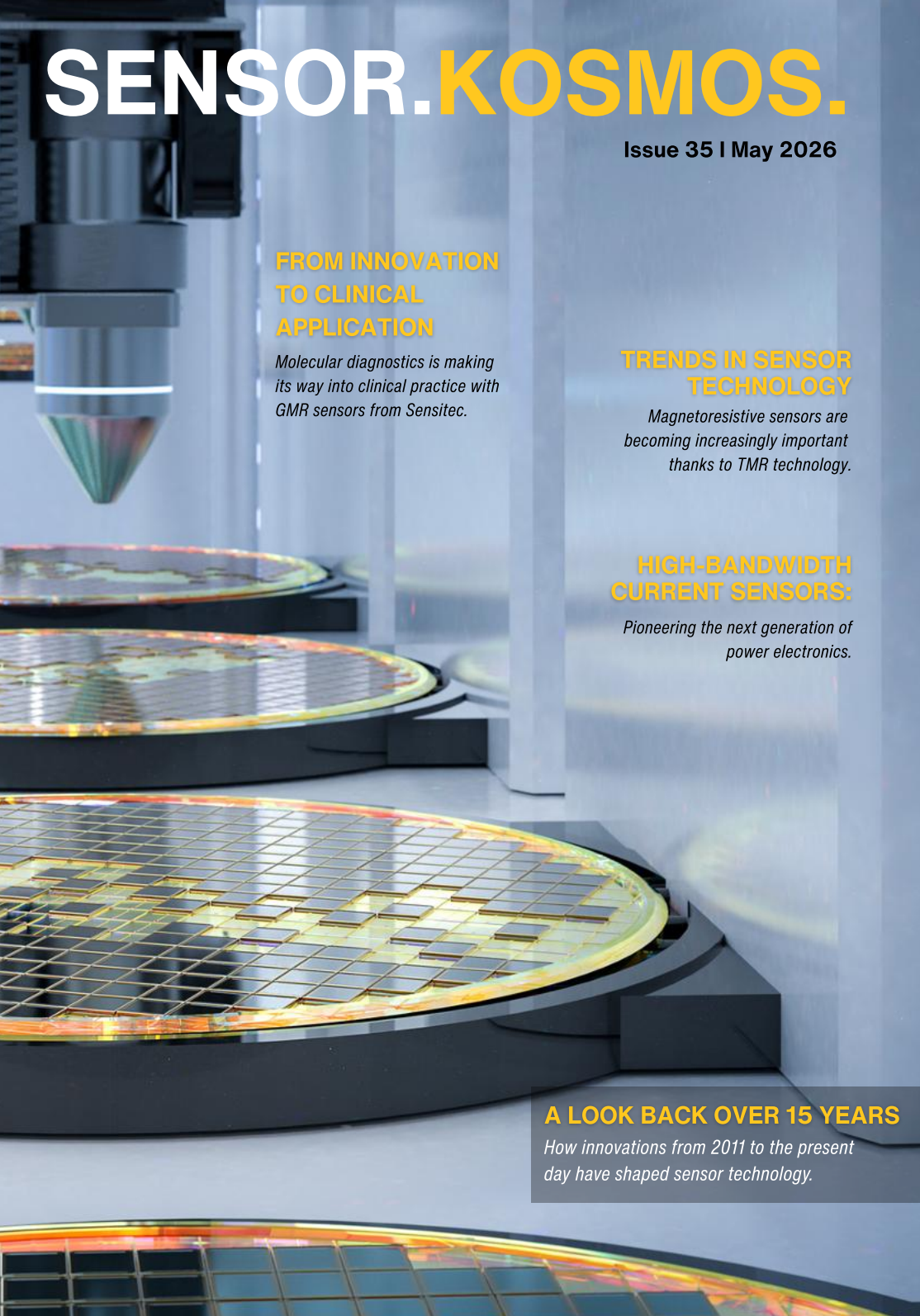
SENSOR.KOSMOS.

Issue 35 I May 2026



FROM INNOVATION TO CLINICAL APPLICATION

Molecular diagnostics is making its way into clinical practice with GMR sensors from Sensitec.

TRENDS IN SENSOR TECHNOLOGY

Magnetoresistive sensors are becoming increasingly important thanks to TMR technology.

HIGH-BANDWIDTH CURRENT SENSORS:

Pioneering the next generation of power electronics.

A LOOK BACK OVER 15 YEARS

How innovations from 2011 to the present day have shaped sensor technology.

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SENSITEC
MAGNETORESISTIVE SENSORS

IC-MU-READY
Magnetic linear scales

COMING SOON:
ROTARY MAGNETIC RINGS

- Available for all MU variants (MU, MU150, MU200, MUE)
- Available for all vernier scales
- Also available in custom sizes
- Standard-length linear strips for the iC-MU are now available on Digikey!

For detailed technical specifications, simply scan the QR code.

SCAN ME

Magnetic scales for sensor systems from iC-Haus can be custom-manufactured for all variants of the MU family. This includes the iC-MU as well as the MU150 and MU200 systems. Depending on the application and the required performance, different magnetic materials can be used.

These include plastic-bonded hard ferrites, sintered hard ferrites and thin, sputtered samarium-cobalt layers. This variety of materials allows for adaptation to various requirements regarding pole spacing, field strength, temperature stability and mechanical strength.

Sensitec GmbH | Schanzenfeldstrasse 2 | 35578 Wetzlar | +49 6441 5291-0
sensitec@sensitec.com | www.sensitec.com

ACTING SUSTAINABLY,
DELIVER RELIABLY

The global political developments of recent months have once again brought home just how fragile global structures are. Supply chains, which were long taken for granted, are coming under pressure – whether due to geopolitical tensions, economic upheavals or regulatory changes. This makes it all the more important to place stability, transparency and resilience at the heart of everything we do. A reliable supply chain is not just a logistical issue today, but a decisive competitive factor and an expression of corporate responsibility. A challenge we are happy to take on!

Another key component of our corporate policy is our clear commitment to the energy transition and environmental protection, which is also reflected in our ISO 14001 and ISO 50001 certifications. We are therefore consistently pursuing the goal of minimising our environmental impact, acting in compliance with the law and using energy and resources responsibly. Specific measures to reduce our CO_2 emissions and increase energy efficiency by 2030 have been clearly defined.

One such measure, for example, is the gradual conversion of our vehicle fleet to electric vehicles. Having spent a year working in the field using a fully electric vehicle, I can say from personal experience that my initial scepticism quickly vanished. The charging infrastructure is excellently developed to meet current needs, and fast-charging sessions can be perfectly combined with short breaks – a real gain in terms of convenience and sustainability.

I would just like to mention in passing that Sensitec can contribute with suitable current sensors for charging infrastructure, battery management systems, on-board chargers and traction inverters.

Glenn von Manteuffel
Field sales, DACH region
and excited about the
all-electric company car.

A recent example from the field of medical technology illustrates just how versatile our technology can be: our sensor supports the reliable detection of fungal infections in molecular diagnostics. Particularly in sensitive fields of application such as medical diagnostics, precise and rapid measurement results make a decisive contribution – they lay the foundation for early intervention and better treatment outcomes.

We are also looking ahead in terms of technology. Our CTO, René Buß, gives us an insight into the latest trends in sensor technology, where we continue to see dynamic developments, particularly in the field of magnetic sensors. These open up new possibilities in terms of precision, robustness and miniaturisation, and are driving innovation across numerous sectors – from industrial automation to electromobility.

Together with our partners in the Sinomags Group, we develop cutting-edge new products and solutions.

In line with this, we also offer a whole range of new, particularly fast current sensors in the field of current sensing, which have been specifically developed for high-frequency inverter topologies using SiC and GaN components. These sensors, with a bandwidth of up to 2 MHz, enable excellent control performance and ensure precise measurement at high frequencies.

Discover more news in this issue and come and meet us in person at PCIM-Expo 2026 in Nuremberg – we look forward to seeing you!

Our team at PCIM 2026 looks forward to welcoming you to our booth 614 in Hall 7 in Nuremberg.

FROM INNOVATION TO CLINICAL APPLICATION

Molecular diagnostics is making its way into clinical practice with GMR sensors from Sensitec.

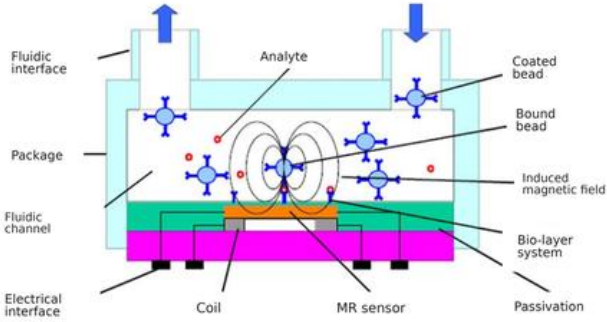
Zepto Life Technology has announced the launch of the FungiFlex® Mold Panel in the US.
The plasma-based molecular diagnostic test is now available through a CLIA-certified reference laboratory (Clinical Laboratory Improvement Amendments, CLIA), a US federal programme administered by the Centers for Medicare & Medicaid Services (CMS).
This marks a significant step from the development phase towards clinical application. The market launch also represents a major advance in the widespread adoption of rapid, non-invasive testing methods for invasive fungal infections.
Healthcare systems worldwide continue to face challenges in achieving early and reliable diagnosis, particularly in immunocompromised patients, for whom rapid, accurate and minimally invasive diagnostic tools are crucial to treatment success.

CLIA certification as a benchmark for quality
CLIA-certified reference laboratories in the United States are subject to particularly stringent regulatory and quality requirements. They support hospitals and healthcare providers by offering standardised, quality-controlled diagnostic services. The availability of the FungiFlex® Mold Panel through such a laboratory underscores the medical relevance and reliability of the technology.

Scaling with perspective
With this step, Zepto Life Technology is evolving from a project partner with long-term prospects into a Sensitec customer with growing demand and strong growth potential for the future. Several medical institutions can now access the test solution and integrate it into routine clinical practice – a key factor for further market penetration.

Magnetoresistive sensors as the technological basis

Modern molecular diagnostics requires not only biochemical expertise, but also highly precise and reliable sensor technology. With the help of Sensitec's magnetoresistive sensor solutions, it is possible to measure the small fields generated by the magnetic beads and deliver reproducible measurement results. This is essential in sensitive fields such as medical technology and diagnostics.



The principle behind the measurement method: magnetic beads mark the analyte within a fluid channel. These beads accumulate on a bio-layer system beneath which the sensor is located. The magnetic interaction between a coil and the beads causes the electrical resistance of the sensor to change, enabling an extremely precise measurement of the concentration of the analyte.

A shared vision for the future

The successful implementation of innovative diagnostic solutions in clinical practice demonstrates the importance of close collaboration between technology partners, manufacturers and medical institutions. Developments such as the FungiFlex® Mold Panel highlight the potential offered by the combination of advanced sensor technology, data analysis and medical research.

Sensitec congratulates Zepto Life Technology on this milestone and feels vindicated in its long-standing confidence in the success of this technology.

Claudia Ulbricht, Marketing & PR

ROTEC

Real-Time Valve Train Module

Precision in motion: How ROTEC and Sensitec master real-time valve train analysis

For more than 30 years, the world's leading automotive engineers have turned to ROTEC in Munich to analyse the complex dynamics of high-performance engines. To push the boundaries of real-time valve train analysis, ROTEC needed a sensor that delivers uncompromising precision under the most demanding conditions. They finally found the perfect solution in the **Sensitec GLM711AVB GMR sensor**.

The partnership between Sensitec and ROTEC culminated in the **ROTEC Real-Time Valve Train Module (ELVTMM)**, a state-of-the-art evaluation unit that provides unparalleled, instant insight into the valve train in motion.

The sensor as the heart of the system

The challenge of measuring valve lift dynamics in a running engine requires a sensor that is not only precise, but also robust and compact enough for seamless integration.

The **Sensitec GLM711AVB** was developed specifically to meet this challenge.

Its innovative design combines a bias magnet and a GMR sensor element in a single, extremely compact housing. This enables optimal sensor alignment, which is crucial for generating the high-quality sine and cosine signals required by the ELVTMM. The sensor's pre-wired, 'plug-and-play' design simplifies installation, whilst its magnetic bias ensures the consistent and reliable performance required for real-time calculations.

Valve lift sensor GLM711AVB

Positioning of the sensor on the valve

The ELVTMM 4-channel evaluation unit

From the raw signal to actionable insights: the ELVTMM

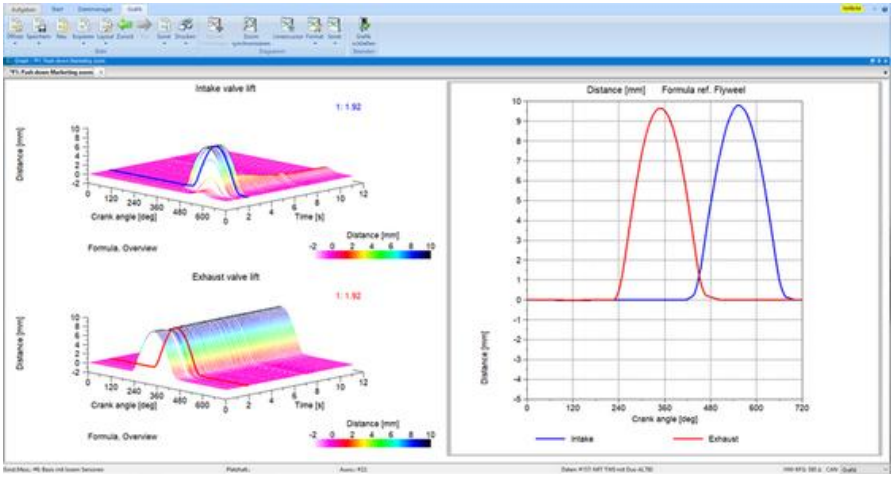
The ELVTMM processes the clean analogue signals from the Sensitec sensor in real time to calculate the valve stroke with an accuracy of +/- 10 µm and a resolution of up to 0.25 µm.

By outputting this data as a proportional 0–10 V analogue output signal, the ELVTMM enables engineers to view the valve lift immediately for direct analysis of dynamic events as they occur. This is crucial for optimising engine performance, efficiency and reliability under all operating conditions.

A holistic view: synchronisation of the valve train and engine speed

The true capabilities of this system are realised when it is integrated into ROTEC's renowned RASdelta measurement ecosystem.

At its heart lies the RASdelta Speed Board, a unique measurement principle that offers unrivalled insights into torsional and rotational vibrations. With an incredibly high time resolution derived from a 12.3 GHz counter, it captures even the slightest fluctuations in the digital speed data from magnetic, incremental or laser sensors.



ROTEC RAS Software Valve Lift Analysis

By combining high-resolution ELVTMM valve train data with these ultra-precise, angle-based speed signals, engineers gain a perfectly synchronised and comprehensive overview of engine dynamics. This enables an in-depth and direct analysis of valve behaviour.

This is a tried-and-tested method for measuring valve lift across a wide range of applications, from motorcycles and passenger cars to Formula 1, as well as in industrial applications such as generators and high-performance engines.

Key benefits for the modern engineer:
Instant analysis: Calculate and output valve lift signals for real-time analysis of dynamic valve lift behaviour.
Exceptional precision: Use the Sensitec GMR sensor to achieve a measurement resolution of up to 0.25 µm.

By combining the precision of Sensitec's GMR sensor technology with ROTEC's comprehensive measurement systems and technical expertise, we offer a definitive solution for controlling valve train dynamics.

ROTEC RASdelta 16-Slot Measurement System

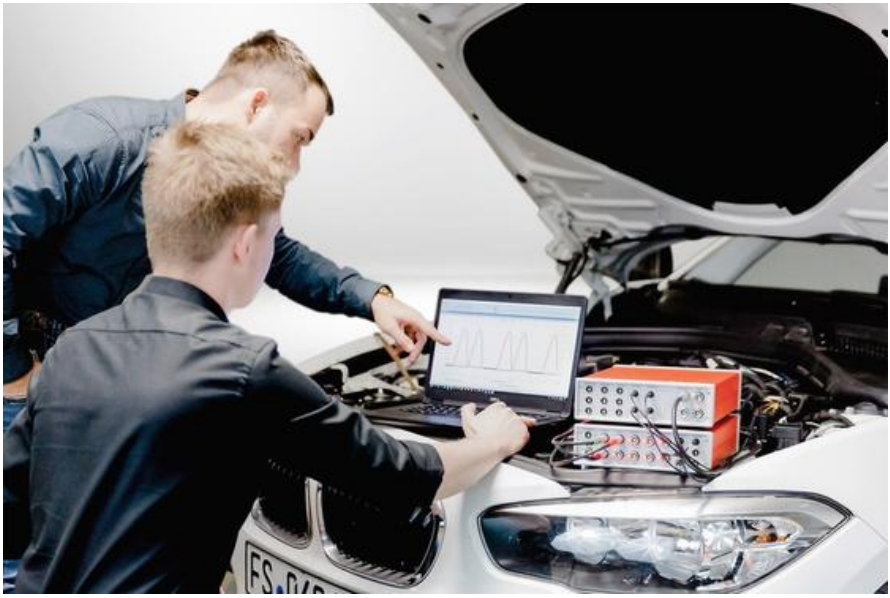
High-precision data: Utilise a 16-bit signal rate and an 800 kHz analogue output for a comprehensive, high-quality data stream.
Flexible integration: Can be used as a standalone module or as part of a complete measurement chain with ROTEC's industry-leading hardware and software.
User-friendly control:
Easy configuration of sensor signal parameters (offset, amplitude, phase) via an intuitive USB interface.

This powerful combination of Sensitec's sensor technology and ROTEC's expertise in signal processing provides an indispens-able tool for anyone looking to push the limits of engine performance.

Come and see the Box 2026 in person at the following trade fairs and events:

6.-7. May **Gas Engine Conference in Dessau**
1.-4. September **SMM Hamburg**
4.-7. October **Gas Machinery Conference Indianapolis**
2.-4. December **Workboat Show New Orleans**

ROTEC ENGINEERING



Comprehensive support from ROTEC Engineering
ROTEC Engineering offers you a comprehensive service partnership to support your projects from start to finish. Our team of test engineers, all of whom have many years of practical experience, can handle every stage of the process:

- CAD design and component preparation
- Mechanical machining and modification
- Sensor application and integration
- On-site measurements and data acquisition
- Comprehensive data analysis and reporting

Whilst a typical project involves the instrumentation of four valves, there is no upper limit.
To ensure the most complete and optimal understanding of the entire valve train, we recommend equipping all valves with measurement points.

ROTEC ENGINEERING

Kevin Rohwedder
Managing Director (MD)
Master of Science in Engineering

M +49 176 12365125
T +49 89 323651 15
kevin.rohwedder@rotec-munich.de

Rotec Munich GmbH
Joseph-Dollinger-Bogen 28
80807 Munich
Germany

www.rotec-munich.de/en/

Trends in sensor technology

Magnetoresistive sensors are becoming increasingly important thanks to TMR technology.

Sensor technology is one of the key technologies underpinning modern industry and is a major driver of innovation in sectors such as automation, mobility, medical technology and consumer electronics. Current trends in sensor technology show a clear shift towards greater integration, miniaturisation, energy efficiency and intelligent data processing directly within the sensor element. Magnetic sensor technology, in particular, has become significantly more important in recent years, as it can measure physical quantities such as positions, movements and electrical currents in a contactless, wear-free and reliable manner.

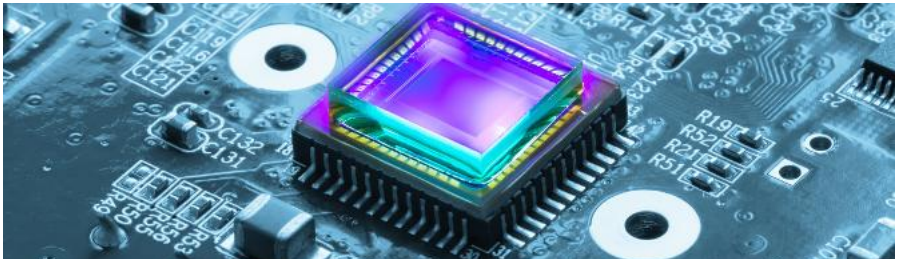
A key trend in sensor components, particularly sensor chips, is the increasing level of system integration. Modern sensors are no longer merely measuring elements, but combine several functions on a single chip (System-on-Chip, SoC) or within a sensor component (SMD package).
In addition to the actual sensor element, this includes signal conditioning and digital interfaces. This reduces space requirements, lowers costs and increases reliability. At the same time, the integration of microcontrollers and algorithms enables the pre-processing of measurement data directly within the sensor (‘edge processing’), thereby reducing the demands on higher-level systems and creating added value across the entire application.

Another key trend is the growing demand for sensor solutions that are both highly precise and energy-efficient.
Power consumption plays a crucial role, particularly in battery-powered applications such as wearables and IoT devices.
Chips are therefore increasingly being manufactured using energy-optimised semiconductor technologies and feature intelligent operating modes, such as sleep or wake-on-event functions.
Here, low-power sensors, such as high-impedance TMR sensors, can make an additional contribution to energy savings.

In the field of magnetic sensor technology, there is a clear shift away from traditional Hall sensors towards magnetoresistive technologies.
Whilst Hall sensors remain widely used and are still ideally suited for many applications, they reach their limits when it comes to higher accuracy requirements, the measurement of weak magnetic fields and in the realm of low power consumption.
This is where magnetoresistive sensors offer decisive advantages.

Magnetoresistive technology is based on the change in a material's electrical resistance when subjected to a magnetic field. The most important variants include anisotropic magnetoresistance (AMR), giant magnetoresistance (GMR) and tunnel magnetoresistance (TMR).
TMR sensors, in particular, continue to gain significant importance as they offer very high sensitivity, high accuracy and excellent temperature stability. Through variations in the sensor stack (the functional layering of the sensor) and the sensor design (the interconnection of the sensor elements on the chip), the output signal can be configured with great flexibility.

A key trend in magnetoresistive sensor chips is the continuous improvement in integration capability. GMR and TMR sensors are thus increasingly being integrated monolithically with standard CMOS components, which facilitates mass production and reduces costs. Similarly, multi-channel sensors are being developed that enable three-dimensional magnetic field measurements and thus allow for complex motion and position determination.



©AMA Association

You can find further exciting developments and current trends in the field of sensor technology in the report “Sensor Trends 2030” published by the AMA Association in collaboration with the VDI.

Link

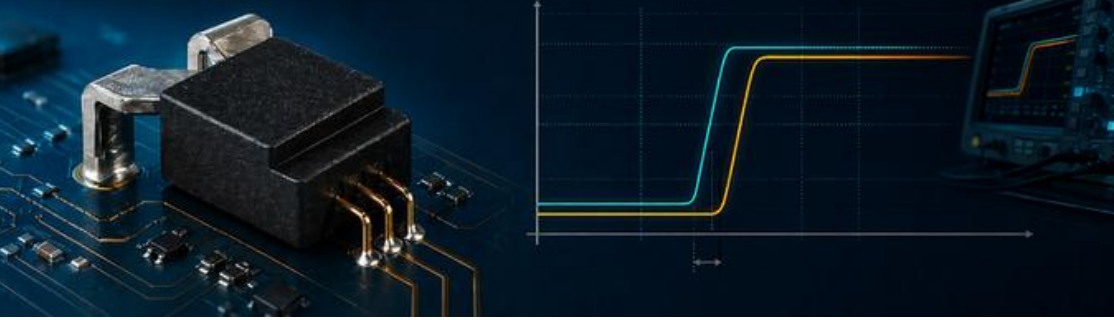
https://sensortrends.ama-sensorik.de/en/

Furthermore, resistance to external influences plays an important role. Compared to optical or mechanical sensors, magnetic sensors are insensitive to dirt, moisture or vibrations. This makes them particularly attractive for applications in the automotive industry, such as speed or position measurement, as well as in industrial automation.

Another significant trend is the increasing digitalisation and networking of sensors. Sensor chips today often feature standardised digital interfaces such as I²C, SPI or even wireless communication modules. This enables easy integration into complex systems and supports concepts such as the Industrial Internet of Things (IIoT).

In summary, it can be said that current developments in sensor technology are strongly characterised by the integration of digital, intelligent functions at the chip level, the optimisation of energy efficiency and the use of highly sensitive technologies. Magnetoresistive sensor technology, in particular, represents a key technology which, thanks to its high precision, robustness and integrability, makes a significant contribution to the further development of modern sensor systems.

René Buß, CTO/VP Innovation & Sales



High-bandwidth current sensors:

Paving the way for the next generation of power electronics

With the widespread adoption of third-generation power semiconductors such as SiC (silicon carbide) and GaN (gallium nitride) in modern power electronic systems, switching frequencies and operating current frequencies continue to rise sharply. Higher switching speeds enable greater power density, improved efficiency and smaller passive components – but they also fundamentally change the requirements for current measurement.

Current sensors must now capture faster transient events, resolve high di/dt slopes and maintain their accuracy under increasingly harsh electromagnetic conditions.

In this environment, high bandwidth is no longer optional, but a technological necessity.

For the development engineer, these materials with a wider bandgap (WBG) present a unique challenge.

Whilst they enable significantly higher switching frequencies and lower thermal losses, they also require a new type of sensor technology.

Conventional Hall-effect sensors often fail due to slow response times and insufficient bandwidth, which can lead to control instabilities or catastrophic failures in high-speed switching environments.

Why high-bandwidth current sensors are indispensable

1. **Detection of fast rising edges**
Devices with a wide bandgap, such as SiC MOSFETs and GaN FETs, operate at extremely high dv/dt and di/dt rates (the rate of change of voltage and current, respectively, over a given period of time). This results in lower switching losses and higher efficiency. To accurately capture these rapid current transitions, the sensor's bandwidth must be significantly higher than the system's fundamental switching frequency.

2. **Improving control loop performance**
Modern digital control strategies require high-precision real-time current feedback. Insufficient bandwidth limits the control loop gain and phase margin, which compromises stability and dynamic performance.

3. **Improving protection in systems with high power density**
In systems with high power density, fault currents can rise to destructive levels within a fraction of a second. Short response times ensure early fault detection and improved system reliability.

4. **Minimising losses and thermal effects**
Reducing the contact resistance directly reduces power loss.

Hui Wang, Product Manager for Current Sensors, uses the example of a PV inverter to demonstrate how essential fast current sensors are for measuring DC input currents and AC output currents in real time, maximising efficiency through optimised MPPT (Maximum Power Point Tracking), and protecting the system from overload.

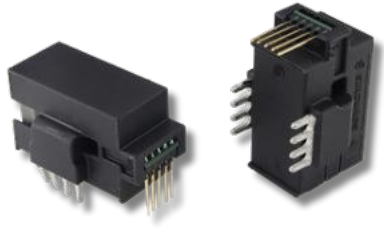
Sinomags current sensor families with high bandwidth

Sinomags offers three different product ranges, specifically designed to meet the demanding requirements of modern power supply systems – from industrial motor drives to power conversion in the automotive industry.

STK-HO/B Series: The SiC optimiser

The STK-HO/B series has been specifically developed for SiC MOSFET applications and addresses the critical issue of dv/dt immunity. In environments where rapid voltage spikes can cause interference, the STK-HO/B series offers the following key features:

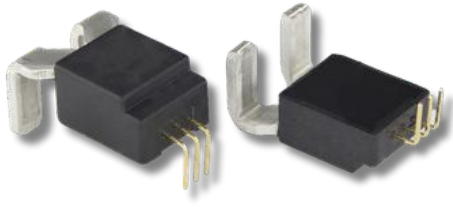
- Response time: Market-leading < 200 ns (compared to the industry average of 3 µs)
- Bandwidth: 1 MHz at -3 dB
- Application: Ideal for WBG power electronics, where fast protection and high-speed control loops are essential.



STK-600/F Series: Precision in harsh EMI conditions

The STK-600/F series utilises a sophisticated gradient field design. This architecture is specifically designed to suppress external common-mode magnetic interference, making it a robust choice for high-power-density modules.

- Bandwidth: 800 kHz
- Design: Open-loop TMR design with a response time of 0.5 µs
- Flexibility: Supports a standard 5 V power supply for easy integration.



STK-616-SOB 10

STK-616-SOIC 8

STK-616-SOB 16

STK-616xM: The revolution at the chip level

For developers looking to replace bulky current transformers (CTs) in space-constrained applications such as on-board chargers (OBCs) for xEVs or server power supplies, the STK-616xM series offers a surface-mount solution in SOIC8, SOIC10 or SOIC16 packages.

- Efficiency: Integrated primary conductor with extremely low internal resistance (< 1 mΩ).
- Signal integrity: Differential measurement using two TMR plates effectively suppresses common-mode interference.
- Design benefits: Reduces the bill of materials (BOM) and PCB area whilst maintaining high accuracy.
- Bandwidth: up to 2 MHz.

Outlook: The 10 MHz threshold

The drive towards higher frequencies shows no signs of slowing down. Sinomags is already looking beyond the current 1–2 MHz standard to meet the requirements of future SiC- and GaN-based systems operating in the multi-megahertz range.
Our product roadmap includes the development of next-generation chip-level sensors designed to push the boundaries of physics. We are currently developing solutions with a bandwidth of up to 10 MHz (-3 dB). These upcoming products will ensure that Sinomags sensors capture every pulse with absolute precision, even as power semiconductors become ever faster.

Stay tuned: As we continue to expand our portfolio of high-bandwidth current sensors and deliver faster, more precise and more highly integrated solutions, we invite you to follow our technical updates and join us in shaping the future of high-frequency power electronics.

Laurin Becker & Hui Wang - Currentsensor Team

SENSITEC AT DIGIKEY

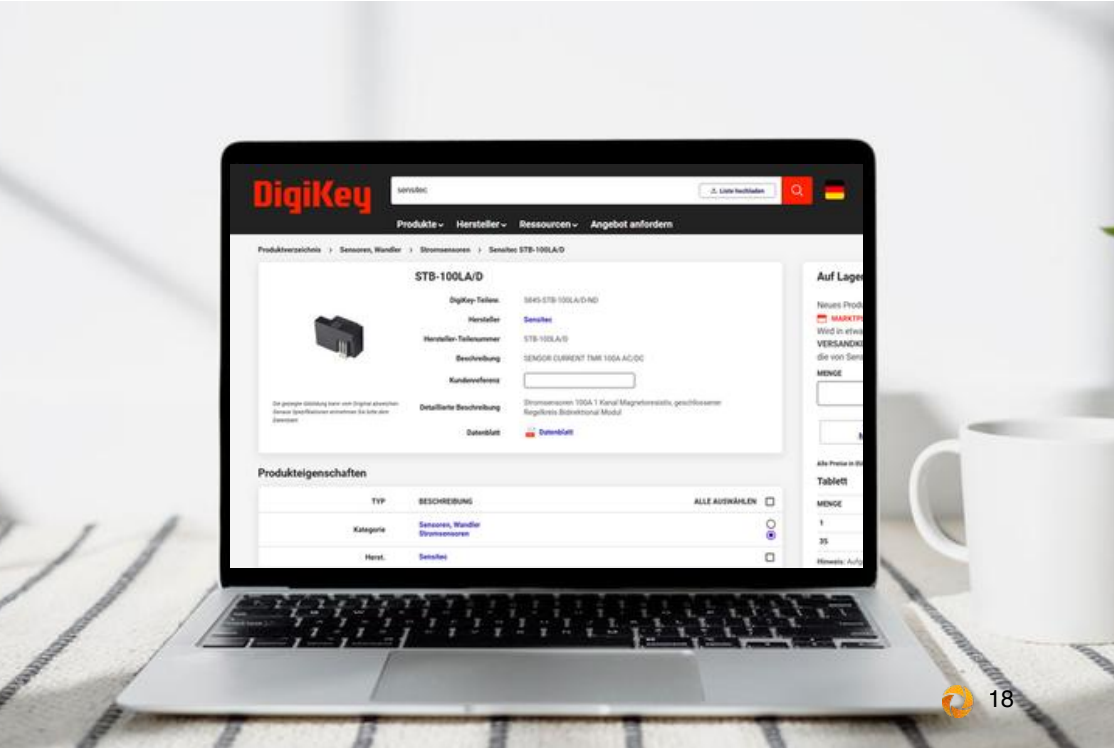
DigiKey is one of the world's leading distribution platforms for electronic components. With over 13 million items in its catalogue, DigiKey offers developers, buyers and tech enthusiasts quick access to high-quality products – directly, hassle-free and available worldwide.

We are delighted that our sensor solutions are now also available through DigiKey. This means our products are available to customers worldwide around the clock – with transparent stock availability, technical data and straightforward ordering.

Discover our sensors at www.digikey.com – and enjoy maximum flexibility when selecting and purchasing.

VISIT OUR SHOP

www.digikey.com



STAFF PROFILE
LAURIN BECKER

New role in the field of current sensing
Since January 2026, Laurin Becker has been strengthening the team at Sensitec GmbH as a Junior Field Application Engineer for Current Sensors. In this role, he is taking over the responsibilities previously held by Matthias Brusius, who left the company at the end of last year. We would like to thank Mr Brusius warmly for his dedication and his contribution to the further development of the current sensor technology division, and wish him all the best for his future professional and personal endeavours.

Career and Education
Mr. Becker has been part of the Sensitec family since 2015. Following his apprenticeship as an electronics technician for equipment and systems, he opted for a dual degree programme in electrical engineering at the University of Applied Sciences Mittelhessen in Wetzlar, which he successfully completed in early 2023 with a Bachelor of Engineering.

Practical experience and development
Even whilst he was still a student, he gained extensive practical experience as part of the current sensor team and gained in-depth insights into our product portfolio and the requirements of our international customers. This enabled him to build up his technical expertise in a targeted manner and take on responsibility in various projects at an early stage.

Even after graduating, Laurin Becker continued to support the team with a wide range of technical issues and steadily developed his expertise in the field of current sensing technology.

Responsibilities and Collaboration
In his new role, he works closely with our Product Manager for current sensors, Hui Wang, and acts as a knowledgeable point of contact for our customers regarding technical solutions. With his dedication and in-depth expertise, he helps to successfully implement and drive forward our customers' projects.

Away from the daily grind
In his spare time, he finds sport to be the perfect way to unwind from his working day. He also enjoys going to concerts and, whenever possible, combines these with travel.

We are delighted to welcome Laurin Becker to this new role and wish him continued success at Sensitec.

Claudia Ulbricht, Marketing & PR

STAFF PROFILE
SVEN HORSTMANN

A new role, a new perspective
On 1 February 2026, we welcome Mr. Sven Horstmann as our new Head of Human Resources. In this role, he is responsible for strategic and operational HR management at the Mainz site, as well as overseeing the Wetzlar site, which he visits regularly in person to strengthen collaboration with his team and colleagues on the ground. His responsibilities include, amongst other things, involvement in recruitment, advising managers and senior management on HR-related matters, and working with the works councils. In addition, he deals with complex and cross-functional issues within the HR department.

Achievements & Development
Sven Horstmann has many years of diverse professional experience in the recruitment industry, during which he has gained extensive knowledge in the fields of human resources, sales and consultancy. Throughout his career, he has consistently focused on human resources and has further specialised by qualifying as a Human Resources Specialist / Bachelor Professional of Human Resources Management. Most recently, he worked in the HR department of a globally active, renowned IT service provider, covering Germany, Austria and the Netherlands.
In this international role, he further expanded his in-depth expertise across all HR-related areas.

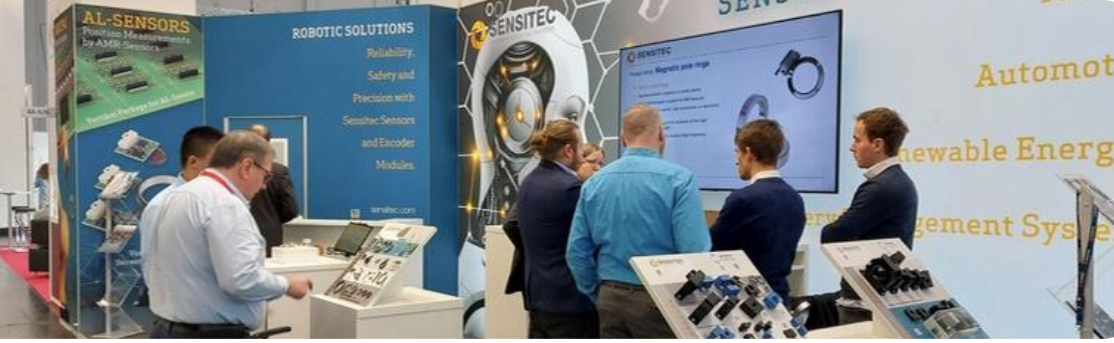
As a trainer, he volunteered in a training working group and brings with him in-depth knowledge of human resources development as well as training and professional development. Furthermore, through his work as an independent consultant, he has gained business experience in the development of people and organisations.

Away from the daily grind
In his spare time, the former dancer enjoys travelling, spending time in nature and attending local events. Sport provides him with the balance he needs from his daily work routine and gives him new energy for upcoming projects.

“I am motivated by working with people, bringing together different perspectives and jointly developing solutions that really make a difference. I enjoy playing an active role in shaping developments and driving growth and progress.”

We wish Mr. Horstmann a great start at Sensitec GmbH and are very much looking forward to working with him.

Claudia Ulbricht, Marketing & PR



EXPERIENCE SENSITEC LIVE

Our trade fair dates for 2026

We look forward to seeing you there!
Experience cutting-edge sensor technology, receive personalised advice and discover how Sensitec can make your applications more efficient, precise and intelligent.
You can also find all the information about our trade fair appearances at:
www.sensitec.com

For further information or to arrange an appointment, please contact:
+49 (0)6441 5291 0 / sensitec@sensitec.com

pcim
EUROPE

9. - 11. June 2026

PCIM Europe, Nuremberg

The leading trade fair for power electronics, drive technology, renewable energy and energy management – and the ideal platform to discover Sensitec's current sensors and encoder technology.

MAGSENSE

16. & 17. September 2026

Magnets Magnetism Sensors and Applications, Jena

MagSense 2026 is aimed at developers, manufacturers and users of magnetic sensor systems. The focus is on the interplay between magnets, magnetisation and sensor technology, as well as their contribution to new, innovative applications.

electronica

10.–13. November 2026

Electronica, Munich

The world's leading trade fair and conference for electronic components, systems and applications.

sps
smart production solutions

24.– 26. November 2026

SPS – Smart Production Solutions, Nuremberg

The industry gathering for smart and digital automation.
Sensitec presents state-of-the-art magnetoresistive sensor solutions for demanding industrial applications.

OUR SALES TEAM

Behind every successful solution is a strong team.
Our sales team is your point of contact for bespoke sensor solutions, technical advice and collaborative partnerships –
personal, expert and reliable.

Jörg Stamm
Strategic Sales
Europe / Automotive

+49 (0) 6441 5291 231
joerg.stamm@sensitec.com

Peter Radde
Strategic Sales
APAC / America

+49 (0) 6441 5291 184
peter.radde@sensitec.com

Glenn von Manteuffel
Strategic Sales
DACH

+49 (0) 9089 92 00 962
glenn.manteuffel@sensitec.com

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components of life

Endrich Bauelemente Vertriebs GmbH supplies the full range of current sensors from Sensitec featured here. For further information, visit:
www.endrich.com

"Not sure who to contact?"
Please get in touch with us at: info@sensitec.com

A look back over 15 years

How innovations from 2011 to the present day have shaped sensor technology.

Let's take a look back at issue no. 6 of Sensor.Komos from May 2011:
Under the headline "Traumhafte Bewegungen (Fantastic Movements)", the main article introduces our valve lift sensors – a sensor technology that set new standards at the time: tiny sensors for precise valve lift measurement directly inside the running internal combustion engine.
An absolute novelty at the time!

The key advantage was obvious – measurement data collected under real-world conditions, not in the laboratory. This was complemented by a specially developed evaluation system capable of processing and analysing the signals in real time – a genuine unique selling point.

Today, a decade and a half later, the lasting significance of this innovation is clear:
The sensors are still being manufactured and are distributed exclusively through our partner ROTEC, which has long since established itself as a key player in the industry and provides expert support to customers with integration. And if any further proof were needed: since 2025, ROTEC has also been offering a new version of the data logger – see our article on pages 11–13 for more details.

The 1-channel signal conditioning unit for valve stroke measurement

“The CMS3000 current sensor series has been launched!”


Markt frei für CMS3000 Stromsensoren

Fast! Compact! Precise!

Sensitec was also well ahead of its time in the field of current sensors: the CMS3000 current sensor series was launched!
With a bandwidth of 2 MHz, these sensors addressed the requirements of modern power electronics at an early stage. At a time when SiC and GaN topologies were still in their infancy, the company was already actively involved in initial predevelopment projects. Even though production had to be discontinued in 2018 due to what was then still limited market demand, the sensors proved indispensable in numerous applications. Today, with SiC and GaN technologies having become widely established, new generations of sensors build directly on this pioneering work and offer tailor-made solutions for current requirements. You can read more about this in the new product section of this issue (pages 15–18).

Glenn von Manteuffel &
Simon Scherner (2011)

Even beyond the major topics, this issue painted a vivid picture of developments at the time:
Following the launch of the CMS3000, there was a change in product management – Glenn von Manteuffel moved to the sales force for southern Germany, whilst Simon Scherner took over as product manager and successfully saw the launch through to completion.

Sebastian Weber supervised a project by pupils at Wilnsdorf Grammar School, which even won an award: the optimisation of the sensor layout and its validation through a large number of measurement series formed the basis for the AFF755 magnetic field sensor, which remains successful to this day.

Our QMB, Hans-Rainer Römer, was delighted to report that we had passed the ISO/TS16949 certification audit – an important milestone for quality standards.

Last but not least, we looked back on a high-profile MR symposium attended by 150 international scientists from all over the world, which was given special recognition by the visit of Prof. Grünberg – the Nobel laureate for his discoveries regarding the GMR effect.

This retrospective shows that many of the topics discussed at the time were more than just snapshots – they marked the beginning of developments that continue to have an impact to this day.

SIDE NOTE

Have we sparked your interest? Take a look at that issue here, or visit our downloads section at: https://www.sensitec.com en/download/

Link

Glenn von Manteuffel,
Head of Strategic Sales

SENSITEC

Wuxi/CHINA

ON THE GO

From 13 to 21 March 2026, staff from Sensitec GmbH travelled to China to exchange ideas with their colleagues on the ground, make further progress on current projects and strengthen cooperation within the Sinomags Group.
The trip focused on meetings at Sinomags and Esstmags.
In addition to in-depth discussions on ongoing projects, the production facilities and development laboratories were also visited.
Furthermore, a customer meeting provided insights into the production of robotic joints.

BUSINESS TRIP
to Wuxi

“Digital services are shaping everyday life”

In terms of content, the focus was on existing and future projects, particularly in the field of sensor packaging and multi-chip solutions with an expanded range of functions. In addition, the team gained an overview of new encoder products from Esstmags. The high level of dynamism and efficiency on the ground was particularly striking. Compared to the past, it is now much easier for foreign visitors to get around the country independently.

A key reason for this is the high level of digitalisation: whether it’s taxis, orders or payments, virtually all everyday tasks are conveniently managed via a smartphone. This consistent digital connectivity not only enables seamless participation in daily life, but also makes the ‘simplicity’ and availability of services particularly impressive to experience.

Cooperation with local partners is characterised by commitment and mutual interest, but is still hampered in some cases by language barriers.

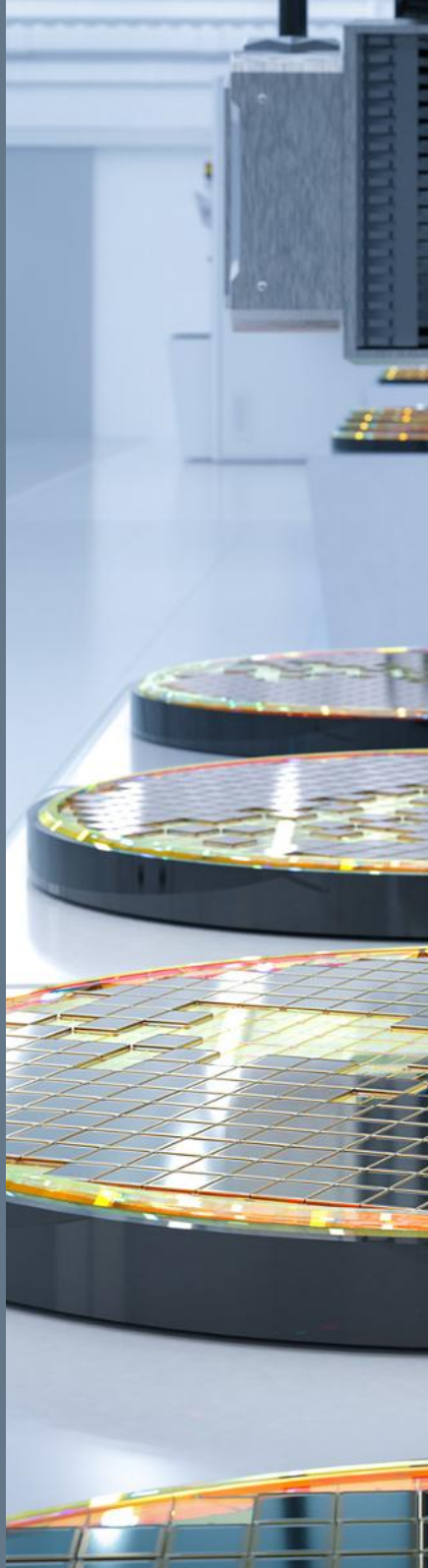
Modern translation tools support communication, but still reach their limits in day-to-day business communication.

Aside from the professional aspects, what remains most of all is a personal impression: the country and its people are becoming increasingly open.

Despite initial reserve, one is met with great warmth and helpfulness.

An experience that has made the trip particularly enriching.

Between meetings
and socialising



SENSITEC
MAGNETORESISTIVE SENSORS

Sensitec GmbH
Schanzenfeldstrasse 2
35578 Wetzlar, Germany

phone: +49 6441 5291-0
sensitec@sensitec.com
www.sensitec.com

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