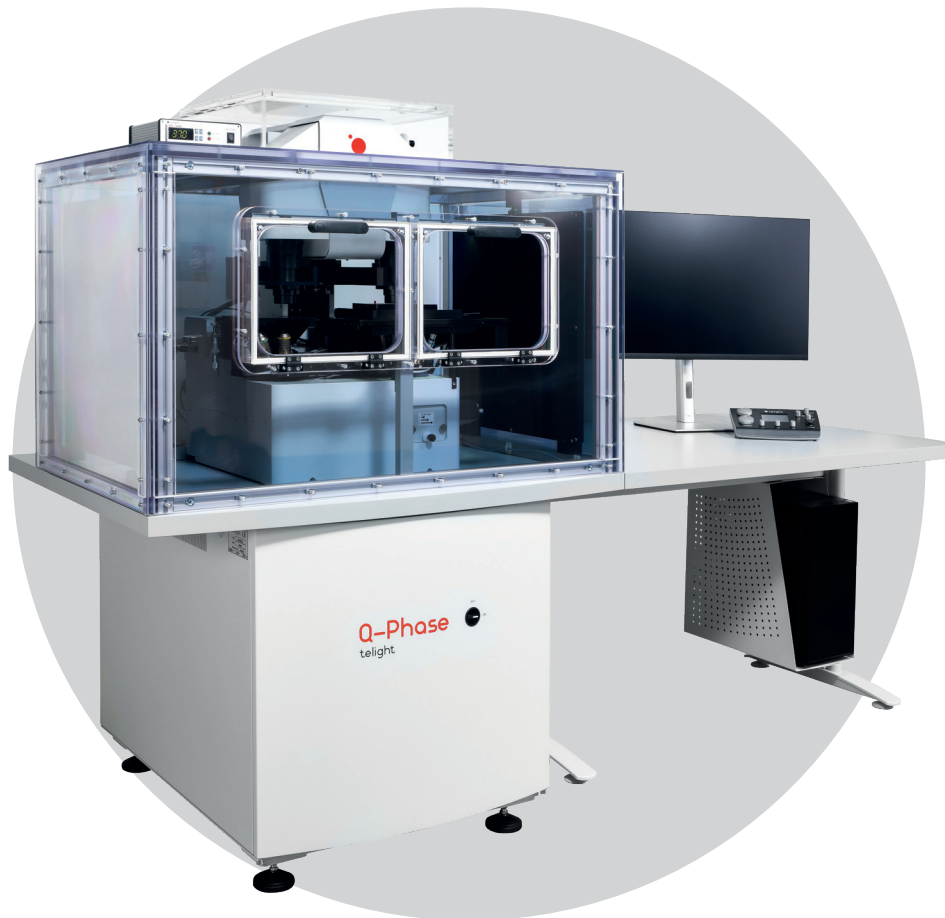


Q-Phase

QPI solution for reliable automated segmentation
and cell culture analysis



Q-Phase is a holographic microscope based on a patented technology for Quantitative Phase Imaging (QPI). Q-Phase creates time-lapse phase images with realistic values for precise measurement of biophysical cell parameters including cell dry mass distribution.

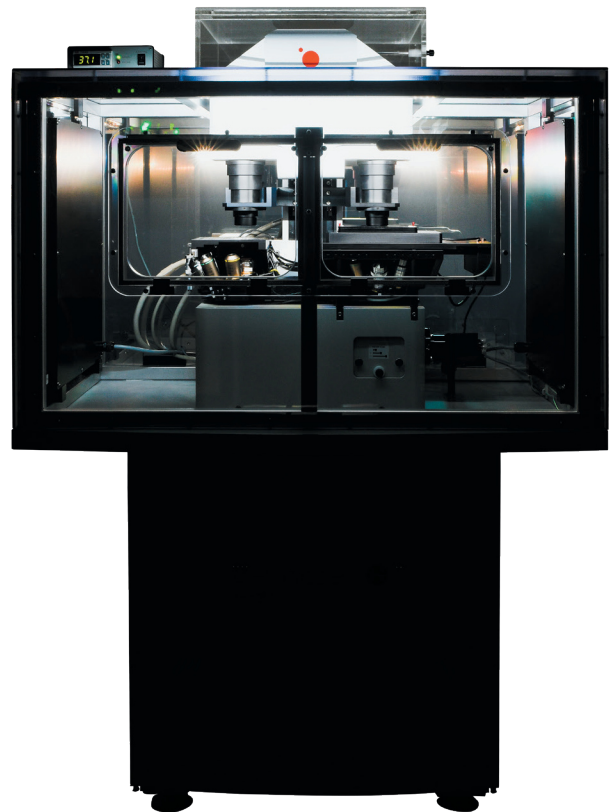
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Specifications

Microscope

- ✓ **Microscope configuration**
transmission inverted microscope
- ✓ **Microscopy techniques**
holography (quantitative phase imaging),
epifluorescence, simulated DIC, brightfield,
high-pass filtered phase
- ✓ **Objectives**
magnification 4× to 60×
- ✓ **Objective turret**
6-position, motorized exchange
- ✓ **Light source**
LED
- ✓ **Operating wavelength**
660 nm
- ✓ **Sample stage**
motorized, 130 mm × 90 mm travel range
- ✓ **Focusing**
motorized objective turret, 8 mm travel range
- ✓ **Piezo-focusing**
optional, travel range 500 µm
- ✓ **Lateral resolution**
4 µm with 4× NA 0.1 objective
0.58 µm with 60× NA 1.4 objective
- ✓ **Field of view**
objective and camera dependent,
up to 1.48 mm × 1.48 mm with 4× objective
- ✓ **Acquisition framerate**
16 fps (higher framerates on request)
- ✓ **Reconstructed phase image size**
1200 × 1200 px
- ✓ **Illumination power at sample plane**
down to 0.9 mW/cm²
- ✓ **Phase detection sensitivity**
down to 0.011 rad
- ✓ **Power**
230 V/50 Hz (120 V/60 Hz optional), 1200 VA
- ✓ **Dimensions (W × L × H)**
1100 mm × 950 mm × 1620 mm microscope
with incubator, 2515 mm × 974 mm × 1620 mm
total with operator table
- ✓ **Weight**
350 kg (including microscope table,
fluorescence module and microscope incubator)
- ✓ **Field and aperture diaphragms**
- ✓ **Side port available** for fluorescence
- ✓ **Microscope table** with anti-vibration suspension
- ✓ **Control panel** with multifunctional touchscreen,
sample stage joystick and rotary knobs
- ✓ **Microscope incubator** with computer temperature
setting and temperature data logging (optional)
- ✓ **Incubation chamber** for precise and long-term control
of temperature, humidity and CO₂ concentrations
(optional) module or other additional techniques



Fluorescence module (optional)

- ✓ **Light engines**
Lumencor with 3 channels (optionally up to 5 channels)
- ✓ **Detectors**
Andor Zyla 4.2 PLUS sCMOS (2048 px × 2048 px)
- ✓ **Filters**
3 multichannel filter cubes, motorized channel switching