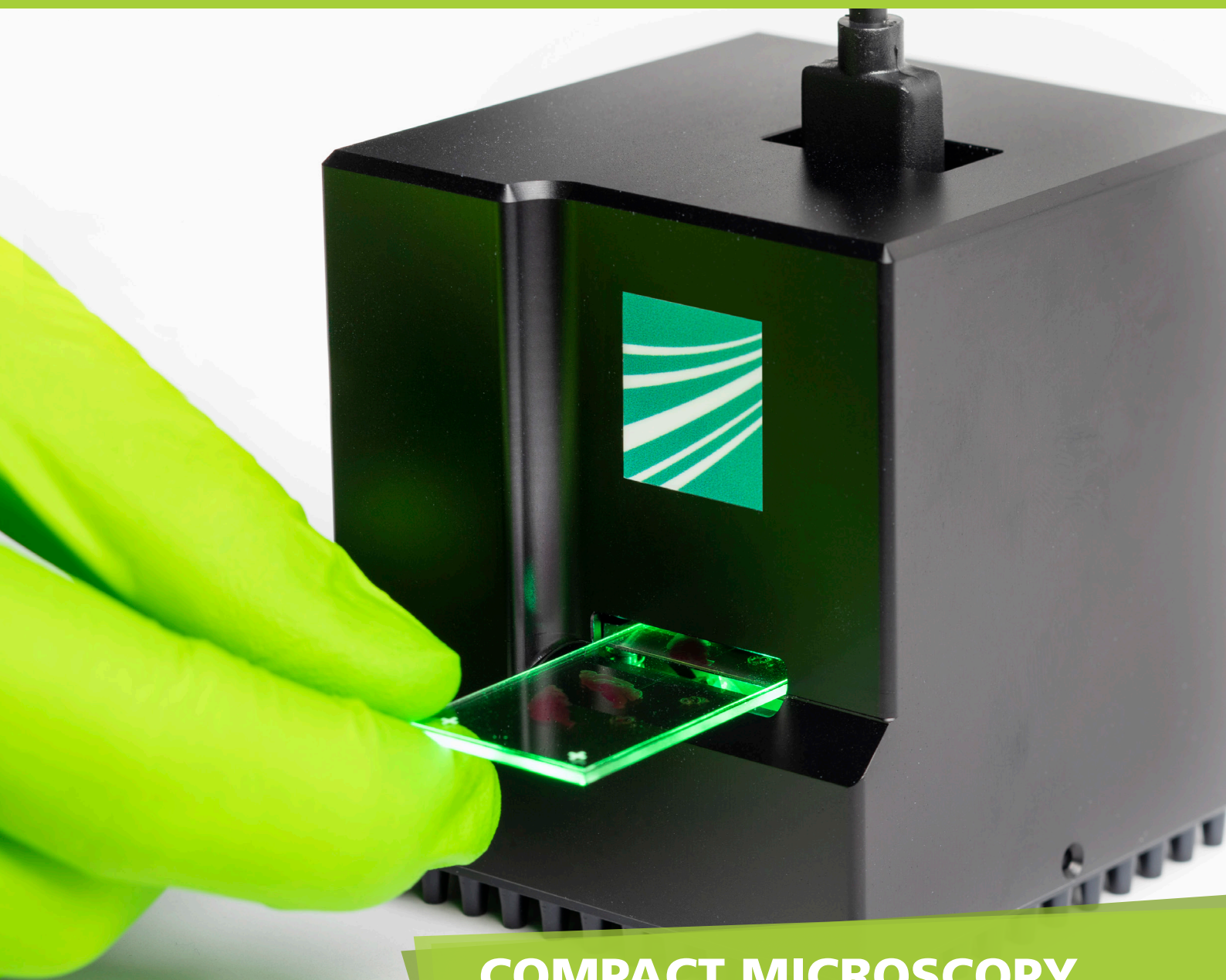


ULTRA-COMPACT MICROSCOPY SOLUTIONS



**COMPACT MICROSCOPY
ENABLED BY MICROOPTICS**



- 1 Array of mini-microscope-objectives in comparison to a classical single aperture 10x objective.
- 2 System image without housing.
- 3 Raw image (left) & stitched image (right) of immuno-fluorescent HeLa cells
BF – bright field
FL – fluorescence

ULTRA-COMPACT MICROSCOPY SOLUTIONS FOR BIOMEDICINE

Aim

Compact and highly integrated bright field and fluorescence microscopy system for parallel imaging of objects or scanning large object areas.

Applications

- Decentralized bio-/ medical and imaging
- Space-saving microscopy integration e.g. cell culture monitoring
- On-site digital histology and pathology

Characteristics

- System Parameters

numerical aperture	0.3
working distance	~450 µm
resolution down to	1 µm
- Object field scales with image sensor size at constant optics height
- 1D / 2D scanning for large object areas
- Multi-color LED illumination system for bright field, dark field and fluorescence excitation (Cy3/Cy5)

Technology

- Array objective production on thin glass substrates via wafer-scale processing
- Different scan modes possible with high positioning precision
- Automatic stitching of partial images to obtain a seamless large area image
- Adaptable for specific applications and illumination modes
- No active adjustments required during system assembly

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