



# Polaris X

**High-end microscope for detailed inspection of connector endface.**

**Polaris X** is a benchtop system for visual inspection, analysis and certification of single and multi-fiber optic connectors.

Designed for critical examination of the polished fiber end faces, Polaris X may serve as a reference system both on the production floor and in laboratory settings.



Single fiber



Multi-fiber



Auto focus



0.2  $\mu\text{m}$  defect size detection



High resolution



Scratch detection



Industry standards



PASS/FAIL verdict

## Features

### Maximum contrast and resolution for accurate inspection

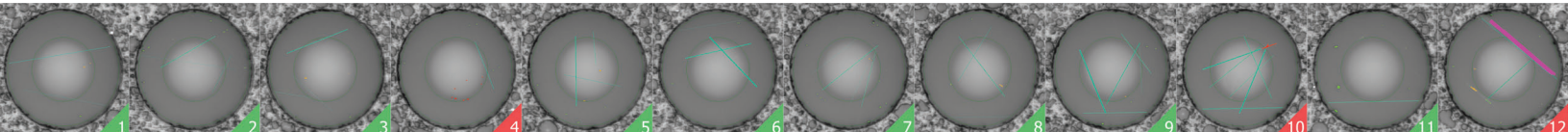
Detect the finest defects as small as 0.2  $\mu\text{m}$  in diameter and scratches as small as 0.4  $\mu\text{m}$  in width.

### Longer working distance to increase a variety of tested objects

Inspect not only patch cords but also ODC connectors and MPO connectors in adapters and cassettes.

### Automated movement along a multi-fiber endface

No manual shifting, no guesswork about the fiber number, no missed fibers.



*MPO connector endface tested on Polaris X.*

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[www.sumix.com](http://www.sumix.com)

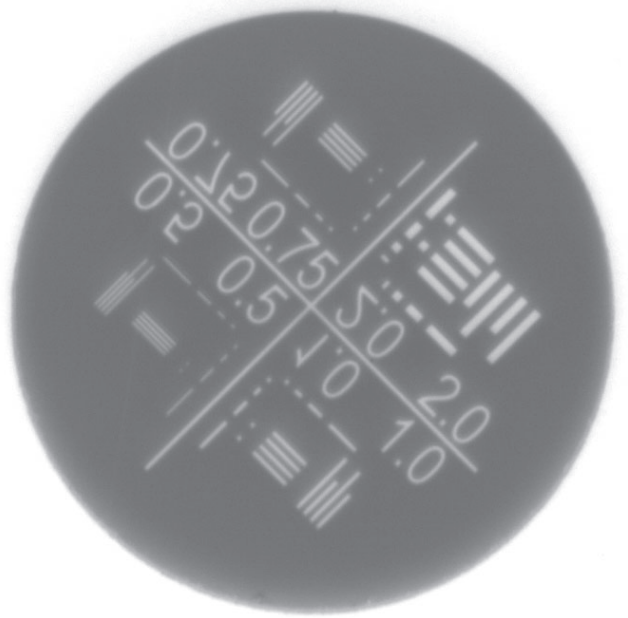
E-mail: [info-team@sumix.com](mailto:info-team@sumix.com)

Tel.: +1 (877) 233-3385

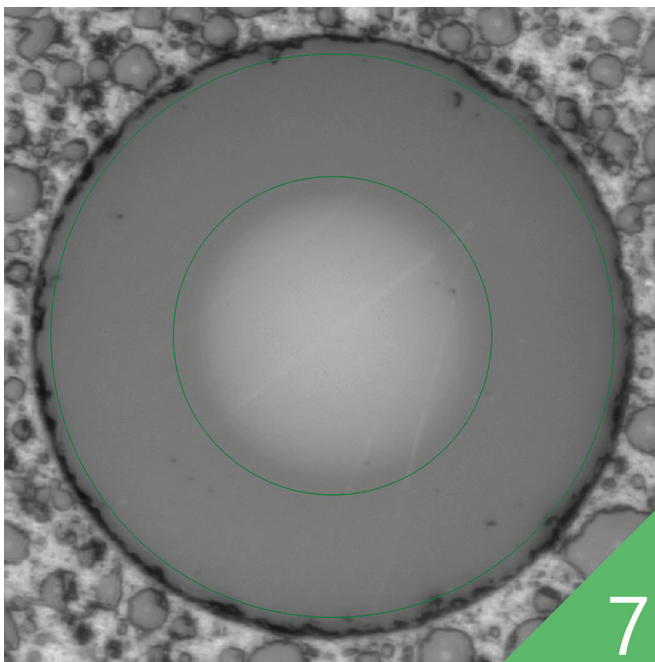
# Specification

<b>Field of view:</b>	0.76 × 0.43 mm
<b>Inspection field:</b>	6.4 mm × 6.4 mm* (MTP/MPO connector)
<b>Defect size detection:</b>	0.2 μm
<b>Effective optical resolution:</b>	0.52 μm (according to MTF calculations)
<b>Magnification:</b>	1384×, calculated for 24" screen (1920 × 1080)
<b>Camera resolution:</b>	0.2 μm/px
<b>Illumination wavelength:</b>	470 nm
<b>Focus:</b>	automatic / manual
<b>Focusing range:</b>	± 3 mm
<b>Camera type:</b>	monochrome, 8 MP
<b>Data transfer:</b>	USB 3.0 cable, detachable
<b>Power source:</b>	12 V AC adapter
<b>Dimensions (H×W×L):</b>	129 × 173 × 259 mm (5.08 × 6.81 × 10.2 inches)
<b>Weight:</b>	5.2 kg (11.46 lbs)
<b>Connectors inspected:</b>	SC, FC, ST, LC, MU, Arinc, ODC, MTP®/MPO connectors and cassettes, bare fiber

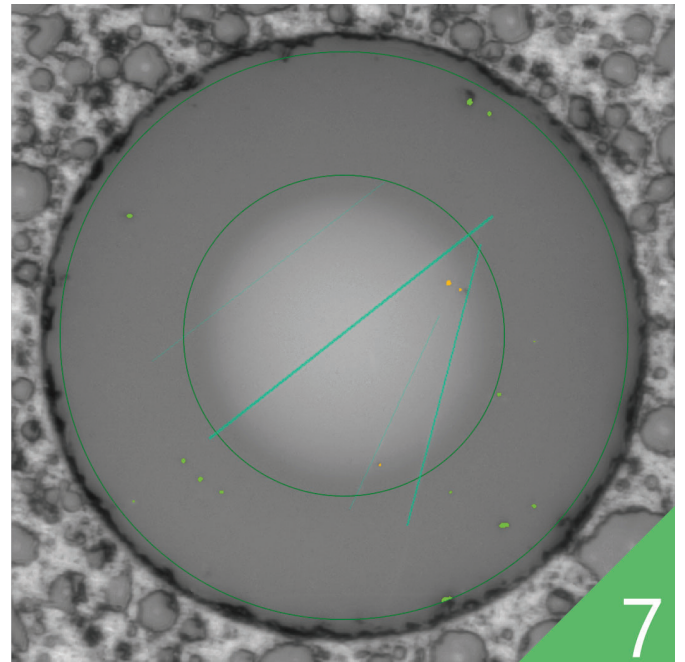
\* Due to fully automatic x/y scanning



*Endface of a reference test-object demonstrating the resolution of Polaris X. The width of etched lines and the distance between them is defined by the value in microns in the corresponding quadrant.*



*Live view of a sample MPO fiber with a low-intensity scratch and small defects.*



*Sample MPO fiber with mapped anomalies identified by the software.*