

## Imaging Modules and Software

### We automate Microscopy

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The banner features a background image of a microscope. On the left, the EPIC logo (three colored circles) and text 'EPIC European Photonics Industry Consortium' are displayed. Below this, the 'Media partner Electro Optics' logo is shown. On the right, a list of 'Event sponsors' includes caeleste, CHROMA, HAMAMATSU, OXXIUS, phix, and PROSPECTIVE. A red bar at the bottom contains the event details.

**EPIC**  
European Photonics  
Industry Consortium

Media partner  
**Electro  
Optics**

**Monday, 28 June 2021, 15:00 CEST**  
EPIC Online Technology Meeting on Novel Photonic Solutions  
for Microscopy

Event sponsors

caeleste  
Beyond State-of-the-Art  
Custom CMOS Image Sensors

CHROMA

HAMAMATSU  
PHOTON IS OUR BUSINESS

OXXIUS  
Simply Light

phix  
#SALZERS OPTICS

PROSPECTIVE

Opto produces intelligent  
digital Microscopes and Vision Sensors as  
Imaging Modules  
for Medtech Applications  
in Standard and custom versions

# Multifluorescence Microscopy for PCR testing in POCT devices

# For Machine Builders and System Integrators



## We deliver Optical Engines

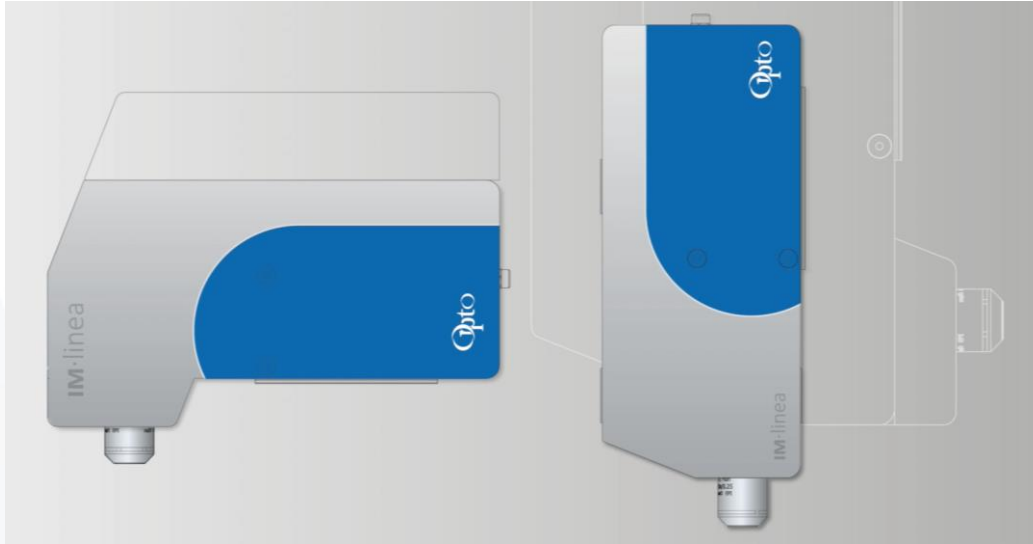
- High Throughput qPCR Screening solutions
- Electrophoresis and Microfluidic POCT devices
- Tissue Engineering Automation
- Image DATA Generation and Management



## We build Imaging Modules

- FOV  $<50 \text{ mm}^2$  and sub Micron Resolution
- Automated Micro Analysis Functionality
- Motorized Positioning and Adjustment
- Challenging Lighting requirements

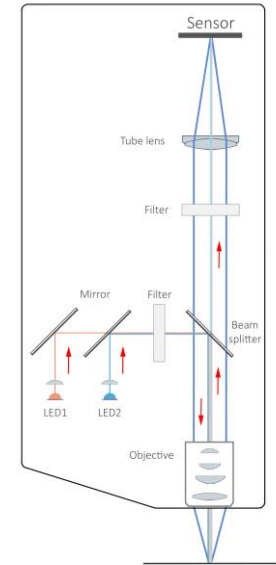
# Next Generation Imaging Modules

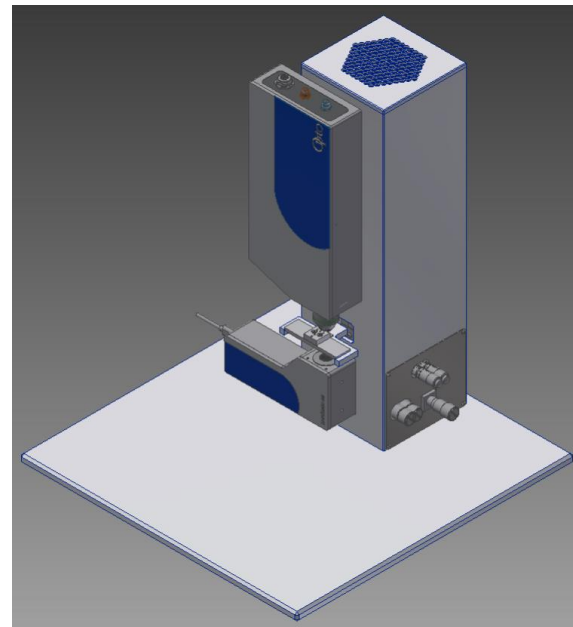


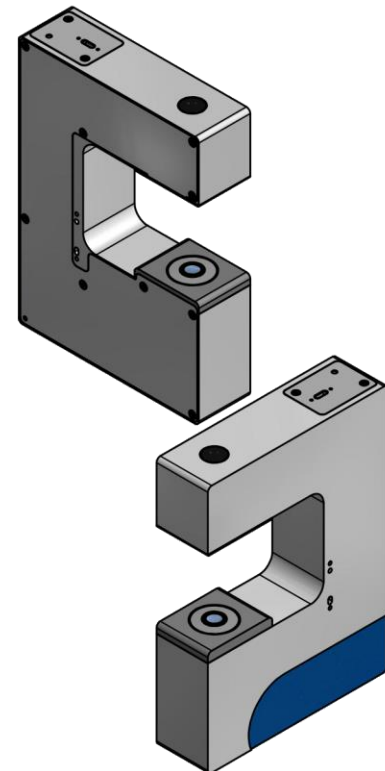
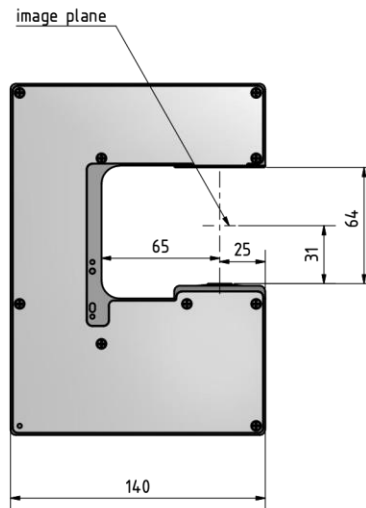
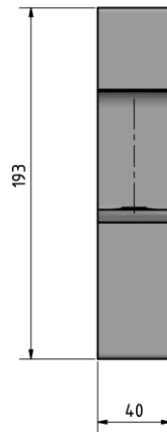
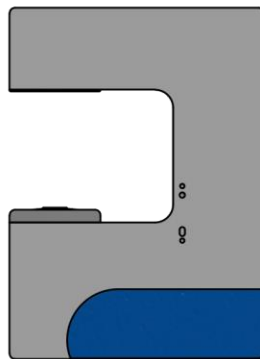
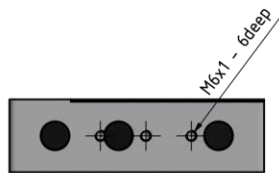
## Dual Fluorescence


- Multi fluorescence functionality
- Pathology, qPCR Screening, Electrophoresis,...
- Plug&Play unit for Flow Cytometry (Microfluidic) POCT applications

2x Fluorescence



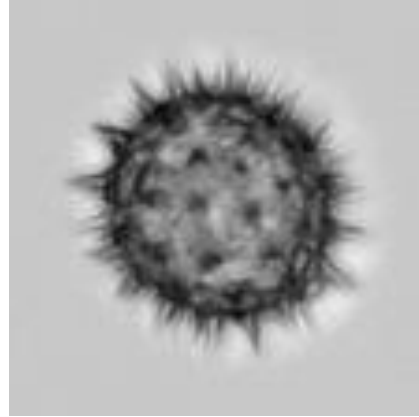
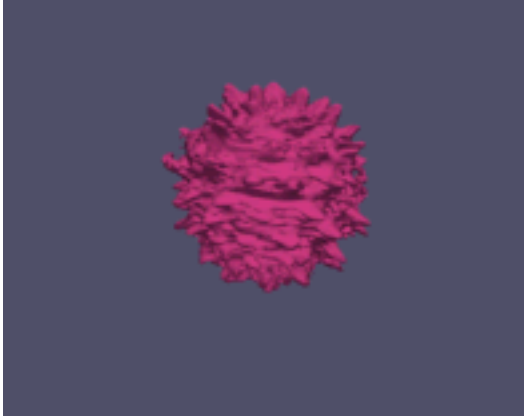




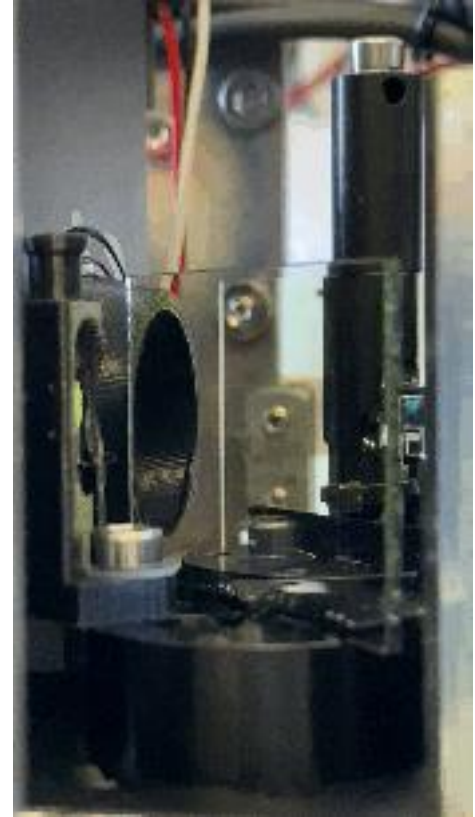
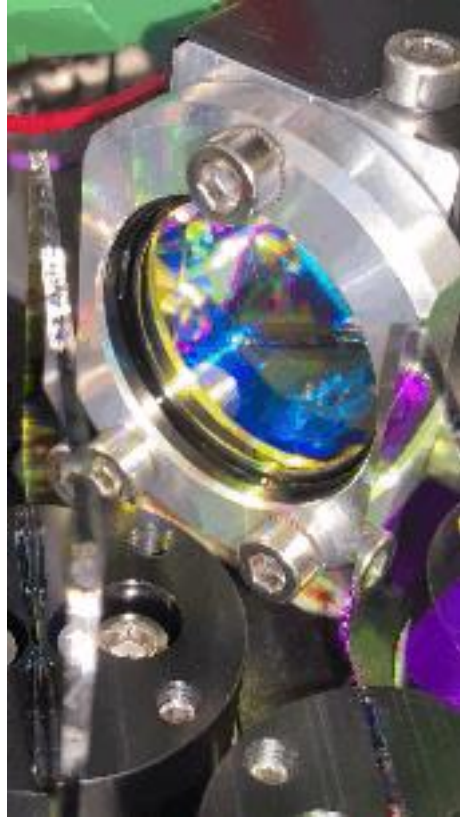
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Beitrag	16.03.2021	KF		
Geprüft	26.05.2021	MG		
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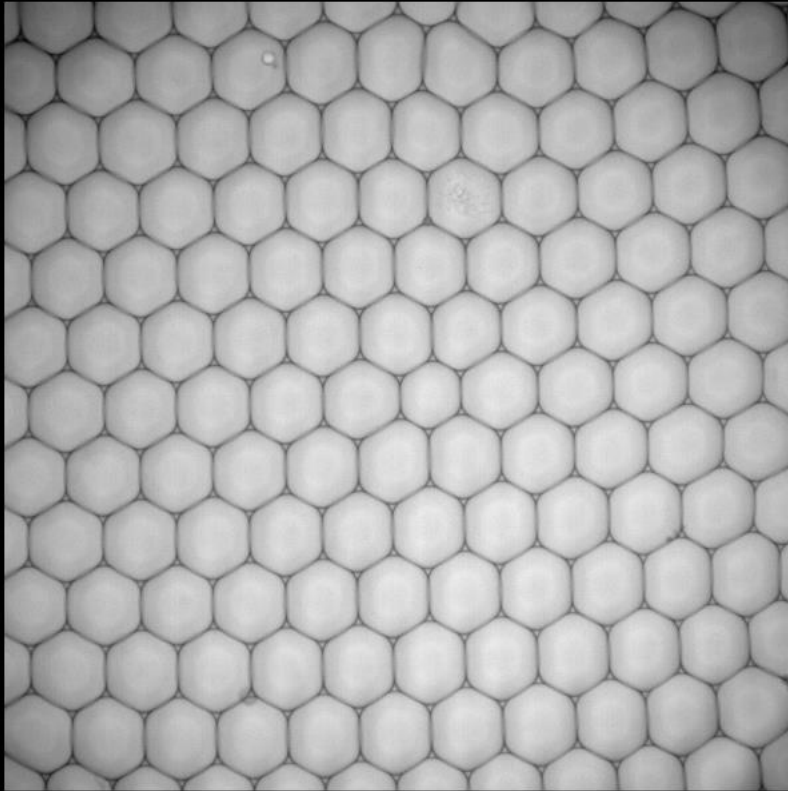




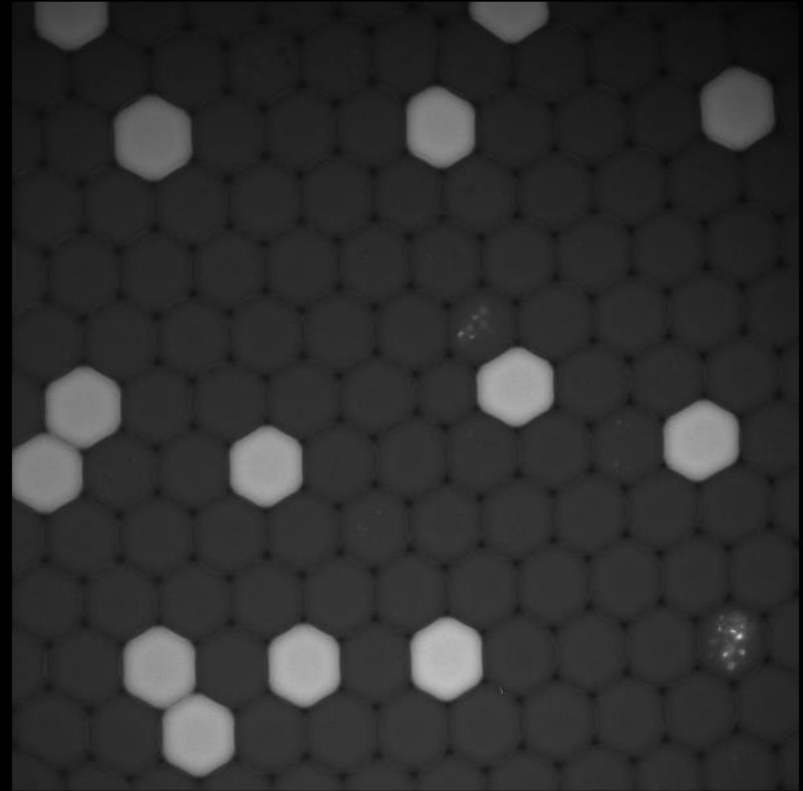


# Multi Fluorescence Imaging

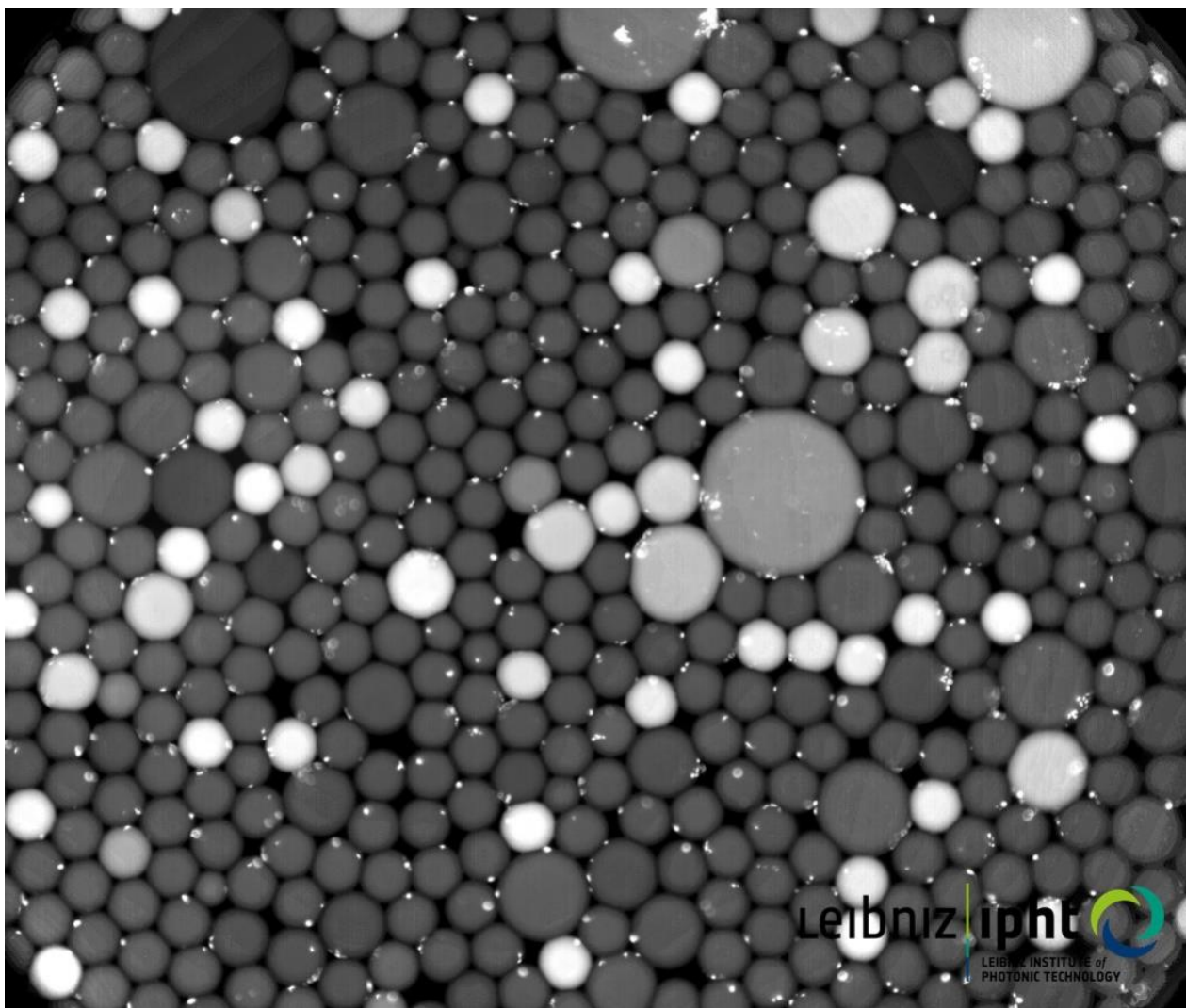




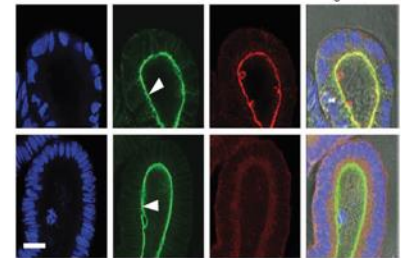
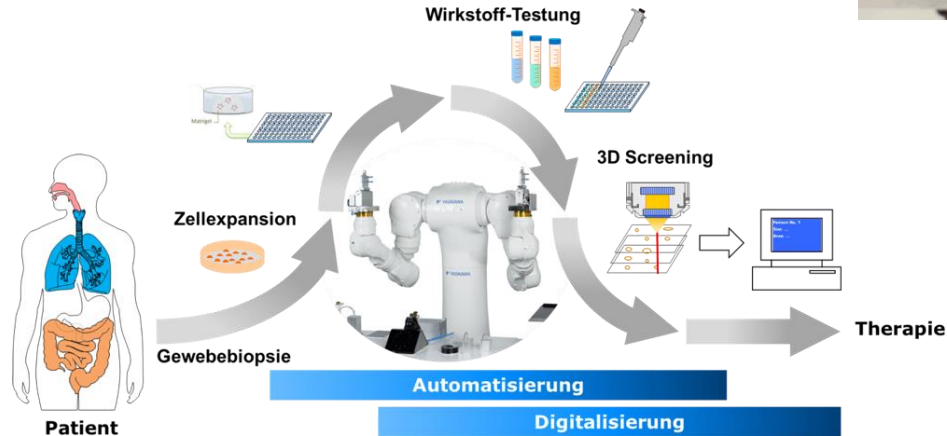
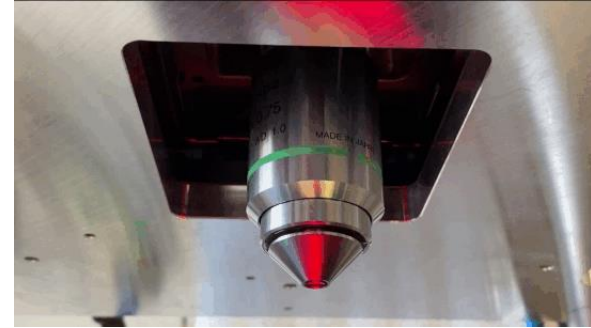
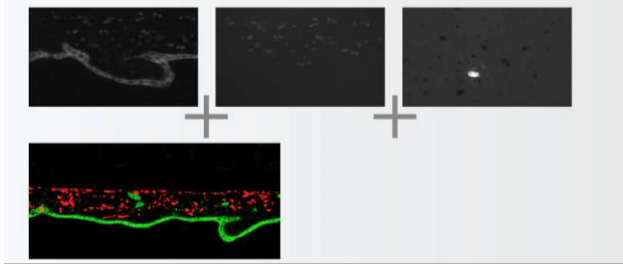
Measured Bright field image, droplet circumferential contours can be easily detected



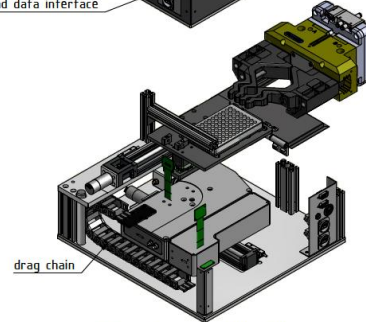
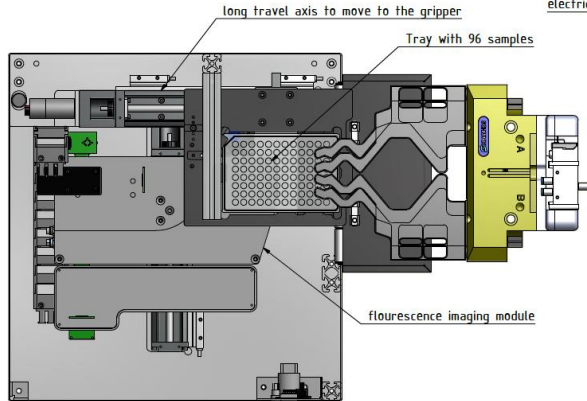
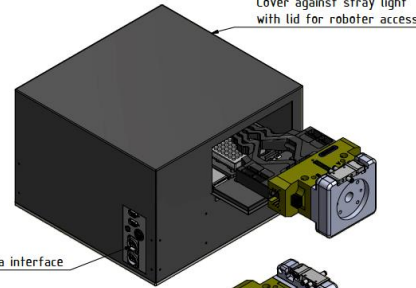
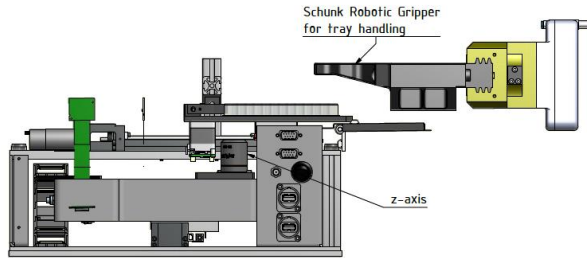
Measured Fluorescence Image: Positive droplets can be discriminated



# Automation of Tissue Engineering needs



# Automation of Bio Screening POCT solutions

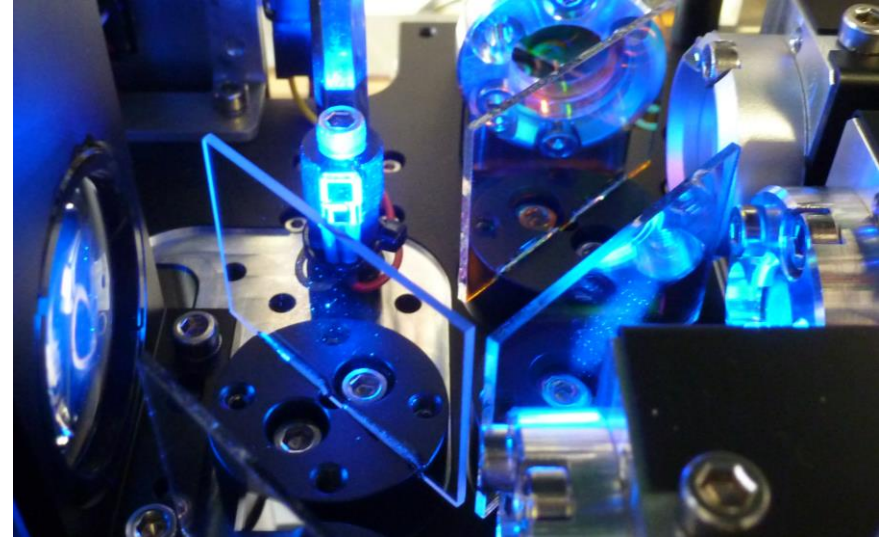


	Datum	Name	ForTither 2xFluoreszenzmodul mit Achsen V3	
Reviz	16.09.2020	HB		
Geprüft				
Opto			045-100204	1 / 1
A3/18at-07				A3
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# Lab Automation

Microscopes as  
Industry 4.0 Sensors  
for Digital AI Labs



Automated digital Multi-Fluorescence Microscopes  
(12 Fluorescences in some seconds)  
for Tissue Engineering, qPCR, Electrophoreses and  
Pathology POCT Integration

# The EPIC Questions

What can we do for EPIC ?

Be the glue between Photonics and  
Machine Vision

We are the partner to automate  
Microscopy

How can EPIC help us?

Help Opto to be recognized as a  
Manufacturer of AI-ready plug and  
play digital Microscopes

DO what you DO





谢谢  
ありがとう  
감사합니다  
Vielen Dank  
Merci  
Thank you  
Gracias  
תודה רבה

