

Micro Vision Systems In High-resolution and Compact Form

Expertise for miniaturized chip-on-tip vision systems under one roof.

Your Benefits

- **One partner:** From design to prototyping to volume production, entire process under one roof.
- **Operational excellence:** Most recent technologies from forming to coating and alignment.
- **Customized to needs:** Choose from build-to-print, build-to-spec or build-to-idea solution.
- **ISO13485 certificated:** Committed to delivering optical components and systems with the highest reliability and quality and meeting medical standards.



Microcamera chip-on-tip with illumination

Technology Expertise

- Expertise in design and integration of fiber-optic flexible light bundles, optimized miniature LED illumination systems design and know how to efficiently couple sources to fiber to maximize brightness
- In-house production of complex submillimeter lenses and plano optics
- High-precision alignment of compound elements
- Serial micro assembling
- Broad coating portfolio



Explosion of microcamera chip-on-tip



Applications

- Endoscopy
- Medical Imaging
- Augmented Reality

Micro Vision Systems

Example Specifications

	Without illumination	With illumination
Optical parameters	Ø 1.6 mm	Ø 1.95 mm
FoV (Field of View) diagonal		120°
Working distance		5 – 50 mm
Resolution		400 x 400 px
F-number		6
Wavelength range		400 nm – 700 nm
Illumination	n/a	LED, fibers
Illumination power	n/a	≥ 100 mW
Electrical parameters		
Cable length		up to 2.5 m
Frame rate		30 fps
Mechanical parameters		
Length	≤ 4 mm	≤ 6 mm
Environmental conditions		
Operating temperature		+25 °C to +40 °C
Storage temperature		-20 °C to +80 °C
Waterproof rating		IP67