Smart measurement for secure workflows

sparktrap®

EPA Assessment Tools®

KEINATH Electronic
consulting & equipment

www.sparktrap.com

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Turning ideas into innovation

How our ESD measurement and testing technology was created

What to do when high-tech manufacturing produces the most advanced electronics, but the ESD testers at the workstation still look like they're stuck in the 1990s? At KEINATH Electronic, we asked ourselves this question more than once. In fact, it became the starting point for something bigger: our own series of ESD measurement and testing devices. Developed from practice, for practice with the ambition to truly change the industry.

30 years of experience, daily customer interaction, and clear observations

For almost three decades, we have been committed to professional ESD protection not only as a manufacturer and specialist distributor, but also as a consulting partner for our customers. We support audits, advise on EPA planning and actively contribute to standards committees and industry working groups to push for progress and practical solutions.

"In many highly automated production environments, we encounter testing devices that simply can't keep up technically. They're difficult to operate, impossible to digitalize, and frankly outdated."
– Markus Keinath, KEINATH Electronic

The impulse for change

The realization was clear: measurement technology is a central pillar of every ESD protected area. It must be reliable, easy to understand and technically state-of-the-art. But many existing systems are too complex, too rigid, too analog and therefore no longer compatible with the demands of modern production.

"We didn't just want to optimize, we wanted to flip the concept around. What does a measurement system look like when it's designed from the ground up to meet today's requirements?"
– KEINATH Development Team

From practice, for practice

Together with the experience of customers, partners, and industry experts, our team began developing a new generation of ESD measurement and testing devices. Designed around real work processes and measurably better in daily use. This led to the creation of our **sparktrap EPA Assessment Tools.**

„Many devices in the past were designed solely from the perspective of the standards. We asked: What do people in their workplace and daily environment truly need? What makes an application simple, safe, and reproducible?"
– KEINATH Product Development

Made in Germany – Because quality matters

All products in the series are consistently developed and manufactured at our site in Southern Germany. As an owner-managed family business located in the south of Baden-Württemberg we deliberately rely on short supply chains, local suppliers and responsible production.

„For us, Made in Germany is not a trend, it's a conviction. For our customers, it means transparent processes, high quality standards, first-hand service, and genuine sustainability."
– Markus Keinath

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We don't just talk ESD – we live it
What sets us apart from other providers is our background. We come from the world of ESD protection. Our devices are not created at a desk but through real-world requirements, from customer conversations, audits, trainings, and application testing.

„We test our devices ourselves in real use, with real customers. That's why we know what works and what doesn't.
- ESD expert team KEINATH

Looking ahead
With our series of ESD measurement and testing devices we don't just aim to replace existing systems. Our mission is to help make ESD protection future-proof: reliable, transparent, and technologically aligned with the rest of modern manufacturing.

„If our measurement and testing technology makes a difference in audits, in daily operations, or in quality reports then we've achieved our goal" – KEINATH development team

What began as an idea from a single conversation has steadily grown into a complete product series. Sparktrap EPA Assessment Tools combine technical innovation with practical relevance Made in Germany, developed in the heart of Baden-Württemberg.

And we're far from finished
True progress begins where you don't wait for change, but take it into your own hands.

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Measurement devices engineered for the future

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Innovation made in Baden-Württemberg

Baden-Württemberg a synonym for engineering excellence and innovative precision. In this region rich with tradition our state-of-the-art ESD measurement devices are created, products that embody more than technical perfection. They are a living expression of centuries-old craftsmanship, continuously evolving while preserving the commitment to the highest quality.

The label "Made in Baden-Württemberg" represents far more than a designation of origin. For us, it is a promise of quality. Here, where tradition meets innovation, we manufacture devices that meet the demands of cutting-edge technology while carrying forward the proven values of Swabian engineering.

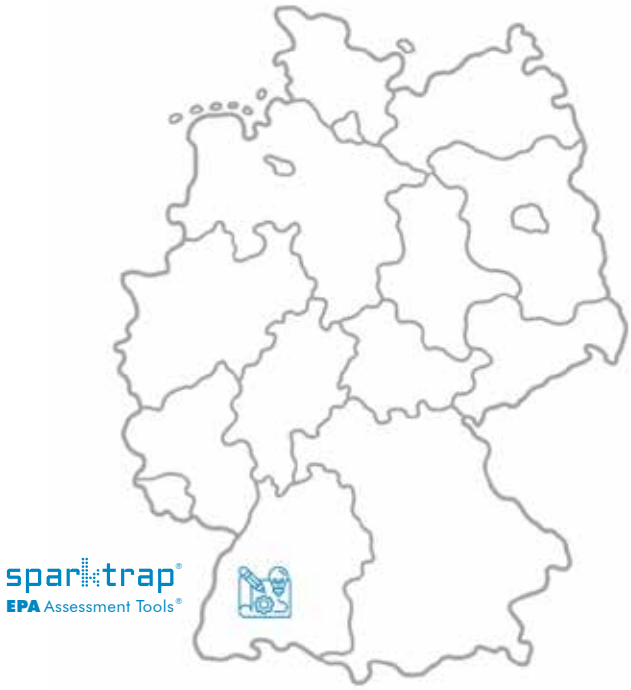
Precision and user-friendliness do not have to be at odds, on the contrary. Our ESD measurement devices prove every day that top technical performance and intuitive operation can work in perfect harmony. Because we understand our customers' reality: in a world where efficiency and productivity are decisive, advanced technology must not be complicated.

That is why we develop devices that not only measure, but inspire. With simplicity in handling and flexibility to adapt to individual requirements.

As a company from Baden-Württemberg we take responsibility for our customers, our region and our planet.

This responsibility is reflected in every aspect of our production from the careful selection of sustainable materials to resource-efficient manufacturing processes.

For us, sustainability is not a marketing buzzword but a lived corporate philosophy. We don't just produce for today. We already think about the world of tomorrow, a world where precision and environmental responsibility go hand-in-hand.



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Smart access control

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EPA GATEKEEPER

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The launch of a smart ESD revolution

Those who know KEINATH know this: From the very beginning, we have dedicated ourselves to channeling our expertise and innovative ideas not only into services and consulting, but also into products of our own design.

This philosophy led to our first bold step into device development back in 2003, a venture that celebrated its spectacular breakthrough in 2019 with the EPA Gatekeeper.

The breakthrough – EPA Gatekeeper revolutionizes ESD personnel testing
2019 marked a turning point in the history of ESD measurement technology. After years of development, we launched the EPA Gatekeeper, a personnel tester that has transformed the industry.

Born out of practical demands for simplified workflows, clear documentation, seamless integration, and future-oriented operation, this device set new standards in ESD testing.

An industry stuck in digital standstill
The situation was paradoxical: while the world around us became increasingly smart and connected, ESD measurement and testing technology remained trapped in the past. An ESD protected area without a personnel tester was unthinkable, yet the devices available on the market belonged to another era. *„We saw devices on the market that had remained unchanged for 20 years," recalls the KEINATH development team. "no displays, no documentation capabilities, no integration into modern IT structures. Digitalization had already reshaped every aspect of life, yet critical ESD personnel testing was still operating as if it were the 1990s".*

Innovation meets usability
The EPA Gatekeeper broke with this tradition and redefined ESD personnel testing. The 7-inch color touch display transformed daily testing from a technical hurdle into an intuitive experience. Self-explanatory pictograms guide employees step by step through the testing process, while the integrated RFID card reader ensures unambiguous identification. Especially revolutionary: the signature HALO light effect, which displays measurement results at a glance, this is what modern personnel testing should look like. A visual innovation that makes the test status instantly recognizable even from a distance and significantly increases acceptance among employees.

The true strength of the EPA Gatekeeper lies in its well-thought-out system architecture. The device requires no additional server software, yet it can be seamlessly integrated into existing IT structures. Measurement data is stored directly on the device, making downtime caused by server issues a thing of the past.

This combination of independence and connectivity makes the EPA Gatekeeper the ideal link between traditional ESD testing and modern quality management systems. Companies gain the flexibility they need to meet their specific requirements.

Future-Proof through continuous innovation
A key advantage of the EPA Gatekeeper is its adaptability. Free updates, which users can easily install themselves, ensure that the device always meets the latest requirements. This update philosophy makes the EPA Gatekeeper a long-term investment that evolves alongside changing standards and technologies.

"We wanted to create a device that adapts to the needs of its users, not the other way around," summarizes the development team. *"The EPA Gatekeeper was our starting point to make the entire field of ESD measurement and testing smart."*

Whoever wants to shape the future of ESD technology must be willing to question established ways of thinking and explore new paths. The EPA Gatekeeper was more than just a product, it was the starting signal for a smart revolution in ESD measurement technology.

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Reliability and safety for your EPA

ESD personnel testing is a fundamental part of every modern manufacturing process and the EPA Gatekeeper sets new standards in this field. This advanced device makes a decisive contribution to optimizing ESD protection within companies, while at the same time making everyday work significantly easier.

USB-host-port

signal LEDs

language selection

glass front with capacitive touch display

stainless steel touch surfaces

solid stainless steel connectors

proximity sensor

RFID card reader

temperature and humidity sensor

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What our device is all about!

- ESD testing according to IEC 61340-5-1
- Digital documentation directly on the device
- No server or client software required, no license fees
- Easy operation with pictogram-based guidance

- Integrated web server function
- Self-networking capability, up to 64 devices form a network automatically
- Synchronization with external databases / MQTT client
- Hands-free mode available

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Power on!

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EPA GATEKEEPER

- HALO-lighting effect
- PoE Power over Ethernet
- Glass front with capacitive touch display
- Intuitive user interface
- No signature list required
- No additional server or client software required
- Onboard web server
- Network functionality
- Smart proximity sensor

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Which Gatekeeper fits your EPA?

Anyone who starts today with the basic version of the EPA Gatekeeper is not investing in a limited solution, but in a future-proof system. If the requirements for the device change, the existing unit can be easily upgraded.

All devices can be upgraded at any time!

EPA Gatekeeper compact
The basic version for digital documentation as a stand-alone device

EPA Gatekeeper compact+
Integrated card reader

EPA Gatekeeper net
Integrated LAN interface

EPA Gatekeeper net+
All functions in one device. LAN interface and integrated card reader

Option to Retrofit
LAN interface and/or RFID card reader

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Network functionality

The EPA Gatekeeper® enables full network operation without additional server software. Up to 64 devices form a self-organizing network without the need for central IT infrastructure. Centrally manageable, flexibly scalable and easy to integrate, independent of IT updates or system environments.

The advantages at a glance:

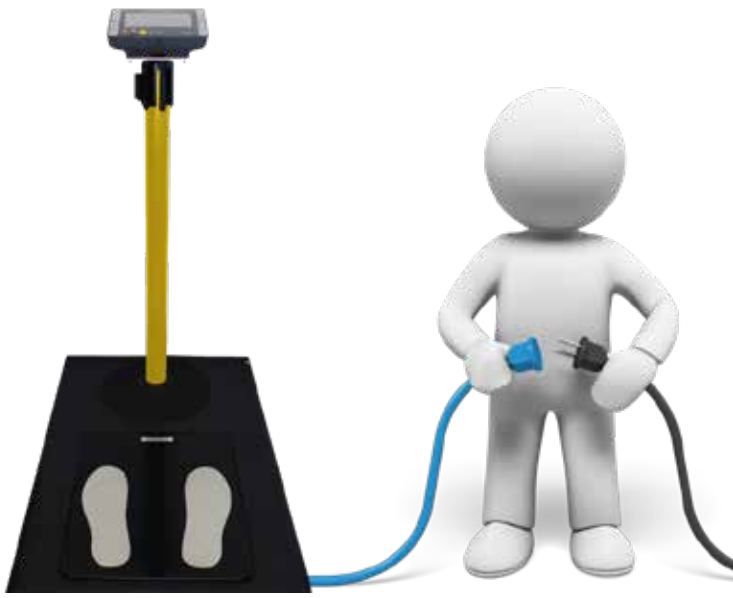
- Up to 64 devices network automatically
- Convenient control of multiple devices from a single point
- Independent of IT infrastructure, no downtime caused by software or system updates
- Decentralized structure ensures high reliability, no single point of failure

Plug & Play instead of effort

The EPA Gatekeeper® was deliberately designed as a smart and connected solution without the need for additional server or client software. That means: no hidden costs, no complex installations, no licensing models.

The advantages at a glance:

- No additional software required. Neither server nor client components needed
- Easy commissioning, plug & play without IT effort
- Cost transparency. No license, maintenance, or update fees
- High user-friendliness, ready to use immediately, intuitive operation
- Future-proof, independent of third-party software or system updates
- Minimal integration effort. Ideal for both existing and new ESD protected areas



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Always ahead: safety that keeps evolving!

At KEINATH, we refer to AddOns as optional software extensions for our EPA Gatekeeper. These AddOns are purpose-built modules that expand the functionality of your existing device, designed not only to meet your requirements but to exceed them.

Our AddOns are easily installed and activated via the USB interface, making the EPA Gatekeeper a truly modular solution.

AddOns at a glance:

High-Security Feature

For the highest IT security requirements. Activates advanced encryption for network communication and data storage (TLS, SSL, SFTP, and https). Ideal for environments with increased protection needs or strict audit requirements.

Anonym-Users Feature

Enables EPA access for employees without an entry in the user database. The test results are documented anonymously but clearly via an ID number. The desired measurement scope is centrally defined through the anonymous user.

Auto User Import Feature

Automatically import user databases from your corporate network. This allows the user databases of multiple devices to be centrally managed and distributed, ideal for large organizations with many users.

Manual User Feature

Employees can also authenticate themselves by manually entering their personnel number on an on-screen keyboard at the device. Especially practical if an employee has forgotten their ID card.

LiveData Feature

For everyone who wants to monitor or automate processes in real time. This AddOn transmits measurement results to your system instantly via MQTT as they are generated. In this way, test results can be displayed, analyzed and, if required, directly integrated into other systems without delay.

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Pictograms explain the measurement

To ensure that every person can enter the ESD protected area without complications, we have deliberately equipped our personnel tester with visual signaling. An integrated explanatory video with self-explanatory pictograms shows step by step how to carry out the measurement correctly. This ensures that even inexperienced users can complete the test safely and in compliance with standards without the need for additional instruction.

The calibration

An annual calibration ensures that your EPA Gatekeeper consistently delivers precise measurement results and complies with all relevant standards. But here lies the common problem: conventional calibration methods require sending the device to specialized laboratories. For ESD personnel testers that are used daily, this means costly downtime and complicated replacement solutions.

Annual Calibration

- The Gatekeeper reminds you when calibration is due
- The Calibrator attaches magnetically to the Gatekeeper
- The device guides you step by step through the calibration process

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Comprehensive solution for your EPA

Anyone seeking maximum safety for their ESD Protected Area (EPA) relies on the combination of ESD personnel testing and controlled access. With the EPA GATEKEEPER® and our high-quality access control systems, you get a well-designed solution:

The daily ESD test is fully documented and access to the EPA is only granted after a successful test

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BUILT TO LAST.

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The world's first ESD Multimeter!

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EPA SAFEASSURE

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KEINATH's journey to the ESD multimeter

After the resounding success, of the EPA Gatekeeper, one thing was clear to the KEINATH development team: the next innovation had to do more than build on this success it had to fundamentally change the entire world of ESD measurement and testing technology. What followed was a multi-year development odyssey that today stands as a milestone in the history of ESD measurement technology.

"*We didn't just want to develop another measuring device,*" recalls the development team. "*Our goal was to revolutionize the fragmented landscape of ESD measurement technology.*" The result of this vision: the world's first ESD Multimeter. A development that not only justifies the claim "KEINATH – Inventors of the ESD Multimeter" but elevates it to a new industry standard. The development followed the proven virtues of German engineering: precision, durability and uncompromising quality. Every component was carefully selected, every circuit optimized, every function meticulously refined. The result is a measuring device that not only carries the label "Made in Germany" but embodies it with pride and technical excellence.

The smart answer to outdated testing methods

For decades, ESD measurement technology suffered from one key problem: multiple specialized devices were needed for different tests, standards had to be interpreted manually and measurement results were documented in cumbersome ways. At a time when production lines were becoming increasingly digitalized and automated, the critical field of ESD protection remained analog and inefficient. *"Industry 4.0 had long since entered the production halls, yet in ESD protection many companies were still working as if it were 20 years ago,"* explains the KEINATH team. *"We saw a huge gap between the technological progress in manufacturing and the outdated methods of ESD monitoring."*

One device, all measurements: The technical revolution

For the first time, the ESD Multimeter combines all relevant ESD measurements in a single, highly integrated device: resistance, field strength, voltage, and discharge time. What once required an arsenal of different measuring instruments is now handled by one compact, intelligent system. But the true innovation lies in digitalization. The device automatically tests according to applicable standards, digitally documents measurement values, and integrates seamlessly into existing quality management systems. Employees no longer need to interpret different standards or manually evaluate limit values – the ESD Multimeter takes over these tasks, reducing human error sources to an absolute minimum.

Asset Tracking, turning documentation chaos into clarity

One of the most revolutionary features of the ESD Multimeter is the integrated Asset Tracking Tool, a system that fundamentally transforms the way ESD measurements are recorded and documented. Using RFID tags, EPA equipment can be uniquely identified and managed, enabling complete traceability of all measurement points and values. "*For us, Asset Tracking was the key to fully digitalizing ESD monitoring,*" explains the development team. "*At last, companies can electronically tag their measurement objects and automatically capture them in the device database, a quantum leap for creating audit-ready ESD control program plans.*" The system provides three decisive advantages: electronic identification via RFID tags eliminates human entry errors, automatic recording in the device's database ensures consistent data management, and sustainable documentation of recurring measurements establishes long-term traceability that meets every audit requirement.

Finally, companies can implement ESD protection that's as smart and connected as their manufacturing operations.

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Discover the Device

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The ultimate all-in-one partner

EPA SafeAssure combines all relevant ESD measurements in a single device for the very first time replacing the need for multiple instruments.

At the technical core of the device operates a powerful high-resistance meter which, in combination with the intelligent field mill, delivers the highest precision across all measurement methods. This fusion of precise hardware and intelligent software turns EPA SafeAssure into a compact yet high-performance measurement center.

Measurement features

Asset-Measurement

The asset measurement function guides you step by step through the testing of your ESD-relevant equipment. It is ideal for regular, structured inspections with complete traceability. Simply select the desired asset from the stored list, whether workstation, floor mat, tool, or test bench and follow the automated measurement sequence with the appropriate parameters.

The advantages:

- Predefined measurement specifications for each asset
- Automated guidance through the testing process
- Accurate recording and documentation
- Complete, audit-proof measurement history
- Making repetitive tests much easier

Laboratory Measurement

The laboratory measurement mode enables direct testing without configuration, ideal for spontaneous checks and immediate evaluations. Simply select the measurement parameters freely and start right away.

The advantages:

- Flexible selection of measurement parameters
- Instant display of measured values
- Option to add a description of the measuring point and setup
- Full test report generation available

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Asset tracking tool

Asset tracking is about recording a wide range of different measurement values for each item. Taken together, these values provide a solid basis for assessing whether the respective production aid complies with applicable ESD standards and can therefore be safely used in the ESD protected area (EPA).

The sequence and type of measurements can be freely defined and documented. This allows the testing process to be standardized and repeated easily and consistently during regular inspections.

This solution ensures clear identification and seamless documentation of all measurement points and measured values. The result: audit-ready ESD control program plans are generated automatically, meeting the highest compliance standards. Where time-consuming manual recording and error-prone paper logs once set the standard, asset tracking now provides precise, traceable, and readily accessible documentation at any time.

- Digital tagging via RFID for unique identification of all assets
- Use of high-quality on-metal RFID tags with maximum adhesive strength
- Automatic data capture with every measurement, no manual input required
- Long-term traceability and complete history of all performed tests
- Fully compatible with all system modules, optimized for modern EPA control processes
- Built for compliance and long-term traceability in testing

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Compliant ESD measurement

Thanks to the integrated evaluation models, you receive a clear statement on standard compliance directly at the measurement site, without time-consuming post-processing or manual interpretation of measurement curves.

Depending on the applicable standard and measurement task, different evaluation models are used. In some cases, simple limit value checks are sufficient, while more complex analyses, such as the walking test, require extensive calculations. Here, EPA SafeAssure automatically ensures standard-compliant evaluation.

EPA SafeAssure automatically compliant with every standard and testing requirement.

The Advantages:

- Instant compliance assessment on site
- No manual evaluation of measurement curves required
- Intelligent long-term monitoring with minimal effort
- Automatic comparison and trend analysis
- Audit-proof documentation

Your plus in precision and compliance
Thanks to automated evaluation and standards-based assessment, EPA SafeAssure ensures that all measurements are reliably documented throughout the entire lifecycle and can be easily reproduced whenever needed.

Standards covered (excerpt):

- Evaluation according to DIN EN IEC 61340-5-1
- High-resistance meter according to DIN EN 61340-2-3
- Walking Test according to DIN EN IEC 61340-4-5
- Charge plate monitor according to DIN EN 61340-4-7
- Flooring measurement according to DIN EN 61340-4-1
- Measurement of clothing according to DIN EN 61340-4-9

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An ESD Measurement Revolution

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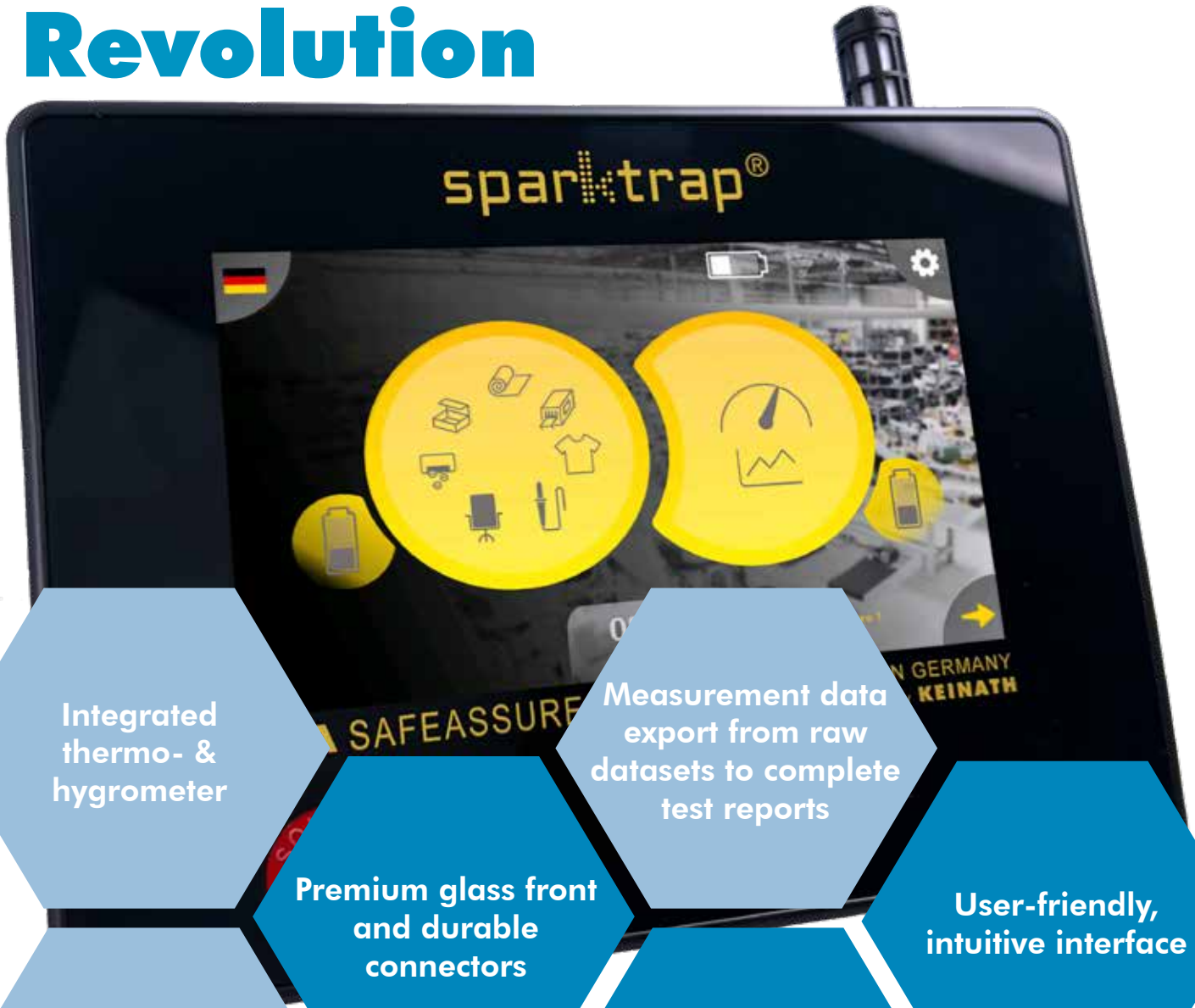

Integrated thermo- & hygrometer

Premium glass front and durable connectors

Measurement data export from raw datasets to complete test reports

User-friendly, intuitive interface

Smart field mill with wireless radio connection, distance sensor and LED light

Asset tracking with on-device documentation

Documentation and evaluation directly in the device, no PC software needed

One device for all ESD measurements

Automated evaluation for full standards compliance

HERGESTELLT IN BADEN-WÜRTTEMBERG

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Feature overview

All testing methods and tools in one device.

Measurement Methods	Previously Used Measurement Systems and Accessories	ESD Multimeter sparktrap EPA SafeAssure
Surface Resistance, Volume Resistance, Resistance to Grounding Point, Resistance to Ground	High-Resistance Meter, Cylindrical Electrode, Ring Electrode, Two-Point Electrode, Hand Electrode, Garment Electrode, Crocodile Clip, Cable Ree	✓
Electrostatic Field	Field Meter Field Mill, Electrostatic Voltmeter	✓
Electrostatic Potential	Field Meter, Field Mill, Electrostatic Voltmeter, Spacer	✓
Walking test	Walking Test Device, Field Meter with Walking Test Kit, Hand Electrode	✓
Charge Decay	Static Discharge Tester, Clamp Electrodes, Sleeve Electrodes	✓
Charge Decay of Ionizers	Charge-Plate-Monitor, Field Mill, Charge-Plate-Set	✓
Temperature and Humidity	Thermo- and Hygrometer	✓

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Documentation and recordings

Automatic on-device documentation.

Measurement Methods	Previously Used Measurement Systems and Accessories	ESD Multimeter sparktrap EPA SafeAssure
Measurement Recording, Measurement Evaluation, Documentation	Pens, Paper	✓ Documentation, Evaluation, Assignment, all in the Device
	AD Converter, Adapter Cable, Converter	
	PC-Software, Data Processing Software, Interfaces	
	Labels, Marking Labels	
	Standards, Limit Value Tables	
	Asset Number Lists	

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Accessories Overview

The smart field mill with measuring head
Thanks to powerful magnets, the field mill attaches securely and stably to the base unit. The wireless radio connection replaces cumbersome cables and enables flexible measurements, even in hard-to-reach areas.

- Wireless radio connection to the device
- Compact display on the field mill
- Integrated laser distance sensor
- Optional LED illumination
- Magnetically attached measuring head
- Wireless charging on the base unit

Modular Electrode Pair
Thanks to the innovative, interchangeable electrode plate, the system adapts to any measurement task in seconds. The powerful magnets in both electrodes and plates ensure a secure hold, even with frequent changes or under demanding operating conditions.

- Electrode pair made of high-quality stainless steel
- Durable Teflon insert
- Cylindrical electrode
- Ring electrodes
- Practical magnetic mounting

Two-Point Electrode
Wherever traditional electrodes reach their limits, the two-point electrode demonstrates its full strength. It enables precise measurements even on the smallest samples.

- Protective sleeve with locking function
- High-quality measuring pins
- Durable and robust conductive rubbers

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Charge Plate Monitor

CPM plates can be securely attached to or removed from the field mill with minimal effort. An integrated spring coil ensures a stable hold.

- CPM 100 and CPM 150
- Plates made of stainless steel
- Designed to mount on the field mill
- Integrated spring coil for secure attachment

Tripod

For stationary operation of the field mill in combination with CPM plates or measuring head, the high-quality stainless steel tripod provides the ideal solution. Two integrated magnets ensure a defined preferred position, allowing the plates to automatically lock into a specific rotational angle.

- High weight for maximum stability
- Reliably holds the field mill in position

Hand Electrode

The high-quality hand electrode impresses with its robust design and durable materials.

- With 4 mm socket
- For walking tests and personnel resistance-to-ground measurements
- Compact design

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Measurement-optimized PTFE hanger & sleeve electrodes
The PTFE clothes hanger was specially developed for standard-compliant testing of suspended ESD garments. Its highly insulating material prevents unwanted interference during measurement. Robust, durable, and easy to clean.

- Extendable arms on both sides for different clothing sizes
- Garment electrodes with integrated elastic band

SafeAssure Case

The custom-fit aluminum case with foam insert and wheels not only provides space for the device but also holds all accessories for a complete all-in-one measurement set. This includes the flexible cable reel, high-quality insulated test leads, and large metal and insulating plates.

Accessories:
EPA SafeAssure comes with an accessory range that combines functionality, durability, and design. Each element is manufactured to the highest standards and perfectly matched to the measurement system:

- Shielded test leads for precise results
- Metal and insulating plates (30 × 30 cm)
- Cable reel with clip for secure fastening to the belt during measurement
- Base for stable, upright positioning of the ESA
- Crocodile clips for flexible applications

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Turning theory into practice

Surface resistance

The DIN EN 61340-2-3 standard defines the test method for determining the dissipative properties of materials. Using the modular electrodes, measurements can be performed with either a cylindrical or ring electrode. This ensures compliance with standards while allowing adaptation to the specific application.

Surface resistance two-point probe

The DIN EN 61340-2-3 standard describes the test method using a two-point electrode to determine the dissipative properties of materials. This method is particularly suitable for small samples, confined areas, or direct measurements within machines and systems.

Volume resistance modular electrodes

The DIN EN 61340-2-3 standard defines the test method for determining the dissipative properties of materials. Thanks to modular electrodes, testing can be carried out using either a cylindrical or a ring electrode.

Resistance to grounding point modular electrodes

The DIN EN 61340-2-3 standard describes the test method using a cylindrical electrode in combination with a grounded metal plate. This procedure is used for standards-compliant qualification and regular verification of the resistance to ground of materials.

Resistance to ground modular electrodes

The IEC TS 61340-5-4 standard describes the test method for regular verification of the dissipative properties and grounding of ESD control elements using a cylindrical electrode and cable reel.

Field strength fieldmill

The DIN EN 61340-5-1 standard defines the measurement method for detecting electrostatic fields. The EPA SafeAssure® uses a precise field mill with wireless radio connection to reliably and standards-compliantly measure electric field strength in the handling area of ESDS.

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Multimeter – Multi-Safe – Multi-Talented

Voltage

The DIN EN 61340-5-1 standard describes the measurement of electrostatic charges on surfaces. The field mill with integrated distance sensor enables precise and reproducible detection directly at the point of use.

Walking test

The DIN EN 61340-4-5 standard describes the measurement of electrostatic charges on personnel using a measuring head on the field mill and a hand electrode. For the evaluation of the footwear–flooring system, a standards-compliant walking test is required.

Decay time measurement of clothing

The test method using a measuring head on the field mill, a clothes hanger, and sleeve electrodes enables a realistic assessment of the ESD performance of garments. It is based on the KEINATH SEM 3000 measurement method, developed to provide reliable and practice-oriented results.

Decay time measurement of packaging

The KEINATH SEM 3000 measurement method, using a measuring head on the field mill and crocodile clips, evaluates the dissipative properties of materials. This is a decisive criterion for qualification for use in electrostatic protected areas (EPAs).

Decay time of ionizers

The DIN EN 61340-4-7 standard specifies the verification of ionizer performance using a charge plate monitor on the field mill. For confined spaces, the smaller version of the plate can be used as an alternative.

Asset tracking

For efficient and complete documentation, the system enables the automatic recording and evaluation of ESD control elements using RFID tags.

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