

# 2D/3D Microscopy

## Advanced Digital Microscope

### Introduction

Optical microscopy is an essential tool for scientific research, enabling detailed examination of microscopic detail and features. The microscope is capable of viewing and capturing high resolution images and measurement data in 2D and 3D.

### Applications

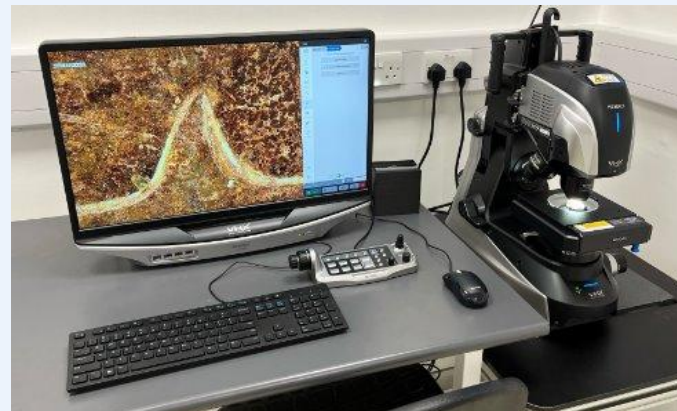
- Surface Analysis: Optical microscopy allows precise evaluation of surface properties.
- Material Science: Investigate microstructures, defects, and material characteristics.
- Life Sciences: Studying biological specimens, ranging from cellular structures to tissues.
- Quality Control: visual inspections, failure analysis.

### How Does it Work?

Optical microscopy operates by utilising visible light and magnification techniques, either through lenses or advanced imaging methods. It illuminates the sample with visible light, capturing highly detailed images for analysis. A range of observation modes: Bright-field, Dark-field, polarisation, Differential Interference Contrast (DIC) cover a wide range of use-cases and applications.

### Technical Specifications

- Integrated PC and control software
- Display size: 27" 4K 132kHz LCD
- Magnification range: 20-6000x
- Image with up to 90 degree tilt angle
- Max image size 50k (W) 50k (H) pixels
- XYZ movement resolution: 0.1µm
- Automatic calibration



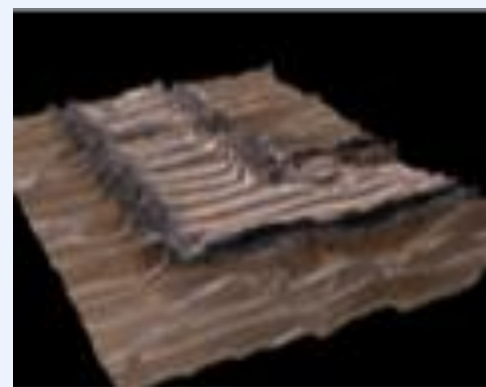
*Keyence Digital Microscope*



*Measuring Microscope*



*Customisable Imaging Station*



*Surface Scanning and Profiling*