

Fiber Optic Sensors

OUR STORY

Resonetics is a leader in advanced engineering and micro manufacturing for the life sciences industry.

Our Lightspeed Labs are located strategically to serve MedTech companies around the world. The company is ISO 13485:2016 certified with facilities in the United States, Canada, Costa Rica, Israel, and Switzerland.

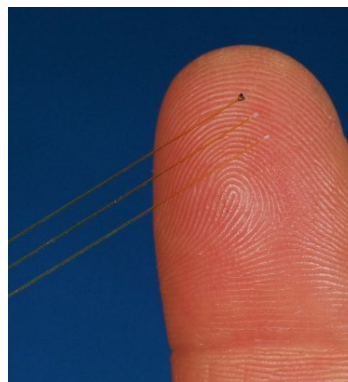
Resonetics Quebec is a leader in Fiber Optic Sensing technology. Formerly Fiso Technologies, Resonetics Quebec has over 25 years of experience in fiber optic sensors for medical device.

Over 2 million sensors have been sold, and our fiber optic sensors are implemented in 15+ FDA approved medical devices.



About Fiber Optic Sensors at Resonetics

We provide leading-edge fiber optic development capabilities and advanced manufacturing experience to support high-volume production of complex fiber optic products for the medical device market. Resonetics Fiber Optic sensors provide reliable solutions for measuring parameters such as pressure, temperature, force, displacement, and position.



Applications

Cardiovascular: LV pressure, arterial BP
Circulatory support: LVAD, RVAD, ECMO
Pharmacology: Drug and Fluid injection
Neurosciences: Intracranial pressure
Spine/Bones: Intradiscal/Intramedullary pressure
Urology: Bladder/Ureter pressure
Ophthalmology: Intraocular pressure
Respiratory / Pulmonology

Development Kit

The development kit (SKR-DEV) is designed for OEM testing, prototype integration, and firmware development.

Key Features

- Low heat emitted from LED light source
- Atmospheric self-compensation available
- LED technology: lifetime greater than 20000 hours
- Full bandwidth via analog output connectors
- Up to 3 channels

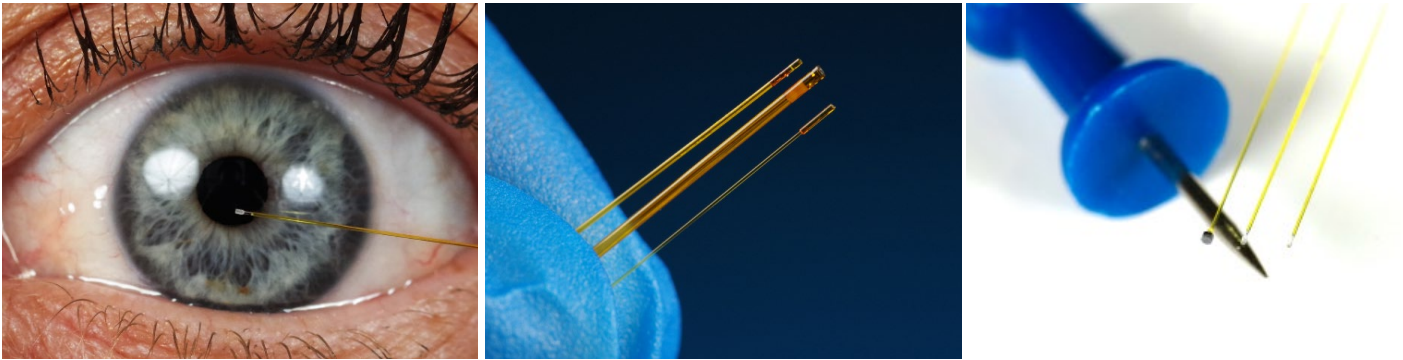


Fiber Optic Sensors

Capabilities & Features

Rely on our leading edge technology and product development capabilities combined with the quality of our technical expertise - a team of experienced engineers and technicians.

- Multiple robotic sensors' assembly lines for high volume production
- Cleanroom space for prototyping and pilot building for production
- Engineering team experienced in producing products used in FDA approved devices
- In-house experts in electronics, physics, chemistry, and optics
- Stringent regulatory compliance and industry best practices insure quality
- Partnership with world leading universities, institutes, and research centers



Advantages

Fiber Optic sensors offer significant advantages over traditional solid-state technology

- Extremely small size, flexible, and kink resistant; highly suitable for minimally invasive disposable devices'
- Fully immune to interference from RF, MW and MRI systems
- No electrical components and zero electromagnetic emissions
- High frequency response and instantaneous readout to avoid signal attenuation and improve detection of transients
- Extremely accurate in situ measurements of any physiological event

