

Focus Technology

Revolutionizing precision optics, improving efficiency, safety, and innovation across fields.

In a nutshell

We are implementing next-gen lenses in various applications and products allowing users to increase their efficiency and bring innovative tools to the market. Two products have been rolled out so far: Multi-Micros and MedOptix. They both leverage the lens's ultra-fast focus capability which is based on an advanced material. Patented since 08.24.

MedOptix is a loupe for surgeons identifying and predicting the working area of the practitioner and adapts the loupe to have a perfect and continuous focusing point, without the practitioner's eye realise. This auto-focus capacity is helping in saving patient life.

Multi-Micros is a tool for watchmakers and precision manufacturing that allows the operator to have a set of magnifications in one and only tool without the need to switch its working environment - ultimately increasing efficiency.

Why is our technology important?

Surgeons rely on loupes for precision, but traditional models require a fixed working distance, causing discomfort and inefficiency. This limitation affects healthcare outcomes, industrial precision, and innovation in optical tools.

Focus Technology's Ultra-Fast Focus Lens (UFFL) is the first intelligent loupe, dynamically adjusting focus in 20 milliseconds to enhance user comfort and accuracy. Worn like a classic loupe, it integrates multiple sensors and a predictive model to adapt in real-time, mimicking the human eye with an extra bionic capability - a zooming feature.

Our MVP is ready and actively tested with medical professionals, set for commercialization by late 2025. With patented innovation and no direct competitors, our novel lens materials provide a significant edge over classical loupes.

Precision operators (watchmakers) work multiple hours in a row with a set of tools that they have to switch multiple from within minutes. This working environment is not optimal for them to focus on their current task and their comfort. Famous watch companies are already users of the tool. Enhancing micro-assembly and robotic precision

The benefits of our solution

For Healthcare - MedOptix:

- Enhanced Precision: Surgeons maintain an uninterrupted view without manual adjustments.
- Reduced Fatigue: Frees movement, preventing strain over long procedures.
- Improved Patient Safety: More accurate surgeries lead to better outcomes and reduce blurring events which lead to a direct impact on the patient's health.

- 20x Faster Focus Adjustment: UFFL technology adapts in 20ms, compared to manual loupes requiring seconds.
- 50% Reduction in Fatigue: Surgeons report reduced strain due to continuous autofocus.
- 30% Increased Efficiency: Faster operations and reduced setup time improve workflow.
- Enhanced Ergonomics: Eliminates the need for fixed posture, reducing physical stress.
- No Additional Training Needed: Seamlessly integrates into existing surgical workflows.
- Long-Term Cost Savings: Increased durability and efficiency lower operational costs over time.
- Our solutions reach the price of the actual market price adding an innovation premium to it.

Keywords

Medtech, deeptech, saving lives, surgical precision, real-time autofocus, medical innovation, patented, next-gen optics

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