

Printed Force Sensors

The Revolution in Flexible Printed Force Sensing Technology

At Silicon Austria Labs, we develop printed force sensors that offer a range of compelling advantages for various applications and industries. These sensors can be produced in virtually any shape or size, over large areas and together with the interconnections, providing immense flexibility in design. This allows for seamless integration into a wide range of different products, from intricate medical wearables to large-scale industrial machinery.

Additive manufacturing is a cost-effective solution for fabricating electronic components. The processes require less raw materials and resources, reducing waste generation and energy costs. Printing processes also facilitate mass production, which can further mitigate environmental impact and reduce the costs.

The flexibility of these sensors and their compatibility with various substrates mean they can be readily integrated with other printed electronic elements, such as circuits and antennas, to create more complex sensor systems within a single, streamlined unit. Our cutting-edge sensors are designed to transform forces into actionable data with high precision and flexibility.

Benefits & Advantages

- **Custom force sensing solutions** whether you are looking for small runs for prototyping purposes or large-scale production. A wide range of specifications, size, shape and accuracy are possible.
- **More sustainable** additive manufacturing, with lowest waste generation possible. Wide range of materials and functional inks lead to low ecological footprint.
- **Easily embedded in your product** Designed for compatibility, our sensors integrate smoothly with a variety of systems, making them ideal for a wide range of applications and accelerating product development cycles.

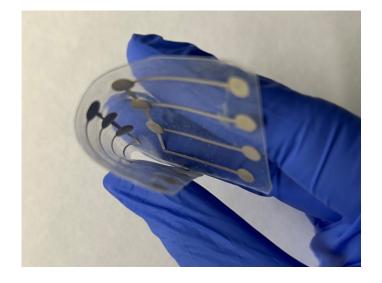


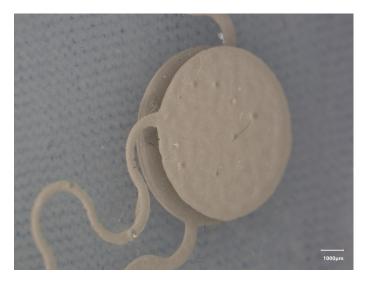
What We Offer

- Capacitive or resistive force sensors
- Single point or multiplex array sensors
- Tailoring sensitivity through design and material
- Typical repeatability error of 2 %
- Covering a wide force range

Market Applications

- Foot function & gait analysis
- Balance & sway assessments
- · Bedding & seating analysis
- Orthopedic research & prosthetics
- · Wearables, head, tactile & wrist sensing
- Aerospace testing
- Robotic systems





ABOUT SAL

Silicon Austria Labs (SAL) is a top European research center for electronic based systems (EBS). The application-oriented center offers cooperative research & services at three locations - Graz, Linz and Villach - in the pioneering research areas of Sensor Systems, Microsystems, Intelligent Wireless Systems, Power Electronics and Embedded Systems.

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