

RESONETICS®

ELECTRO-MECHANICAL SENSORS

Advancing sensor technology in MedTech

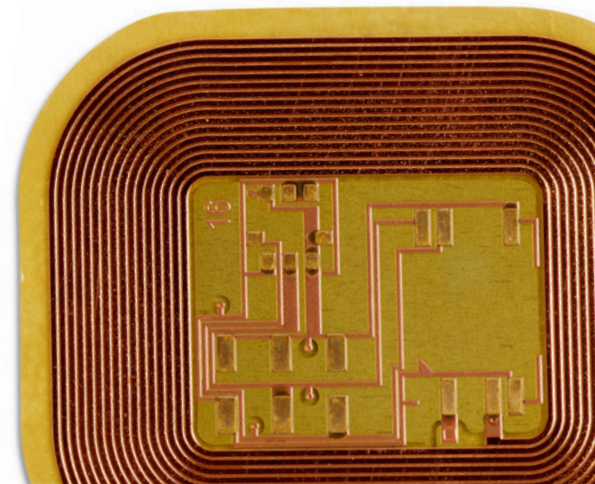
We design and manufacture custom electromechanical sensors that meet the critical demands of MedTech applications. Our sensors collect essential data, such as strain and temperature, and their compact design makes them ideal for integration into devices and implants used in minimally invasive surgeries.

Engineered with precision, these sensors exhibit low susceptibility to radio frequency fields and withstand autoclave reprocessing, ensuring reliable performance in challenging environments.

Our process begins with understanding the data your device needs to collect. From there, the engineers in our Lightspeed Lab® work closely with you to design and develop a custom sensor solution tailored to your application. In addition to sensor design, we support the mechanical and physical integration of these sensors into your device, along with assisting in the development of testing protocols to ensure consistent performance and reliability.

Applications

- Strain gauges
- Temperature sensors
- Near-field communication (NFC) wireless connectors
- Wireless power transmission
- Analyte sensing (CGM or other)



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Our story

Resonetics® is a leader in advanced engineering and micro manufacturing for the life sciences industry. Core capabilities include laser processing, centerless grinding, nitinol processing, thin-wall stainless steel & precious metal tubing, photochemical machining, microfluidics, sensor solutions, and medical power. With Lightspeed Application Development® Labs located strategically to serve MedTech companies around the world, Resonetics is built on a foundation of quality, speed and innovation. The company is ISO 13485:2016 certified with facilities in the United States, Canada, Costa Rica, Israel, and Switzerland.

20 Global Manufacturing Locations in 6 Countries:

United States
Canada
Costa Rica
Israel
Switzerland
Netherlands



Learn More
Resonetics.com

Advantages

1. Customizable Design: Tailored to meet specific design and performance requirements, ensuring seamless integration into devices.
2. Simplified Assembly: Multiple gauges can be integrated onto a single component with precise alignment, offering redundancy and simplifying assembly for the customer.
3. Compact Form Factor: Integrated lead wires within the sensor package allow for a minimal footprint, making them ideal for small, intricate devices.

Electromechanical sensor benefits

- Small footprint
- Exceptionally thin
- Low power consumption
- Great field strength/force
- Robustness to autoclave reprocessing
- Ability to fabricate 2-layer coils
- Low electromagnetic emissions
- Low susceptibility to RF fields
- Ease of assembly

