

# Industrial Interferometers

## for Fiber Optic Connectors Surface Inspection



### SMX-QS04

SMX-QS04 is a high-end blue light interferometer with high resolution for inspection of single fiber connectors (ST, FC, SC, LC, MU, APC), SMA and other connectors.

Interferometer's stage and connector holder are firmly attached to the objective, which provides extreme vibration resistance. No vibration damping equipment is required.

SMX-QS04 features autofocus with long range, which simplifies and speeds up the measurement procedure.

### SMX-QD10

SMX-QD10 is a blue-green light interferometer for inspection of single fiber connectors of ST, FC, SC, LC, MU, APC types, small format multi fiber connectors of MT-RJ type and connectors of SMA type.

SMX-QD10 interferometer provides white light mode for scanning connector surface with discontinuities up to 25 microns. The interferometer provides a practical resolution of 1 micron for inspection of small features like fiber buffer and for detection of connector defects.

The interferometer combines solid performance, compact size and reduced vibration sensitivity providing enough stability for normal work in a busy workshop.

### SMX-QM50

SMX-QM50 is a high-end white light interferometer with high resolution and large field of view to inspect MT, MT/APC, MT-RJ connectors in a single scan.

Interferometer's stage and connector holder are firmly attached to the objective, which provides extreme vibration resistance. No vibration damping equipment is required.

SMX-QM50 features autofocus with long range, which simplifies and speeds up the measurement procedure.

### Features and Benefits

- Precision and rugged design using custom engineered optics, cameras, electronics, piezo phase shift and stepper motor systems providing repeatability among different devices and different operators
- Precision holders eliminating the need for tedious positioning and focusing of connectors
- Precision and high resolution optics in addition to 6.6 megapixel digital camera allowing inspection of fiber buffer zone and detection of defects
- Large field of view up to 5 mm providing capability of testing MT connectors in one scan, eliminating errors due to stitching of several scans
- Compact design, USB 2.0 interface, and built-in battery providing portability of the device

**Accuracy and Precision**

**Portability**

**Durability**

## Specification

	SMX-QS04	SMX-QM50	SMX-QD10
Field of view	d=0.4 mm	5.2 x 3.8 mm	d=1.4 mm
Lateral resolution	0.55 um	1.75 um	1 um
Optical magnification	12.1x	2x	5.5x
Best suitable for connectors	ST, FC, SC, MU, LC, APC, MIL-ST, M29504/14	MT/PC, MT/APC, MT-RJ, SMA	ST, FC, SC, MU, LC, APC, MT-RJ, SMA, MIL-ST, M29504/14
Measurement mode	monochrome	white light	monochrome and white light
Maximal image size	3000 x 2200	3000 x 2200	2200 x 2200
Power supply	external; built-in battery	external; built-in battery	external
Weight	3.7 kg (8.16 lbs)	3.7 kg (8.16 lbs)	4.9 kg (10.8 lbs)
Dimensions (HxWxL)	110 x 145 x 240 mm (4.33 x 5.7 x 9.45 inches)	110 x 145 x 240 mm (4.33 x 5.7 x 9.45 inches)	105 x 145 x 215 mm (4.13 x 5.7 x 8.46 inches)

## Interferometric Surface Inspection (ISI) Software

Sumix interferometers are supplied with the ISI (Interferometric Surface Inspection) analytical software.

### Functionality

- Long range autofocus
- High quality live view images
- 2D and 3D surface profiles
- Rich set of controls (zoom, rotation, etc) for surface profiles understanding
- Fast and automated measurements
- Widest range of measured parameters
- Compliance with industry standards
- DB results storage
- Raw data storage
- Measurement report and history report in Excel

### Flexibility

- User-defined Pass/Fail criteria
- Configurable list of measured parameters
- Inspection of non-standard (military or special) connectors
- Compatibility with all Sumix interferometers

