burster

A **Variohm Group** Company

THE MEASUREMENT **SOLUTION**

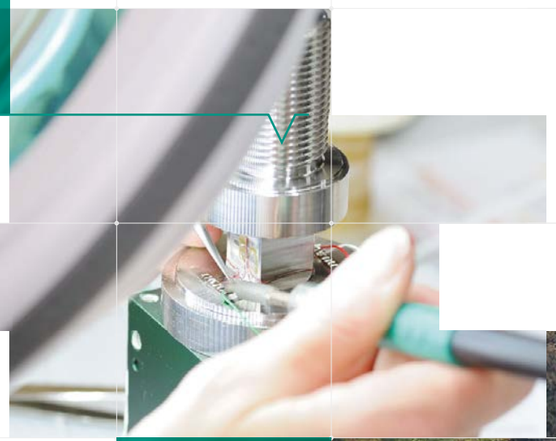
ALL OVER THE WORLD

burster develops and manufactures sensors, calibration instruments, precision test devices and measuring systems for sensor signal processing for customers all around the world.

THE MEASUREMENT **SOLUTION**

HIGH-TECH FROM A STRONG SOURCE

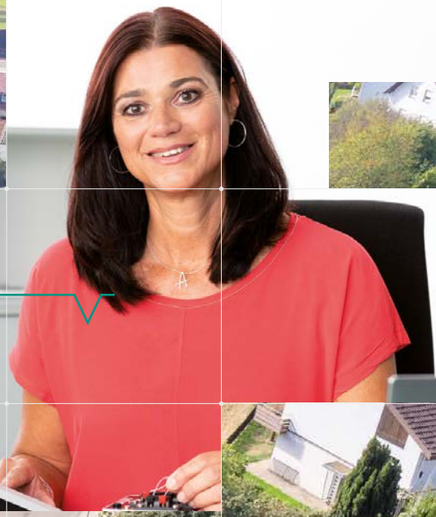
GLOBAL PRESENCE
IN
55
COUNTRIES



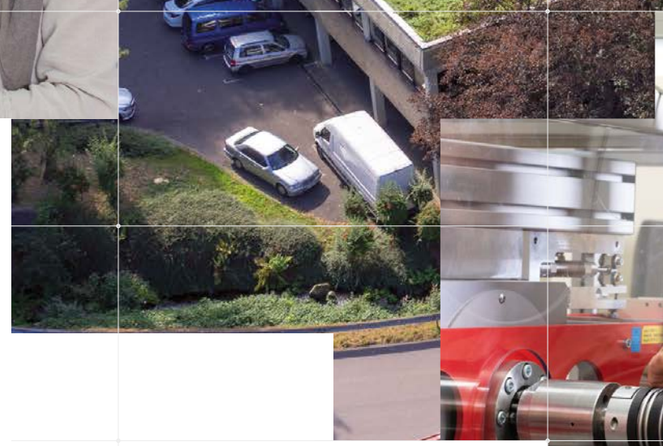
ESTABLISHED
1961

>
140,000
CONTACTS

MORE THAN
150
EMPLOYEES
WORLDWIDE



MADE AND ENGINEERED
IN
GERMANY



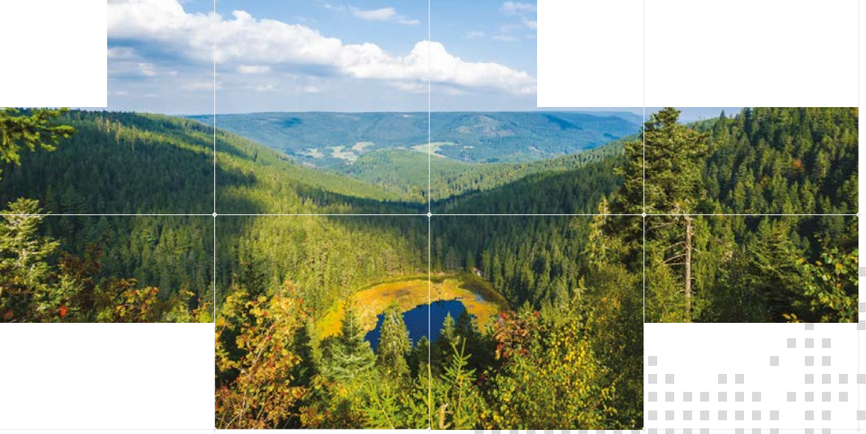
EXPORT RATIO
>
50%

*"For more than 60 years, **burster** has represented personal commitment and a consistent quality focus in sensors and measurement technology. All over the world, in practically every industry, we help our customers to develop and implement innovative solutions for a more sustainable, more certain future."*

burster specializes in the development, production and sale of measuring and test devices, sensors and measurement systems as well as calibration services. Since 1961, burster has set standards for precision, quality and flexibility. This has made the German medium-sized enterprise one of the world's foremost suppliers of sensor signal processing and process monitoring systems.

burster is part of the Variohm Group and its companies are owned by discoverIE. The Variohm Group is a cluster of companies that are committed to providing outstanding technical solutions in various industries and sectors. Together, they develop customised sensing, switching and motion control solutions for complex technical challenges.

Globally, burster is in contact with more than 140,000 people in industry and R&D. We are partners for mechanical and plant engineering and automation, the automotive industry and its suppliers, electrical and electronic engineering, the chemicals industry, e-mobility as well as many other sectors and future or niche markets such as medical engineering, biotechnology and robotics.



burster HQ:
BLACK FOREST / GERMANY

MADE IN GERMANY
AT HOME IN THE WORLD

MEASUREMENT TECHNOLOGY AND CUSTOMER SERVICE AROUND THE WORLD

burster products are used around the world, and we export more than 50 % of our output. We are part of an international network with a presence in 55 industrialized countries on all continents.
Together with our branches and sales offices, we ensure a smooth flow of goods and information, and provide expert support for industry customers with international locations. burster represents “Made in Germany” quality standards, for safe and reliable production processes worldwide.

burster
GLOBAL NETWORK

burster HQ GERMANY

burster INTERNATIONAL

- **burster UK**
- **burster ITALY**
- **burster USA**
- **burster INDIA**
- **burster CHINA**

ALL burster AGENTS

See website burster.com
under “Country Contacts”

EXPERTISE **FOR YOU**

PERSONALIZED SERVICE PLUS ENGAGED INTERACTION FOR CUSTOMER SATISFACTION

We are committed to providing our customers all over the world with flexible solutions and market-driven products of the highest quality and precision. To make this happen, we employ highly skilled international teams in all areas, and operate our own manufacturing facilities. No matter what stage you are at with your purchase decision, you can count on us for expert support from A to Z.

GLOBAL SALES

With their great expertise and extensive application experience, our professionally trained and technically savvy sales and product engineers will support you before, during and after your purchase decision. Whether locally in your country or at burster headquarters in Germany – you can reach your dedicated contact person quickly and directly for all technical questions and detailed application advice.

EXPORT

Our export department is the link between our headquarters in Germany and burster branches and offices worldwide. With competence and assurance, it manages the global exchange of goods and accompanying information between burster and our international network. Constant communication and information sharing allows us to provide all customers with the best possible advice and the most suitable products.

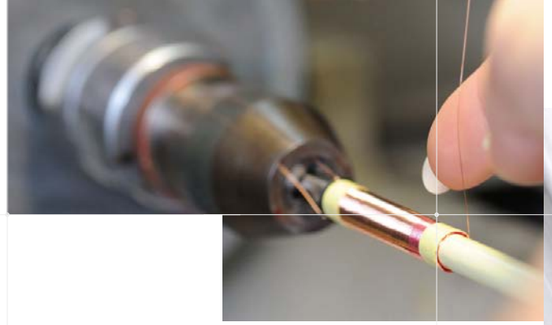
DEVELOPMENT

Our development teams are comprised of talented, knowledgeable and highly experienced developers. From off-the-shelf products to highly complex devices that connect to the latest interfaces and fieldbus systems, we are uncompromising in our work at the cutting edge and regularly define new standards with innovative products. State-of-the-art equipment and technology complement our in-depth knowledge.

PRODUCTION AND QUALITY MANAGEMENT

Flexibility, adherence to schedules, high productivity and reliable processes – these attributes define our production and quality management. Our employees are diligent about the quality of their work – and this provides the basis for reliable products.

ADDING VALUE THROUGH SOLUTION COMPETENCE AND PRACTICAL EXPERIENCE

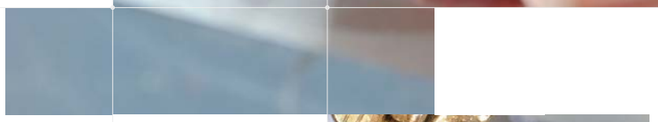


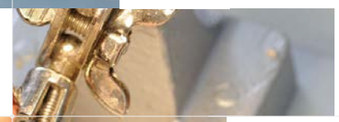
HIGHEST STANDARDS FOR CONSISTENTLY SMOOTH OPERATIONS

To meet the highest requirements in everyday production, our customers need a competent and 100 % reliable partner. With our extensive know-how and years of practical experience, we provide industries with tailored advice and knowledgeable support around all kinds of applications: from integration and compatibility with market standards to complex Industry 4.0 applications. How can we be a reliable partner to you?

burster OFFERS YOU

- **Trust and reliability**
- **Extensive application experience**
- **Worldwide support**
- **Smart and bus-compatible solutions with consistency**
- **Safety and innovation**
- **Durability and quality**





MANUFACTURING EXPERTISE WITH **TRADITION**

OUR STANDARDS: PRECISION, QUALITY AND FLEXIBILITY

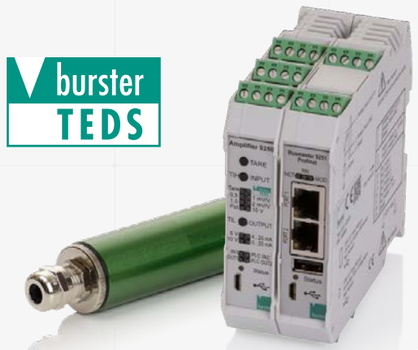
Since 1961, burster has manufactured and developed measurement components and systems that meet the highest quality requirements.

Today, burster is one of the most important manufacturers of precision measuring instruments, sensors and systems for sensor signal processing, and has set numerous benchmarks and market standards. Many thousands of customers around the world benefit from our great expertise, manufacturing capabilities, innovative strength and excellent international networks. Especially when it comes to safety or complex applications, burster is a constant in measurement technology – whether on the ground, in the air, or in space.

burster
PRODUCT PORTFOLIO

THE WHOLE WORLD OF MEASUREMENT TECHNOLOGY

MEASUREMENT



TRANSFORMATION & AMPLIFICATION

EtherNet/IP

EtherCAT Technology Group

PROFINET

PROFIBUS

IO-Link

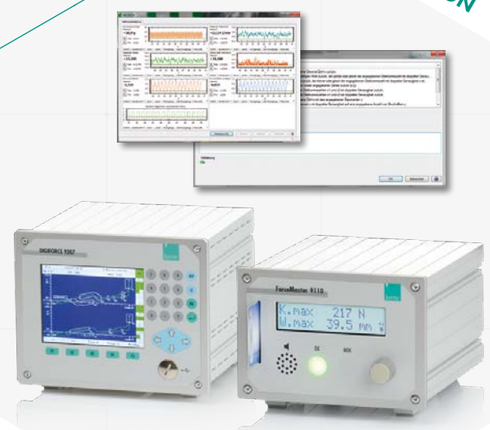
TRANSMISSION & COMMUNICATION

burster

THE MEASUREMENT SOLUTION

CALIBRATION

EVALUATION & VISUALIZATION



SUPPORT

GLOBAL SUPPORT

TUTORIALS

LOAD CELLS

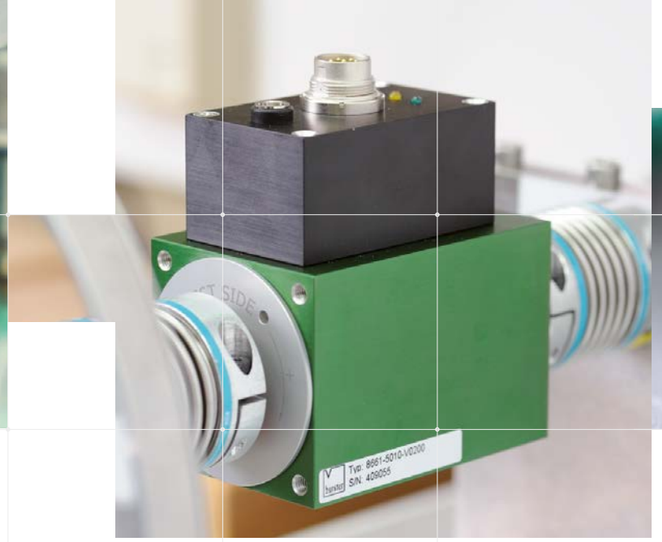
Miniature load cells and load cells in application-oriented designs

KEY FACTS:

- Measuring ranges from 0 ... 1 N to 0 ... 1 MN
- Non-linearity from 0.035 % F.S.
- Smallest diameter 10 mm
- Minimum overall height 3.3 mm
- Suitable for cable carrier chains
- Temperature compensated range from -55 °C ... +200 °C
- Degree of protection up to IP68

BENEFITS:

- High flexibility and custom modifications thanks to in-house production
- Insensitivity to external forces
- Diverse and compact designs for compressive and tensile forces
- Calibration laboratory accredited according to ISO 17025 (DAkkS)
- With mechanical, bidirectional overload protection up to 10 times the measuring range
- Standard sensors available ex stock



TORQUE SENSORS

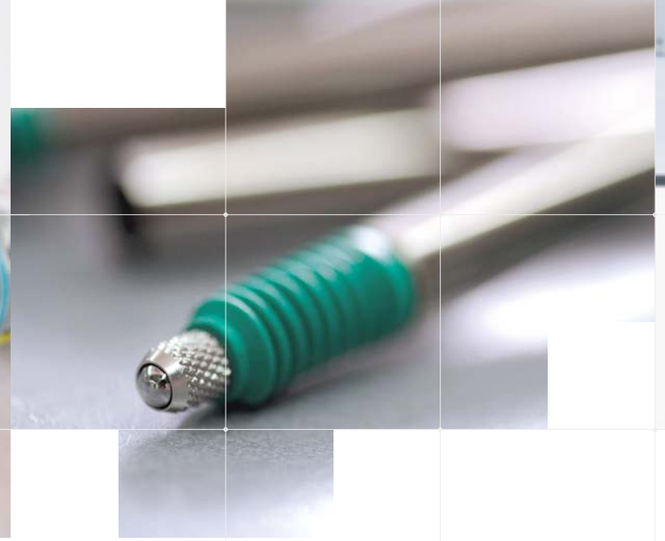
Torque measurement for non-rotating and rotating applications

KEY FACTS:

- Measuring ranges from 0 ... 0.01 N·m up to 0 ... 5000 N·m
- Non-linearity from ≤ 0.05 % F.S.
- Optionally with angular displacement and rotational speed measurement
- Various output signals or interfaces via integrated amplifiers
- Dual-range versions available
- High side-load immunity thanks to support bearings

BENEFITS:

- Large variation possibilities
- Short delivery times due to modular system
- Calibration laboratory accredited according to ISO 17025 (DAkkS)
- burster TEDS
- Extensive accessories



DISPLACEMENT SENSORS

Potentiometric, incremental and inductive measurement of mechanical displacements

KEY FACTS:

- Measuring ranges from 0 ... 1 mm to 0 ... 2000 mm
- Non-linearity up to 0.05 % F.S. or accuracy up to 1 µm for incremental
- Different measuring methods: potentiometric, inductive (DC/DC, LVDT), incremental
- Resolution up to 0.1 µm
- Directly coupled or with return spring, various designs
- Optionally with up to IP68 degree of protection
- Integrated amplifiers or external modules available
- Power supply and evaluation e.g. via USB directly on PC

BENEFITS:

- High flexibility and custom modifications thanks to in-house production
- Calibration of sensors according to customer requests: e.g. 0 ... 10 V, ±5 V, 4 ... 20 mA
- Measurement chains with other burster devices
- Compatible with model 9250 instrumentation amplifier and model 9251 fieldbus controller for bus link, e.g. PROFINET

PRESSURE SENSORS

Universal sensors for measuring pressure as a variable

KEY FACTS:

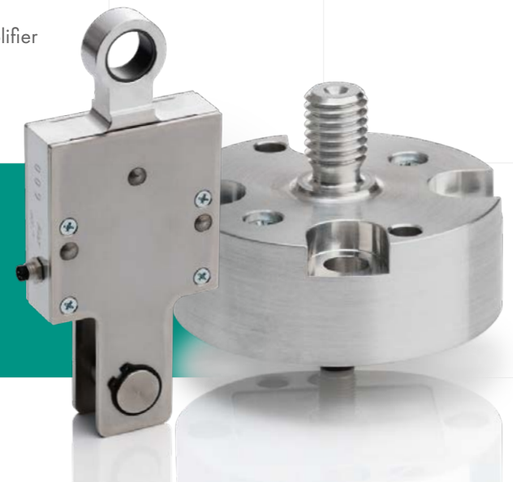
- Measuring ranges from 0 ... 35 mbar to 0 ... 5000 bar
- High measurement accuracy from 0.05 % F.S.
- Absolute pressure measurement, relative pressure measurement, differential pressure measurement
- Dynamic measurements at high pressures
- For liquid or gaseous media
- Integrated instrumentation amplifier possible

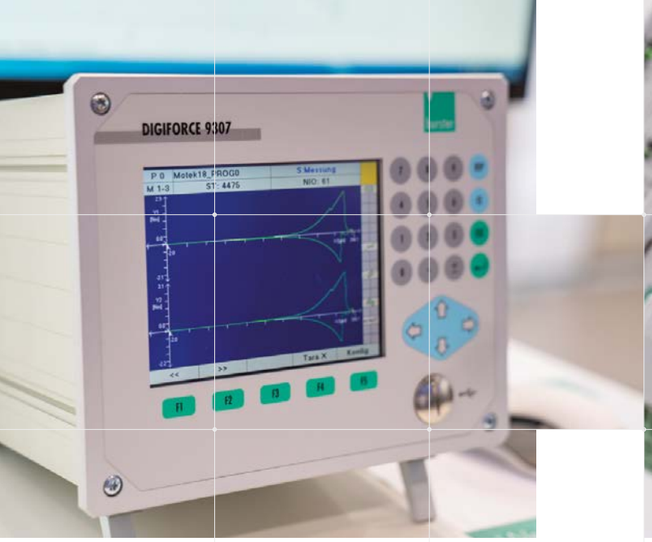
BENEFITS:

- Temperature range: -55 °C ... +200 °C
- Flush diaphragm possible
- Various connecting threads and seals
- High system pressure for differential pressure measurement

STANDARD SOLUTIONS DON'T FIT? – MySensor

Your customized solution when no standard sensor fits your requirements.





DIGIFORCE®

Process control devices for press-fit, joining, riveting and peening processes

KEY FACTS:

- X/Y monitoring of up to three active channels
- High measurement accuracy from 0.05 % F.S. at 10 kHz sampling rate
- Evaluation result within a few milliseconds
- PROFINET, PROFIBUS, EtherCAT, EtherNet/IP, PLC I/O
- Graphical evaluation with envelopes, windows, thresholds, trapeziums and mathematical functions

BENEFITS:

- Flexible integration into customer-specific process environment
- burster TEDS
- All-round capabilities for quality assurance
- Supports all main sensor types
- Over 25 years of experience in X/Y process control and quality assurance

SENSOR ELECTRONICS

High-precision, fast connection and integration of various components

KEY FACTS:

- Measurement accuracy up to 0.001 % F.S.
- Measurement speeds up to 14.4 kHz
- 2/4/6-wire system for maximum precision
- Degree of protection up to IP67
- PROFINET, PROFIBUS, EtherCAT or EtherNet/IP
- Connect load cells as well as torque, displacement, angular displacement and temperature sensors

BENEFITS:

- Maximum accuracy and measurement speed
- Solutions for laboratory, mobile and industrial use with AC or DC supply
- Single or multi-channel solutions
- Scalable for diverse physical variables
- burster TEDS
- Digital indicator, amplifier and transmitter modules

CALIBRATION INSTRUMENTS

Measurement and simulation for laboratory, research, and calibration centers

KEY FACTS:

- Measure and simulate electrical values: voltage, current, resistance, thermocouples, RTDs, frequency, strain gages
- Accuracy starting at < ±0.001 % F.S.
- USB, Ethernet, RS-232 interface
- Free LabView drivers, SCPI command tables for automation
- Software for evaluation and reports

BENEFITS:

- Multi-functional devices for mobile or stationary use
- For laboratory, production, development, service and automation
- Reference measurement chains with burster sensors
- Various measurement programs and ramp functions
- burster TEDS
- Calibration laboratory accredited according to ISO 17025 (DAkkS)

RESISTANCE MEASUREMENT

Ohmmeters and equipment for measuring electrical resistance

KEY FACTS:

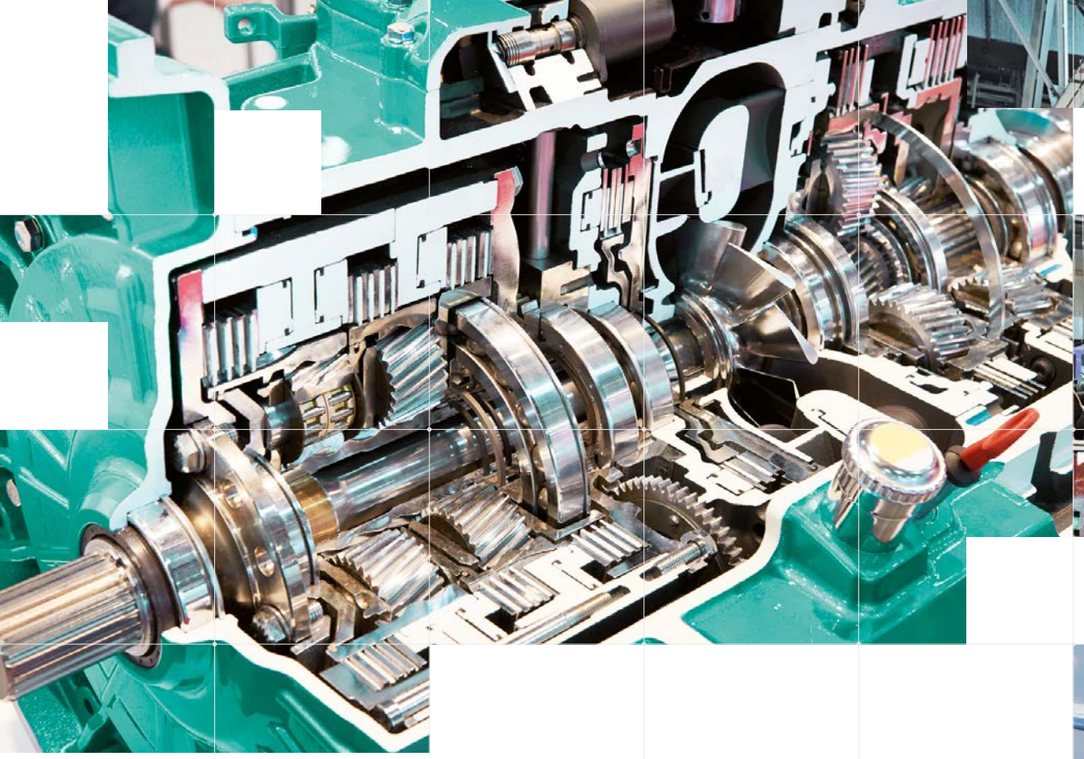
- Measuring ranges from 1 nΩ ... 100 TΩ
- Measurement accuracy up to ≤ 0.01 % of reading
- Temperature compensation for all materials
- Thermal EMF compensation
- Very high measurement speed and short evaluation times

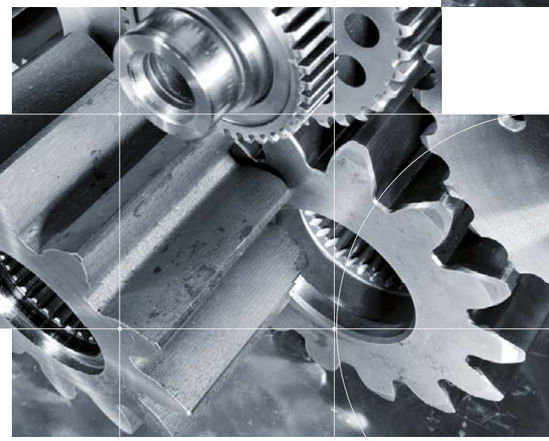
BENEFITS:

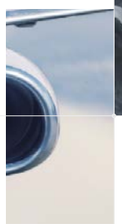
- Over 40 years of experience in resistance measurement
- Dry circuit measurement in acc. with DIN IEC 512
- Multi-channel applications and open-circuit detection
- Fieldbus interfaces
- Range of accessories
- Calibration laboratory accredited according to ISO 17025 (DAkkS)

BATTERY TEST AND MEASURING MODULES

Measuring modules are essential components for precisely recording and analysing battery parameters. They enable the measurement of various electrical properties such as open circuit voltage (OCV), internal resistance and impedance.





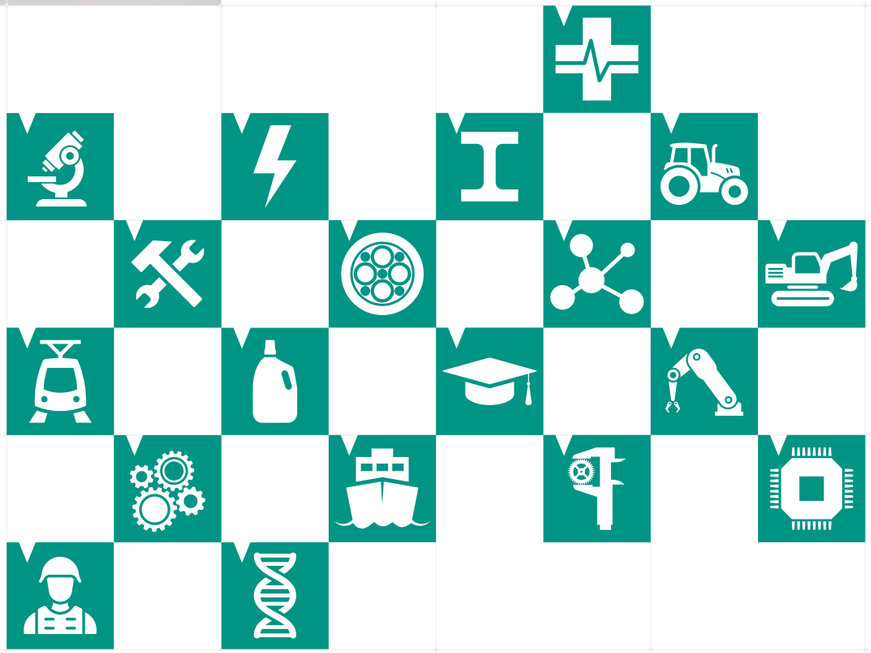


All information about applications and industry solutions can be found online at **burster.com**

APPLICATION EXPERIENCE **AT EXCELLENCE LEVEL**

OUR EXPERTISE FOR CHALLENGES WORLDWIDE

Our extensive experience in the manufacture and sale of measuring sensors and test devices is paired with an in-depth understanding of the needs and measurement tasks of a wide variety of industries. Measurement components and systems from burster are used in numerous industries on all continents. We are trusted by customers in the automotive, drive technology and mechanical engineering sectors, as well as in future markets such as e-mobility, green energy, medical technology, biotech and aerospace. burster has earned its reputation for customer-oriented innovations, wide application experience and comprehensive customer service.



INDUSTRY SECTORS

GROWING TOGETHER
BUILDING SUCCESS

RELIABILITY THROUGH CONTINUITY AND CONSISTENCY

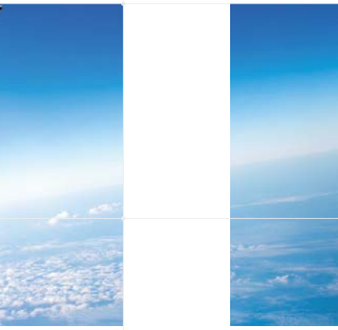
A wide range of industries rely on burster products – our solutions are used in practically every sector of the economy. We are well established in key industries with global relevance – such as automotive, drive technology and mechanical engineering – on which economic growth and future developments depend. Here in particular, products have to withstand harsh production conditions and a rapid pace of innovation. In pursuit of durable and reliable solutions, burster routinely demonstrates a pioneering spirit.

We offer many thousands of customers extremely durable and robust sensors and measuring instruments that are often in industrial use for decades.

Our product portfolio exemplifies continuity and consistency. It has defined market standards over many generations of development. Since the company's foundation, burster has worked closely with these key industries, facilitating progress at every step.

BECAUSE **PROGRESS** **NEEDS** VISION

GLOBAL STANDARDS WITH A CERTAIN FUTURE



Visionary trends and the responsible use of resources will play a key role in the industries of the future. burster products enable adaptable solutions and help these industries – such as aerospace, medical technology and green energy – to meet demands for speed, precision and connectivity. In this way, our research-driven solutions are supporting an energy and mobility transition, and with it the future security of these industries.

Our products are components with global integrability and connectivity that ensure communication capabilities over common interfaces.

This means more efficiency for our customers, and is the basis for international requirements in this age of globalization.

COMPREHENSIVE
CUSTOMER SERVICE

OVER 60 YEARS OF EXPERIENCE AND EXPERTISE AT YOUR SERVICE

As manufacturers of complete measurement solutions and sensor signal processing systems, we aim to offer a comprehensive service to our customers.

Our services. Your advantage. From the start. At every stage.

Our services for you:

Accredited calibration
DAkkS ISO 17025 accredited laboratory for maximum reliability, accuracy, smallest measurement uncertainties and international recognition. Important component of test equipment management under IATF 16949.

FACTORY CALIBRATION CERTIFICATE (WKS)
Compliance with requirements of the automotive, medical technology and aerospace industries for monitoring test and measurement equipment.

TEST AND CALIBRATION CERTIFICATE
For cost-effective, fast and traceable calibration.

SENSOR-AMPLIFIER CALIBRATION
Configuration of measurement systems.

THINK GLOBAL – ACT LOCAL
Service competence at your site, supported by experts at burster HQ.

PHONE SERVICE / VIDEO CALL
Our service team is always happy to help you.

DOWNLOAD SERVICE
All documents available online 24/7.

VIDEO TUTORIALS
You can find lots of helpful tutorials on our YouTube channel.

A **Variohm Group** Company

burster praezisionsmesstechnik gmbh & co kg

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