

# ProView™ XD – for ST/PC 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  $\mu\text{m}$ . The interferometer is specifically designed for production lines where a simple, fast and very accurate end face inspection is required. But the ProView 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 ST/PC connectors is delivered with a pre-mounted standard ST/PC connector holder. There are also optional holders available for inspection of other standard connectors (e.g. SMA, FC/PC and LD80) and a universal v-groove clamp assembly 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).

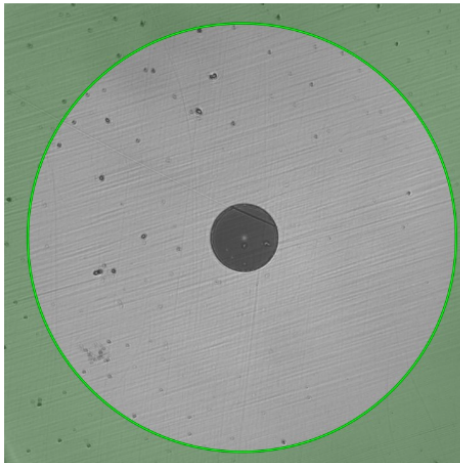
## Key Features

- For end faces with diameters from 220 to 1200  $\mu\text{m}$
- 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

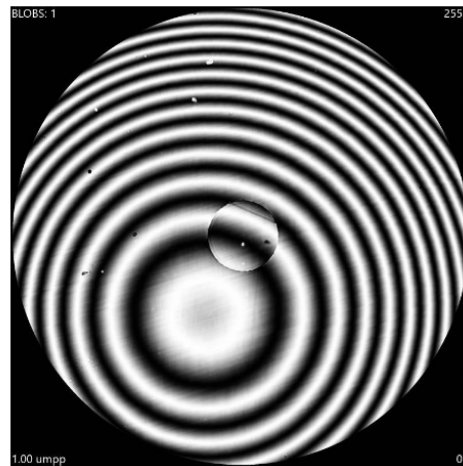


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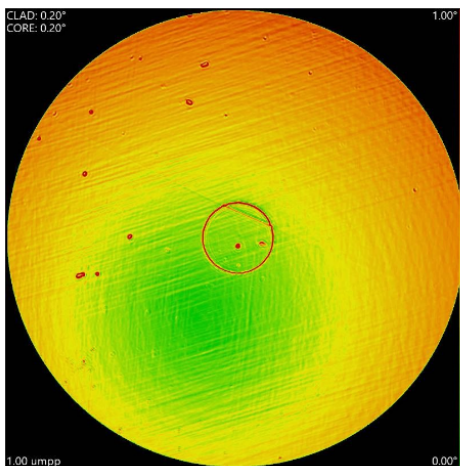
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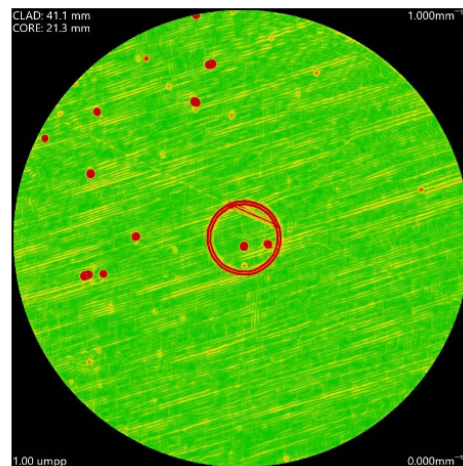
Microscope view



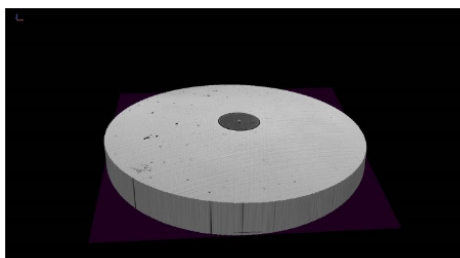
Interferometer view



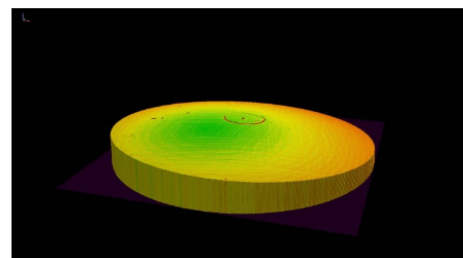
Angle map view



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<br>86(W) x 140(D) x 97(H) mm (incl. focus knob and rubber feet)                             |
| <b>Weight:</b>            | 1.2 kg                                                                                                                |
| <b>Power Supply:</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<br>Storage temperature: -20 °C ~ 50 °C<br>Humidity: 5% ~ 95% RH (non-condensing) |
| <b>Fiber diameter:</b>    | 220 µm – 1200 µm                                                                                                      |
| <b>Field of view:</b>     | ~1300 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, 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>Angle, 1200 µm fiber:</b>             | up to 0.7°                                                                                     |
| <b>Absolute accuracy:</b> <sup>(1)</sup> | 0.03° standard deviation (<400 µm, ROI = 90%)<br>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 |
|----------------------------------------------------|--------------------|-----|
| <b>NorthLab ProView™ XD – for ST/PC connectors</b> | <b>IF-12-01003</b> |     |
| <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.*