

# FISCHERSCOPE® X-RAY XULM®-PCB / XDLM®-PCB

**PCB experts:** Specialized measuring solutions for printed circuit boards

**Accurate and precise:** Positioning of the measuring point on small structures thanks to automatic image recognition

**Quick-measure design:** The sample is placed and ready for measurement in just a few simple steps



**Tailor-made:** Different models offer the optimal solution for your application

**Balanced:** Optimal cost-benefit ratio

**Commissioning:** Extremely fast and simple

# FISCHERSCOPE® X-RAY XDAL®-PCB / XDV®-μ PCB

## Meeting all challenges:

Reliable and fast results for ambitious measuring tasks

**PCB experts:** Specialized measuring solutions for printed circuit boards, fulfill IPC standards

## Most advanced polycapillary optics on the market:

Our in-house manufactured polycapillaries deliver outstanding measurement results in short measuring times (XDV®-μ PCB)



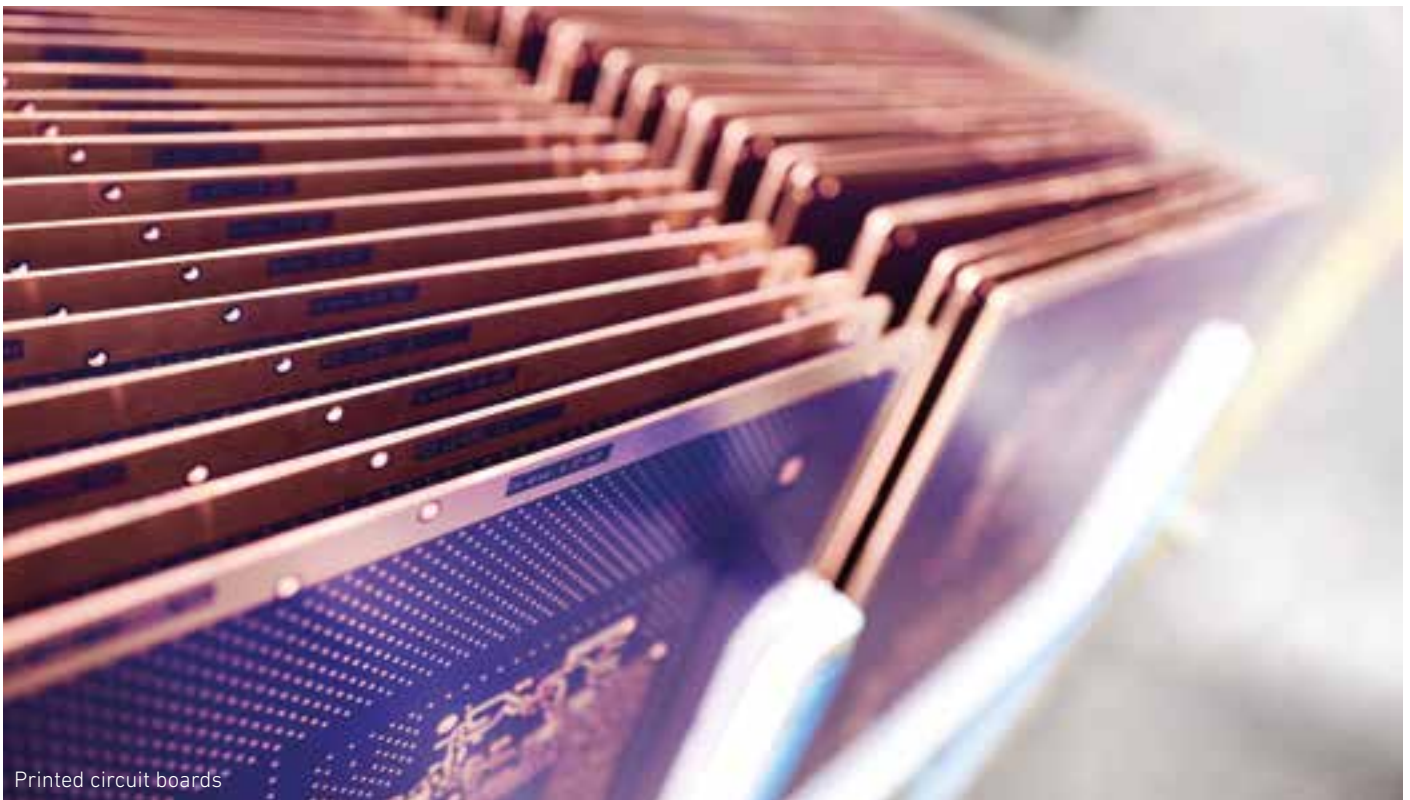
## Fully automatable:

Let your instrument work for you

## Accurate and precise:

Positioning of the measuring point on small structures thanks to automatic image recognition

**Commissioning:** Extremely fast and simple



Printed circuit boards

## The entry-level series for printed circuit boards

### FISCHERSCOPE® X-RAY XULM®-PCB

The PCB series was specially developed for the measurement and analysis of layer thicknesses on printed circuit boards. The FISCHERSCOPE® X-RAY XULM®-PCB is well suited for simple measuring tasks with a small measuring spot. The XRF spectrometer is equipped with a proportional counter tube detector which allows short measuring times due to its large detector area.

#### Features

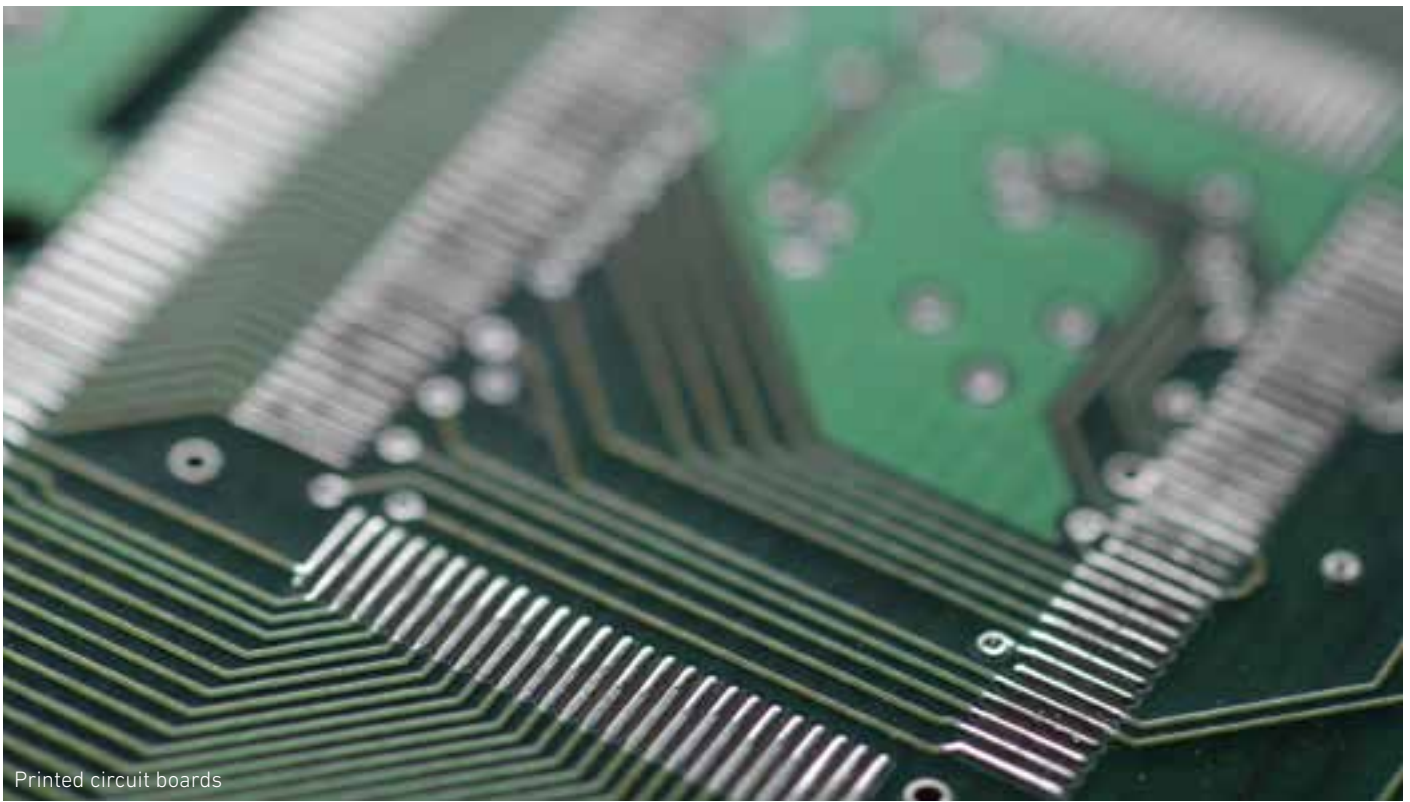
- Robust entry-level instrument for simple measurements of components and structures on printed circuit boards
- Measuring direction with measuring bottom up
- Microfocus tube with tungsten anode
- Fixed aperture
- Fixed filter
- Proportional counter tube detector for short measuring times and small measuring spot
- Fixed, wide measuring table for printed circuit boards up to 610 × 610 mm, optionally with measuring table extension
- Fully protected instrument with type approval according to current radiation protection legislation

### FISCHERSCOPE® X-RAY XDLM®-PCB

The FISCHERSCOPE® X-RAY XDLM® PCB with proportional counter tube is ideal for fast measurement of single measurement tasks with small measuring spot. The main difference between the model series: XDLM has additional functionalities for optimal measuring conditions and are suitable for automated measurements in production control (XDLM® PCB 210 and 220).

#### Features

- Universal entry-level instrument for simple measurements of components and small structures on printed circuit boards
- Measuring direction with measuring top down
- Microfocus tube with tungsten anode
- Fixed or 4-fold changeable apertures
- Fixed or 3-fold changeable filter
- Proportional counter tube detector for short measuring times and small measuring spot
- Various measuring table options: manual pull-out, optional with measuring table extension or programmable, for PCBs up to 610 × 610 mm



Printed circuit boards

## The professional series for printed circuit boards

### FISCHERSCOPE® X-RAY XDAL®-PCB

Due to the combination of a powerful silicon drift detector, multi-collimator and changeable filters, FISCHERSCOPE® X-RAY XDAL®-PCB instruments are predestined for the measurement of small structures on printed circuit boards. The instruments allow optimal measurement conditions for various applications, e.g. ENIG and ENEPIG.

#### Features

- Universal instrument for measurements on small structures, multilayers, functional layers and thin coatings  $< 0.1 \mu\text{m}$
- Measuring direction with measuring top down
- Microfocus tube with tungsten anode
- 4-fold changeable apertures
- 3-fold changeable filter
- Silicon drift detector 20 or 50 mm<sup>2</sup> for highest precision on thin layers
- Various measuring table options: manual pull-out, optional with measuring table extension or automated, for PCBs up to 610 × 610 mm

### FISCHERSCOPE® X-RAY XDV- $\mu$ ® PCB

The FISCHERSCOPE® X-RAY XDV- $\mu$  PCB instruments are used for measurements on smallest structures. Thanks to silicon drift detectors and polycapillary optics, the high-end instrument measures with extremely small measuring spot at very high intensity. The instruments meet the IPC requirements for ENIG and ENEPIG.

#### Features

- Universal instrument for automated measurements on smallest structures, multilayers, functional coatings and very thin coatings  $< 0.1 \mu\text{m}$
- Microfocus tube with tungsten anode; molybdenum anode optional
- Measuring direction with measuring top down
- 4-fold changeable filters
- Polycapillary optics permit particularly small measuring spots  $\varnothing$  approx. 20 or 10  $\mu\text{m}$
- Silicon drift detector 20 or 50 mm<sup>2</sup> for highest precision on thin layers
- Programmable measuring table for printed circuit boards up to 613 × 610 mm, optionally with vacuum function