

EPA Gatekeeper® ESD personal grounding tester

The easy way to do ESD testing and documentation
of wrist straps and shoes according to IEC 61340-5-1

The EPA Gatekeeper is used to measure the personal resistance to ground of wrist strap and shoe grounding systems. With the EPA Gatekeeper, creating and managing signature lists and installing additional server or client software belong to the past.

The devices form an independent network and exchange data with each other. The measurement logs are automatically stored at the desired intervals on any storage location in the network (alternatively, they can be read out manually via USB). The required test is defined for each employee and performed by the device (ex. shoes only / wrist strap and shoes). The validity of the test can be set manually from 1-24h hours if required, so that the employee is tested only once per shift.



- PoE (Power over Ethernet) compatible
- Proximity sensor
- Built in sensor for temperature- and humidity
- Built in RFID card reader for all common formats
- Hands-Free mode possible
- USB-Host interface for HID compatible devices (Ex. Barcode scanner)
- Relay output for access control
- Independent monitoring of the calibration date in the device
- Language selection (german/english) on the home screen
- Query of the last ESD training adjustable
- Encrypted communication in the network
- Glass front with stainless steel touch surfaces
- 2 stainless steel touch surfaces for ergonomic operation for left- and right handed users



TECHNICAL INFORMATION

Version: V.1.1

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Optical signaling with „Halo-light effect“

A backlight in red or green, which visually projects the result of a measurement onto the mounting surface, is emitted by power light-emitting diodes.



green signaling with „good“ measurement



red signaling with „failed“ measurement

Front connections:

The connection elements for wrist straps are made of solid stainless steel.

For the wrist strap, there are three connections on the front panel according to the common standards. All three connections are equally connected to each other.



Technical data:

Test voltage:	30V - 100V, continuously adjustable, a current limitation is permanently given (max. 400 μ A)
Test range:	10kOhm – 1GOhm
Measuring time:	< 2 seconds
Connecting elements:	3 mm push button, 10 mm push button and 4mm laboratory socket
Connections:	Interface to the door opener, USB host interface, LAN interface, 2 x SMA socket for connection of the shoe electrode, socket for power supply adapter
Display:	Capacitive TFT touchscreen with 7.0" diagonal and a resolution of 800 x 480 pixels
Power supply:	Plug-in power supply unit, alternatively PoE (Power over Ethernet)
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
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)

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The models:

The EPA Gatekeeper® is available in different models:

- compact
- net
- compact+
- net+
- net+/LiveData

Interface	compact 172-30011-34	net 172-30012-34	compact+ 172-30013-34	net+ 172-30014-34	net+/LiveData 172-30015-34
Door opener	x	x	x	x	x
USB-Host	x	x	x	x	x
LAN		x		x	x
RFID-Reader (Card reader)			x	x	x
MQTT (Real time data transfer)					x

*the different models can be upgraded at any time

Scope of delivery of all models:

- Measuring unit
- Mounting base for wall- and table mounting
- Shoe electrode with cables
- Power supply adapter
- Grounding cable
- Connection cable for the door opener
- USB memory device with system manual and file templates



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User list

With the EPA Gatekeeper signature lists belong to the past.

In the compact and net variants, authentication takes place by selecting a user from a corresponding list.

In the compact+, net+ and net+/LiveData variants, authentication takes place by an integrated multifunction RFID reader (alternatively, for example, by an external barcode reader).

For all variants, a user database must be imported at the start of operation.

This database contains the following data.

	A	B	C	D	E	F	G	H	I	J	K	L
1	Last Name,First Name,Employee ID,User ID,Wrist,Shoes,ESD Instruction Date,Emergency Flag,Access Terminal X,Access Terminal Y,Access Terminal Z											

A set emergency flag allows entry at any time without measurement and is therefore reserved for employees who, for example, provide first aid.

Measurement screen

After successful authentication, the measurement screen appears. The scope of the measurement that the user must successfully complete is defined individually for each user in the database and displayed in the measurement screen.

- Wrist strap
- Shoes
- Or both

If the user hesitates when connecting the required elements, an animation starts that demonstrates the required actions - individually suited to the scope of measurement defined for the user.

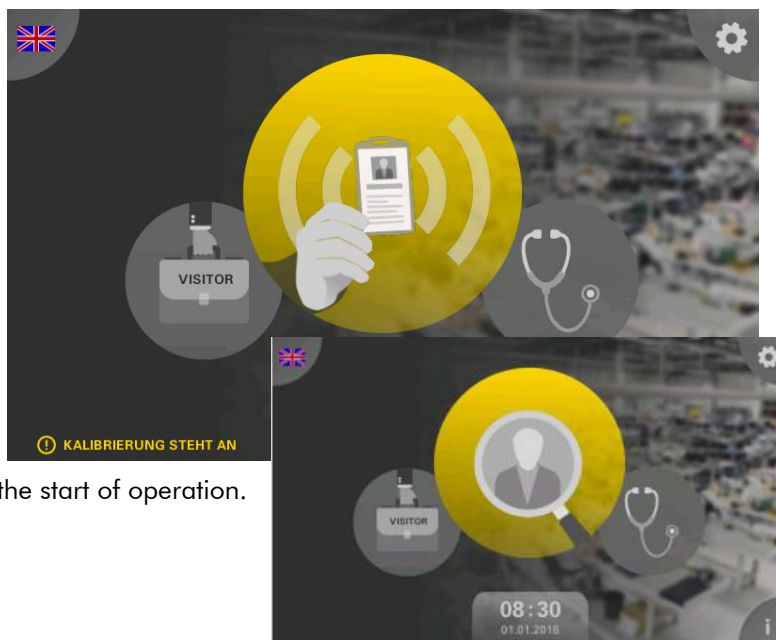
Measurement history

Under the point measurement history an extensive history of the stored measurement values including user, date, time and measurement results is available.

The history can be made anonymous and follows the data protection settings that have been configured.

The device has a memory for up to 250,000 measured values.

It can be selected whether all entries are displayed or only failed measurements.



MEASUREMENT LOG						<input checked="" type="radio"/> all	<input type="radio"/> Failed tests only
Last Name	Employee ID	Date	Shoe L	Shoe R	Wrist Result		
First Name	Terminal	Time					
Maier	473246895265	01.01.2018	5.0	0.54			
Klaus	75325785	08:00	100	OK			
Maier	473246895265	01.01.2018	5.0	0.54			
Klaus	75325785	08:00	100	OK			
Maier	473246895265	01.01.2018	5.0	0.54			
Klaus	75325785	08:00	100	OK			
Maier	473246895265	01.01.2018	5.0	0.54			
Klaus	75325785	08:00	100	OK			
Maier	473246895265	01.01.2018	5.0	0.54			
Klaus	75325785	08:00	100	OK			
Maier	473246895265	01.01.2018	5.0	0.54			
Klaus	75325785	08:00	100	OK			

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Asseccories

EPA GATEKEEPER® Calibrator 172-30200-34

For easy calibration of the EPA Gatekeeper in all models.
With the calibrator, the calibration of the EPA Gatekeeper can be performed on site, without interfering with operations.



During the calibration process, the calibrator is attached to the right sensor plate of the EPA Gatekeeper with the magnet on the back.

Stand with holder with hidden cable guide 172-30310-34

Consists of:

- Belt barrier post / yellow
- Belt cassette empty (Dummy)
- Claw for mounting plate
- Mounting plate for the stand
- Floor mat for shoe electrode and stand
- incl. grommets



Floor mat for shoe electrode and stand 172-30302-34

Floor mat for shoe electrode 172-30303-34



The content in this technical information intends as a guideline. The content bases on extensive research. A legal obligation can not be derived from this.