

## ProView™ XD

### Fiber End Face Interferometer & Microscope

NorthLab's ProView XD is a highly advanced interferometer for precise measurement and inspection of fiber end faces with cladding diameters between 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 fiber cleaver maintenance purposes.

In many cases an interferometric fringe pattern can be very complicated to analyse 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 angle, flatness and slope direction 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 colour codes on the image.

In addition to cleave angle inspection the ProView XD can also be used to measure several other properties such as fiber diameters and distance between defined points etc.

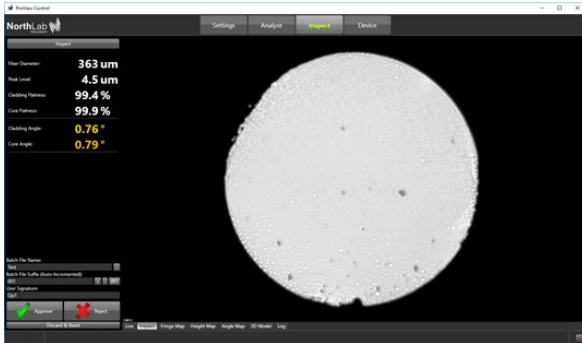
The ProView XD is delivered with a universal sized v-groove clamp assembly which can accommodate standard fiber holders from FIBEL or Fujikura but also allows the use of bare fibers. There are also optional holders for inspection of standard connectors (e.g. SMA, FC/PC, ST/PC, LD80). Custom made clamps or adapters 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 fusion splicers, cleavers 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).

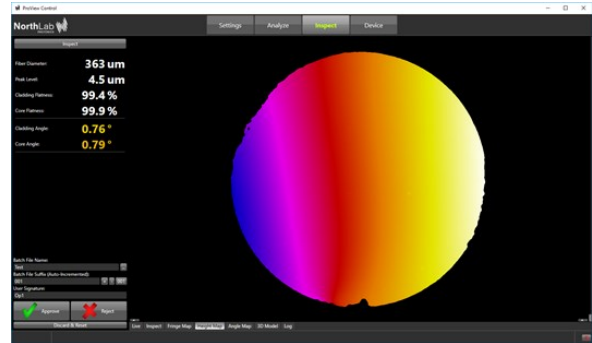


#### Key Features

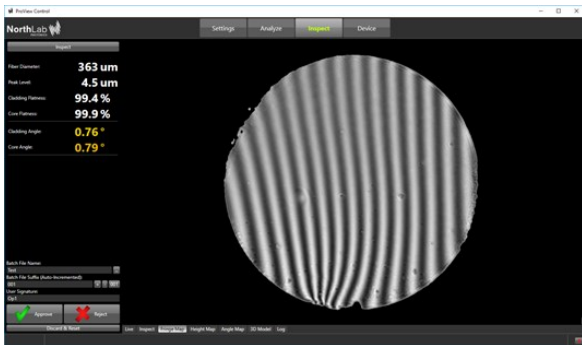
- For fiber cladding diameters from 220 to 1200  $\mu\text{m}$
- 2D and 3D topography
- Fringe & Inspection mode from PC Controller GUI
- Very fast inspection time with automatic angle estimation
- Optional use of PASS/FAIL cleave angle indication
- Inspection of end face properties such as flatness, perpendicularity, hackles and contamination
- Grab and save 2D and 3D images and cleave data



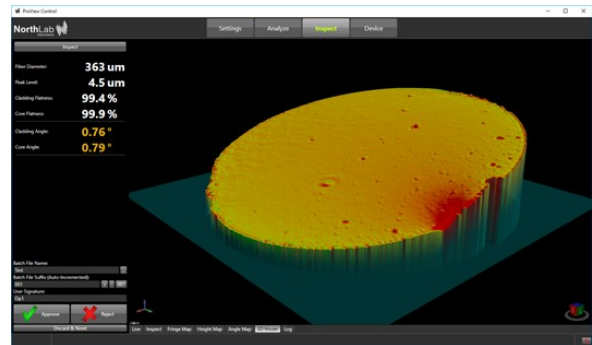
**MICROSCOPE VIEW**



**HEIGHT MAP VIEW**



**INTERFEROMETER VIEW**



**3D MODEL VIEW**



**FITEL/FUJIKURA FIBER HOLDER PLATFORM**

### 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>	1.2 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 Storage temperature: -20 °C ~ 50 °C 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%) 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 4.6.1 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).

Product	Part #	Qty.
<b>NorthLab ProView™ XD</b>	<b>IF-12-01000</b>	
<b>Standard Package</b>		
FITEL S712 Fiber Holder Platform	IF-01-01001	1
FITEL S713 / Fujikura Fiber Holder Platform	IF-01-01002	1
Shims (set of 5 pcs.)	IF-01-01003	1
User's Manual & PC Software (USB-stick)	N/A	1
<b>Optional Components</b>		
SMA Connector Holder	IF-01-01004	
FC/PC Connector Holder	IF-01-01005	
ST/PC Connector Holder	IF-01-01006	
LD80 Connector Holder	IF-01-01007	

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