

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	✓

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	





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



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



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



Turning theory into practice



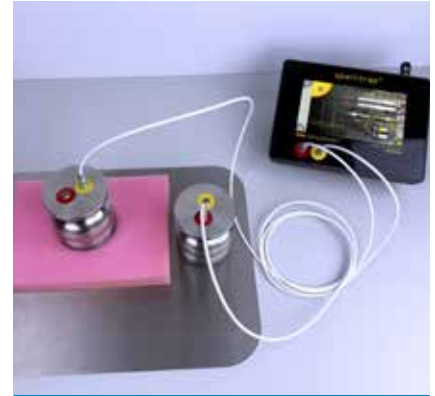
Surface resistance

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

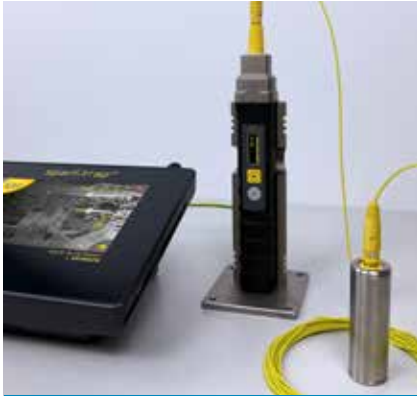
The IEC TS 61340-5-4 standard describes the test method for regular verification of the dissipative properties and grounding of ESD control elements using a cylindrical electrode and cable reel.



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.

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.