

KEINATH Electronic
consulting & equipment

DIE GANZE TECHNOLOGIE
FÜR ESD UND LÖTTECHNIK®



spar:trap®
EPA GATEKEEPER

IN ZUKUNFT ENTSCHEIDET QUALITÄT

spark:trap[®]

EPA Assessment Tools[®]

EPA GATEKEEPER

The most powerful & most comfortable ESD personal tester

Due to digitalization and Industry 4.0, higher requirements are placed on ESD personal grounding testers. The obligatory and daily checking of the personal ESD protection equipment before entering the ESD protected area is an essential part of a consistent ESD protection concept.

To this day, the ESD test is still documented with a signature in many cases. This prepares the ESD representative unnecessary and additional effort by the manual archiving of the lists, at the same time this system is not tamper-proof, and many companies no longer recognize this as a proof of the ESD test.

In order to meet these increasingly complex requirements we have developed the new ESD personal tester, the EPA Gatekeeper[®]. The EPA Gatekeeper[®] is a complete in-house development "Made in Germany".



Made in Germany 

The administration and creation of signature lists belong to the past.

The EPA Gatekeeper not only saves a lot of time for the preparation and administration of the signature lists, but also avoids the unnecessary printing of paper. Even in the basic version without a card reader, the documentation of the measurement results can be carried out in the device. The EPA Gatekeeper offers a digital and future-proof system for the recording of the daily checking of personal ESD protection equipment.

The unique halo light effect.

With the unique halo light effect, the EPA gatekeeper stands out from the crowd. There is nothing comparable from any other manufacturer. The red or green power LEDs on the back of the device provide additional visual indication of the measurement results. This extends the action beyond the screen of the EPA gatekeeper.

Made in Germany.

We were also guided by our conviction "Made in Germany" when planning the EPA gatekeeper. Starting with the development, through the procurement of the individual components, to the production of the EPA gatekeeper, it is our intention to produce everything from our country, the south of Germany.



A development by KEINATH Electronic

High-quality design.

With the EPA Gatekeeper you get a personal grounding tester with a unique design. The EPA Gatekeeper convinces with its capacitive 7" touchscreen and its connections made of solid stainless steel. With the built-in proximity sensor and additional halo light effect, the EPA Gatekeeper stands out with many details.

Full-surface glass front with stainless steel elements.

This is how ESD personal testing works today: Not only the design, but also the finishing of the device with a full-surface glass front and stainless steel elements sets new standards in the field of ESD measurement and testing technology. At the same time, this ensures a long service life, especially for measuring and testing devices that are in daily use.

Simple, self-explanatory and multilingual user interface

The user gets all the information on the screen via simple pictograms and animations. Events are also signaled optically and acoustically. This means that there are no language barriers among the individual users, even visitors and employees from other nations know immediately what to do.

Sensors for proximity, temperature and humidity

By the proximity sensor, the device wakes up automatically when a user moves up. The stand-by mode saves energy and at the same time ensures a long lifetime for the display. Due to the great influence of temperature and humidity on the ESD measurement, these parameters are also monitored by the built-in sensors and archived in the measurement data for each testing.

An elegant installation.

Due to the carefully selected and integrated individual components, the well thought out software and the possibility of power supply via PoE (Power over Ethernet), additional hardware and cabling are no longer necessary. All functions are in one device.

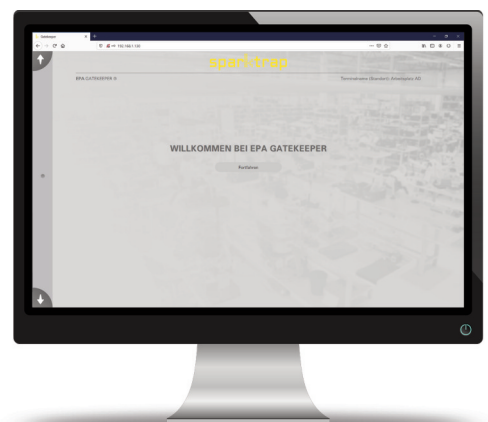
No additional server or client software required

The devices form an independent network and exchange information with each other. The configuration and setting of the gatekeeper can be done on the unit itself or via the web server. The device enables simple establishment in your company due to the Plug & Play idea. Existing table/database programs can be used to evaluate and prepare data.

Synchronization with external databases / MQTT client.

Requirements for real-time data processing are also no problem for the EPA Gatekeeper. Here, the LiveData device variant offers an interface for immediate processing of individual measurement data in external databases.

spark:trap[®]
EPA GATEKEEPER



The different models

EPA GATEKEEPER® compact

The basic version for digital documentation as a stand-alone device, the authentication takes place via a list on the touch display; the measured values are saved locally on the device. The measurement results can be exported using the USB host interface.

EPA GATEKEEPER® compact+

The EPA Gatekeeper compact + also has an integrated card reader. The card reader is used to authenticate the user via employee ID Cards. The built-in card reader reads all common formats.

GATEKEEPER® net

The EPA Gatekeeper net has a LAN interface for the automatic communication of the devices in a network and for management via the web browser. The authentication takes place via a list on the touch display.

EPA GATEKEEPER® net+

The EPA Gatekeeper net+ has a LAN interface and an integrated card reader and thus combines the functions of the compact+ and net versions.

EPA GATEKEEPER® net+/LiveData

The EPA Gatekeeper net+/LiveData has a LAN interface, an integrated card reader and an additional MQTT client, and thus offers the full range of functions of the EPA Gatekeeper.



Wall mounting



Table mounting

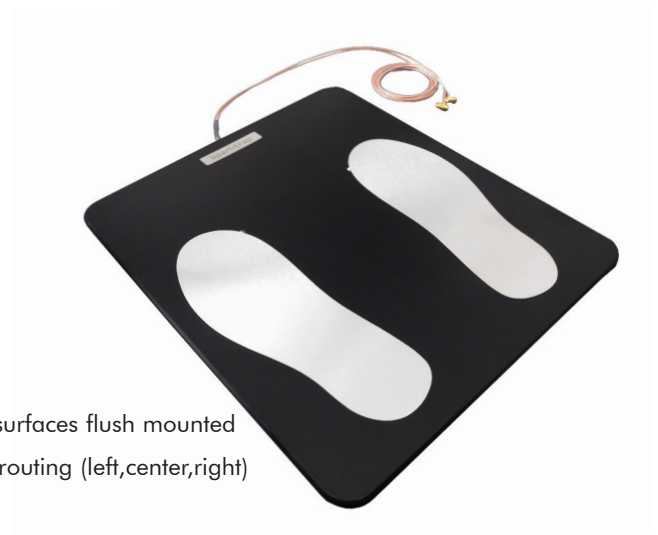


Mounting base

- For flexible use for wall and table mounting
- Hidden cable guide with grommets

Shoe electrode

- Brushed stainless steel contact surfaces flush mounted
- Cable ducts for adapted cable routing (left,center,right)



Technical data

- Test voltage: 30V - 100V, continuously adjustable, a current limitation is permanently given (max. 400 µA)
- Test range: 10kOhm - 1GOhm
- Hands-free mode: Measurement possible without touching the touch surfaces
- Measuring time: < 2 seconds
- Language: German / English, user selectable
- Housing: Flexible plastic housing for wall and table mounting
- Front: Glass front with touch screen, stainless steel connection elements and 2 stainless steel touch plates
- Connecting elements: 3 mm push button, 10 mm push button and 4mm laboratory socket
- Display: Capacitive TFT touchscreen with 7.0" diagonal and a resolution of 800 x 480 pixels and also operable with ESD gloves
- Status display: Optical and acoustic signaling, additionally with "halo light effect"
- Power supply: Plug-in power supply unit, alternatively PoE (Power over Ethernet)
- Connections: Interface to the door opener, USB host interface, LAN interface, 2 x SMA socket for connection of the shoe electrode
- Network operation: Several devices in a larger installation independently form a network, devices in a network automatically exchange measurement data with each other
- Configuration: The configuration of the device can be accessed via a password-protected menu or via the web browser.
- Proximity sensor: For stand-by switching of the display
- Door opener: Door opener time adjustable (0.1-5 seconds)
- Data collection: Personnel number, card ID, name, date/time, scope of measurement, measured values, validity ESD training, temperature, humidity, result of the measurement (individual data can be excluded or hidden)



Application example

EPA GATEKEEPER®

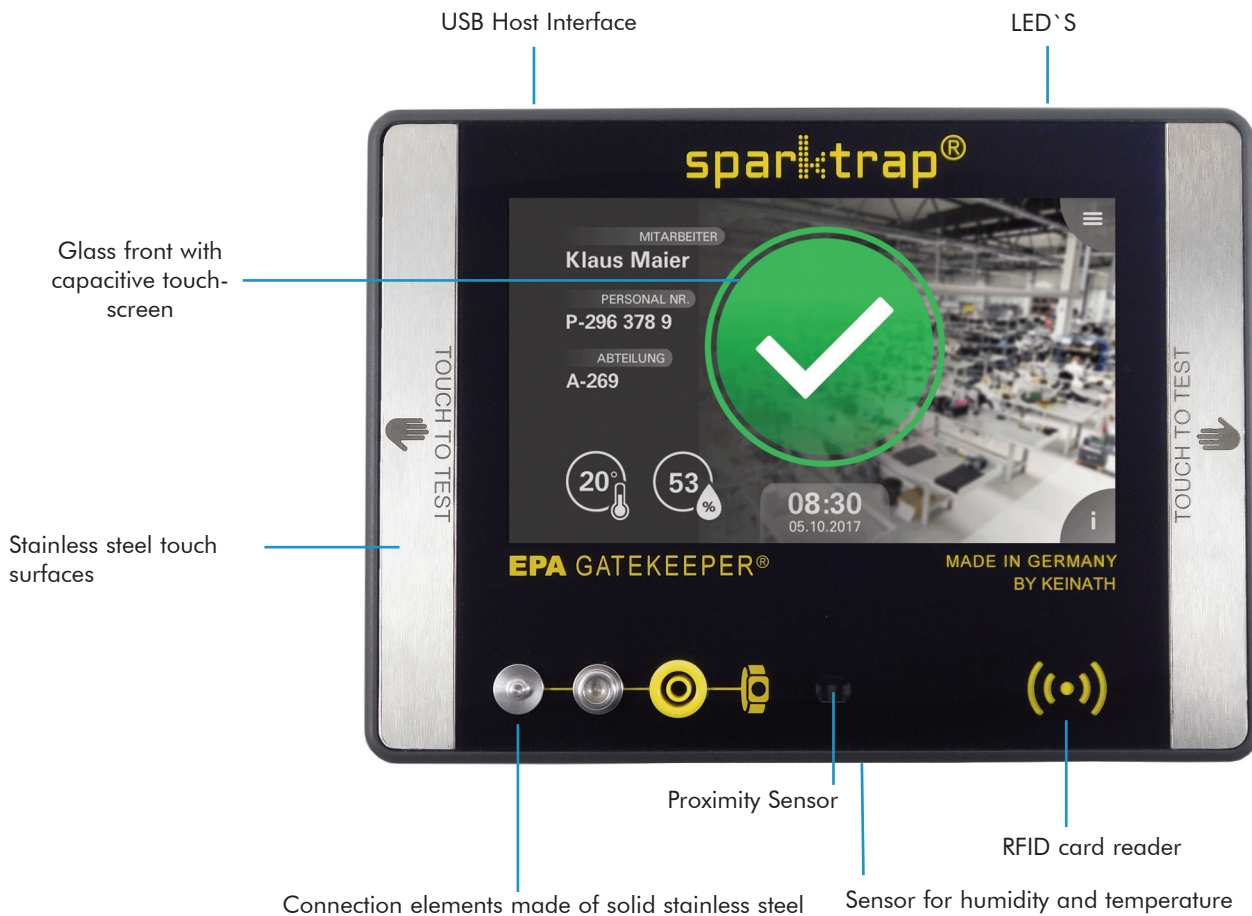
The personal grounding tester EPA Gatekeeper for measuring the personal resistances to ground of wrist strap and shoe grounding systems in different versions for your requirements.

Scope of delivery

EPA Gatekeeper (in the respective version), mounting base, shoe electrode, USB memory device with operating instructions and templates files, plug-in power supply, connection cables

Part number	Description
172-30011-34	EPA GATEKEEPER compact with power adapter and shoe electrode
172-30012-34	EPA GATEKEEPER net with power adapter, shoe electrode and LAN interface
172-30013-34	EPA GATEKEEPER compact+ with power adapter, shoe electrode and RFID Reader
172-30014-34	EPA GATEKEEPER net+ with power adapter, shoe electrode, LAN interface and RFID Reader
172-30015-34	EPA GATEKEEPER® net+/LiveData with power adapter, shoe electrode, LAN interface, RFID Reader and MQTT Client
172-30210-34	Later calibration EPA GATEKEEPER incl. calibration certificate





Stainless steel touch surfaces

The front of the unit is equipped with high-quality stainless steel touch surfaces on both sides. The arrangement of the touch surfaces enables ergonomic operation for left- and right-handed users.

Touching one of the two stainless steel touch surfaces starts the measurement.

Connection elements made of solid stainless steel

The solid stainless steel connections on the front of the device enable the verification of the wrist strap in accordance with current standards. All three connectors are equally connected to each other.

Proximity sensor

The proximity sensor controls the stand-by of the display. The display wakes up automatically when a person moves up the device. If no further measurement is performed the device switches back to stand-by mode.

Glass front with capacitive touch screen

The full-surface glass front with integrated connection elements completes the unique design of the device and the 7" capacitive touchscreen enables simple intuitive operation of the device.

RFID card reader

The built in multifunction card reader reads all common formats. This enables customers to use already existing RFID chips/cards.

The RFID reader always reads the UID as the primary ordinal number.

Adaptations to read out other ordinal numbers are possible on request.

LED's

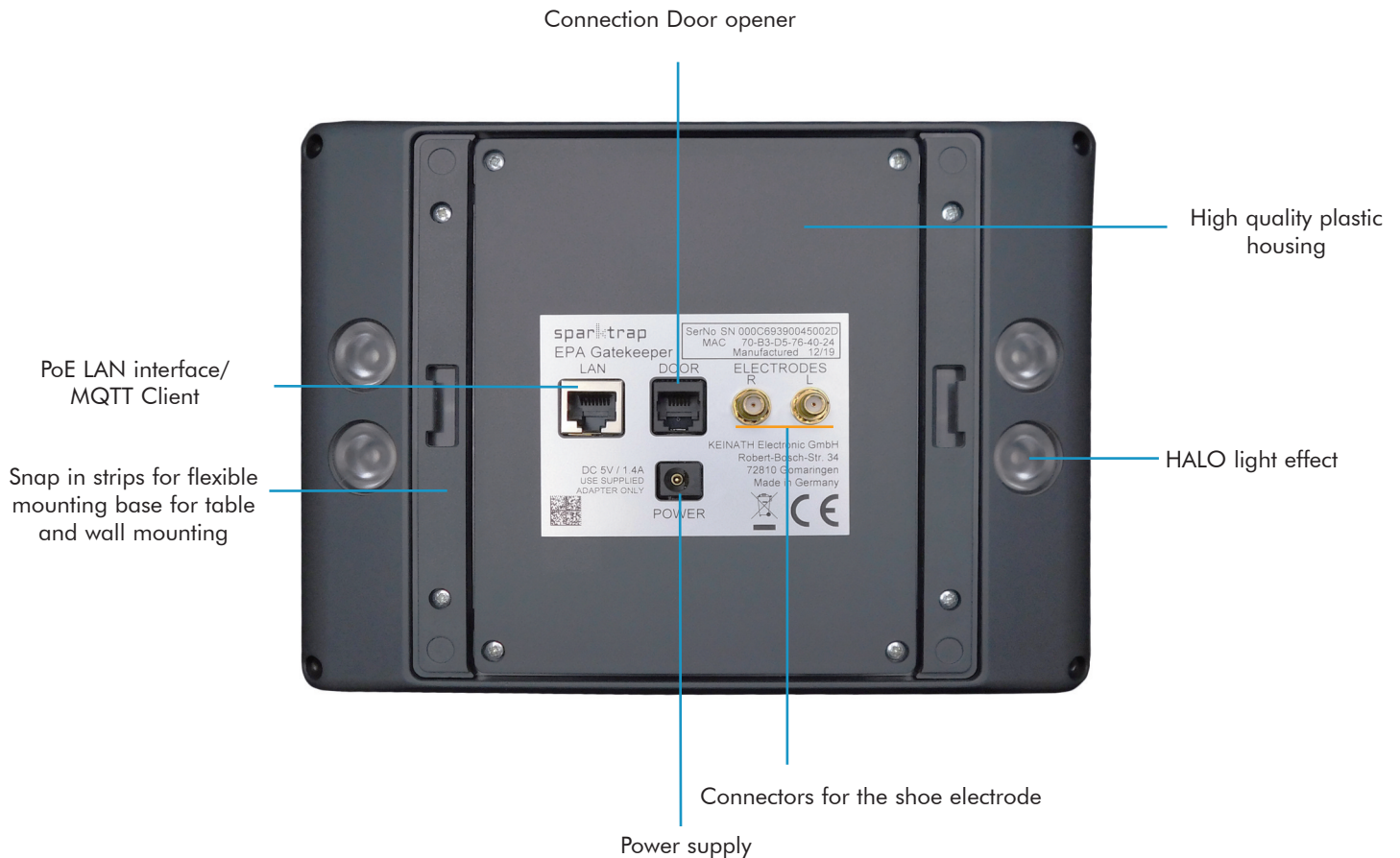
The LEDs on the top of the device indicate both link and activity functions as well as status information of the software.

USB Host interface

The USB interface on the device is used to connect additional HID capable input devices and to load new firmware versions. In the device variants without LAN interface, user and measurement data are also imported and exported via the USB interface.

Sensor for humidity and temperature

The built-in temperature and humidity sensor records the ambient conditions during the measurement. These are documented in the respective measurement data record.



Connection door opener

The door opener connection on the backside has two switching outputs for controlling doors or turnstiles. The release line included in the scope of delivery can be used for this purpose. The switching time can be set manually from 0.1 to 5 seconds. The second switching output for optional control of a further contact can be freely configured.

LAN interface and MQTT client

In the net, net+ and net+/LiveData device variants, the EPA Gatekeeper is equipped with a network interface, which allows data synchronization of the devices and automated storage of measurement results in the network. The individual terminals can also be accessed via a web browser for administrative purposes. In addition, the network interface enables PoE supply of the device.

Devices in the "net+/LiveData" version have the option of sending measured values to an external server, which can receive data from multiple terminals and process them in real time, e.g., to use measured values as parameters for complex access criteria or to operate visualizations. Technical basis for this is the standardized MQTT protocol.

Halo light effect

The power LEDs on the back of the device in red or green provide additional visual signaling of the measurement results. The light is projected onto the mounting surface of the device.

Power supply

The power supply of the EPA Gatekeeper is either via the supplied plug-in power supply unit or in the net, net+ and net+/LiveData versions via PoE.

Connections for the shoe electrode

For the connection of the shoe electrode, high-quality and shielded test leads with SMA connectors are used. For a laterally connection, both the cables and the rear connections on the device are marked accordingly.

High quality plastic housing with snap in strips

The aesthetic housing offers all conditions for a modern operation by the user. The user can decide for himself whether he wants to use the device as a table- or wall mounting. This ensures ergonomically suitable operation.

EPA GATEKEEPER® - Upgrades

Possible upgrades for the EPA GATEKEEPER.

- The different versions can be upgraded at any time



Part number	Description
172-30100-34	later upgrade / LAN-interface
172-30101-34	later upgrade / RFID-card reader
172-30102-34	later upgrade / LAN-interface and RFID-card reader
172-30106-34	later upgrade / LiveData (MQTT Client)

EPA GATEKEEPER® - RFID Tags (optional)

RFID tags for employee authentication at the EPA GATEKEEPER.

- These tags can be used for authentication at the EPA Gatekeeper, if no own tags are available in the company.

Part number	Description
172-30307-34	RFID Tag/ NXP NTAG 213

Other versions, for example in credit card format, are available on request



EPA GATEKEEPER® Calibrator

For easy calibration of the EPA GATEKEEPER in all versions.

- The device adheres via magnets to the touch plate of the personal tester
- For calibration of the resistance measurement and the measuring voltage with only one device
- Calibration process without reconnecting the test leads
- The EPA Gatekeeper guides you through the calibration process
- Automatic calibration for all measuring voltage ranges

Scope of delivery:

EPA Gatekeeper Calibrator, conductive carrying case, operating instructions, connection cables, calibration certificate

Part number	Description
172-30200-34	EPA Gatekeeper Calibrator incl. calibration certificate
172-30211-34	Later calibration incl. calibration certificate

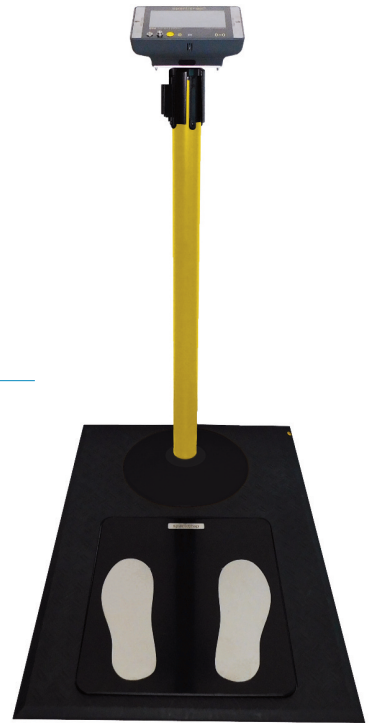


Floor mats & stand for the EPA GATEKEEPER®

For flexible placement of the EPA Gatekeeper in your production area.

- Powder coated steel post tube
- Color: yellow
- Cast iron base plate in black
- Post height: 960 mm, base diameter: 350 mm, weight: 10 kg
- Attachable holder for the EPA Gatekeeper
- Hidden cable routing in the stand with cover grommets
- Floor mat for the shoe electrode 700 x 640mm
- Floor mat for shoe electrode and stand 950 x 650mm

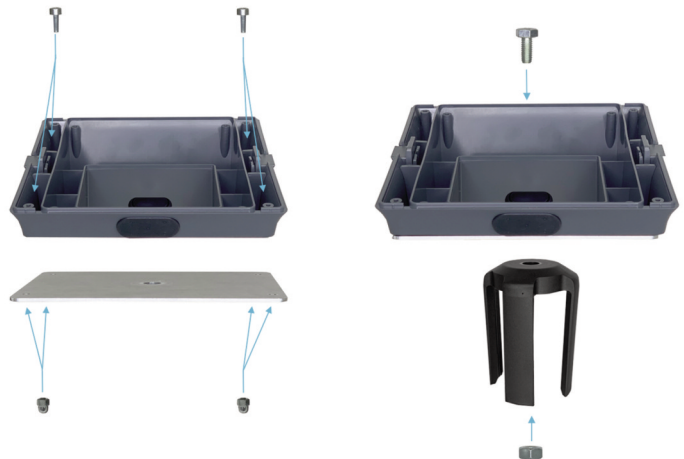
Part number	Description
172-30310-34	Stand with holder incl. grommets and floor mat
172-30303-34	Floor mat for the shoe electrode 700 x 640mm
172-30302-34	Floor mat for shoe electrode and stand 950 x 650mm



Floor mat for shoe electrode



Floor mat for shoe electrode and stand



Mounting plate with claw

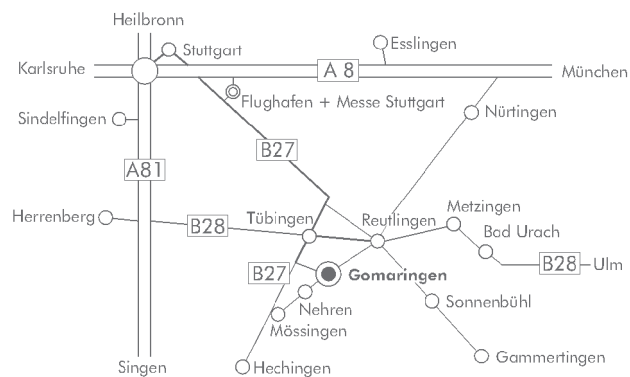
DIE GANZE TECHNOLOGIE FÜR ESD UND LÖTTECHNIK®

Business unit consulting

- Training and certification center for the electronics industry
- Inspection body for ESD & soldering technology
- Material qualification
- EPA planning
- ESD outsourcing
- Calibration laboratory

Business unit equipment

- Measuring and testing equipment for ESD protection
sparktrap® EPA Assessment Tools
- ESD personal tester
sparktrap® EPA Gatekeeper
- Automatic access control and barrier systems for the EPA
- Soldering tin for the electronics industry
KEATIN® & KETIN®
- Authorized distributor for ESD needs
- Premium ESD work wear KETEX®



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