

### Microfluidic Flow Sensor Elements



The leading supplier of microsensors solutions, Sensirion AG (Switzerland), announces 3<sup>rd</sup>-generation MEMS-based liquid flow sensors for microfluidic systems ([www.sensirion.com](http://www.sensirion.com)). The new sensors expand the company's existing line of liquid flow products.

The low-cost OEM components are intended to be integrated into analytical instruments, medical devices and life-science applications. The high level of on-chip integration results in impressive reductions in cost, size and weight. The key feature of the 3<sup>rd</sup>-generation MEMS sensors is merging the sensor element with digital intelligence for linearization and temperature compensation on the same microchip. The devices enable media detection and accurate measurement of very low liquid flow rates (down to nanoliters per minute) with very short response times and outstanding repeatability. Liquid media are totally isolated by PEEK or fused silica (glass) channels, since the semiconductor sensor chip is mounted on the outside of flow path and senses through the wall of the channel (US Pat. 6813944). The largest model is designed for flow rates up to 3 ml/min. Response times in the millisecond range facilitate monitoring and controlling dynamic effects in microfluidic systems. The degree of miniaturization of the new devices is especially impressive – the latest sensor technology reduces their weight to a mere 6 grams (see photo).

Contact: [www.sensirion.com](http://www.sensirion.com), [info@sensirion.com](mailto:info@sensirion.com), Tel. +41 44 306 40 00, Fax +41 44 306 40 30

---

#### **About Sensirion:**

Sensirion is a high-tech sensor company based in Zurich, Switzerland. Sensirion is the leading international supplier of intelligent CMOS-based sensor elements using patented CMOSens<sup>®</sup> Technology for humidity/temperature sensors, mass flow measurement and control devices for gases and liquids, and differential pressure sensors. Sensirion provides international OEM customers with tailored sensor system solutions for applications such as mass flow controllers, building automation modules, medical technology, and consumer goods. Sensirion customers benefit from intelligent system integration (integrated intelligence including calibration and digital interface) and can achieve cost savings thanks to easy system interfacing (ease of use) and modularity.