

Digitalization of the Impossible

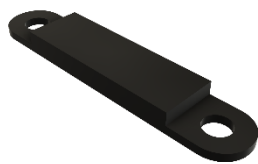
THE KEY TO THE IOT

The high-tech company **sensideon** rethinks wireless sensor technology and enables temperature measurement and object identification in places that were previously only accessible with great effort or not at all. True to the motto "where others reach their limits", the robust wireless sensors from **sensideon** allow new fields of application to be opened up in the smart factory or in e-mobility.

The Internet of Things (IoT) and the digital transformation offers huge potential for innovative sensor technologies. In the field of wireless sensor technology and radio frequency identification, **sensideon** presents a new RFID sensor based on Surface Acoustic Wave technology (short SAW RFID sensor) opening up new possibilities, especially for moving, difficult-to-access and hot components.

Smart Factory - with RFID-Sensors

Typical applications are found in continuous furnaces and process chambers, wherever the temperature and identification of moving components or slides is of interest. Classical radio sensors and RFID tags no longer meet the high requirements in terms of robustness. The



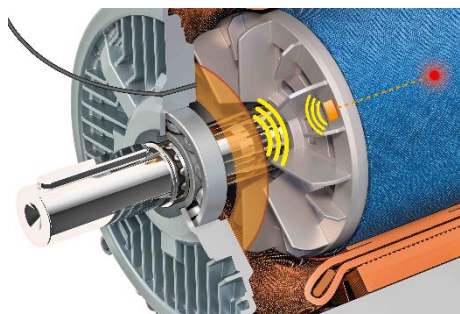
Flat-Tag

SAW RFID sensor from **sensideon** works without circuits or battery and is extremely robust. "The sensor

can measure up to 400°C and can be interrogated wirelessly," explains René Fachberger, founder and CEO of **sensideon**. The modular SAW RFID sensor is available in various designs and sizes, including a very compact and easy-to-integrate version (Fig. above). The addition RFID results from the option to also transmit a unique identification number via a radio link. This allows, for example, the reliable detection of heavily used containers and tools in the manufacturing industry.

E-Mobility Innovation

Another innovation is the revolutionary monitoring system for measuring the rotor temperature in electric motors (Fig. below). The transmitter and receiver units are significantly smaller than those of



Electric motor with SAW RFID-Sensor

conventional systems and can be fully integrated into the motor housing and flexibly adapted to the size of the rotor and the stator. "No changes to the shaft and housing are necessary - the same system can be used on the test bench and in prototypes," says René Fachberger.

With the SAW RFID-sensor, **sensideon** provides a key technology for the realization of innovative and smart applications in the IoT.

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of sensor technology

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- RFID-Tag
- passive
- wireless
- heat resistant
- always ready to use
- no battery
- no charging
- extreme robust
- EMC/ESD safe

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MEASURE IT
YOU CAN
IMPROVE IT

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