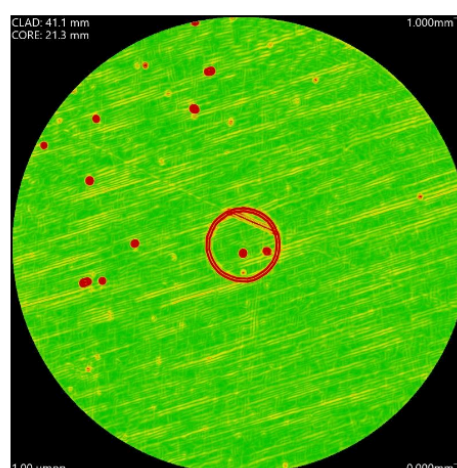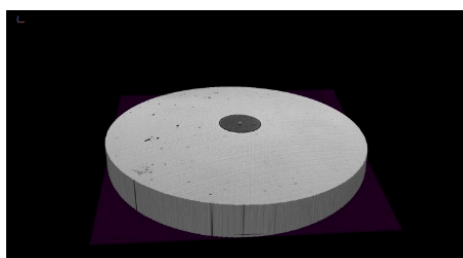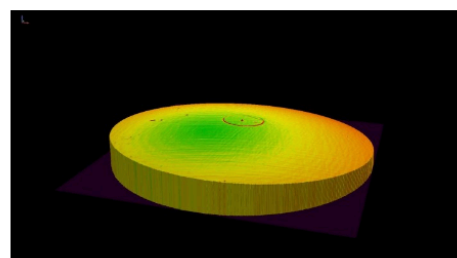

Microscope view

Interferometer view

Angle map view

Curve map view

3D model view

3D model view

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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:	220 µm – 1200 µm
Field of view:	~1300 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, 220 µm fiber:	up to 3.9°
Angle, 400 µm fiber:	up to 2.1°
Angle, 720 µm fiber:	up to 1.2°
Angle, 1200 µm fiber:	up to 0.7°
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™ XD – for SMA connectors	**IF-12-01001**	
NorthLab ProView™ XD – for FC/PC connectors	**IF-12-01002**	
NorthLab ProView™ XD – for ST/PC connectors	**IF-12-01003**	
NorthLab ProView™ XD – for LD80 connectors	**IF-12-01004**	
Standard Package		
USB 3.0 Cable	N/A	1
User's Manual & PC Software	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.