

EPAMAT OPEN-GATE non-contact and mobile



EPAMAT OPEN-Gate made of stainless steel equipped with floor panel is especially suited to isolate people at highly frequented ESD passways.

The 2-barred turnstile is always set at open position –means free access. Does a person pass the turnstile without admission e.g. because of a lack of ESD protection or an invalid card (when using card readers) the turnstile will move into the position "closed". The access is blocked.

EPAMAT OPEN-GATE with detachable carry handels is completely mounted at a floor panel

Dimensions: 1400 x 1700 x 1193 mm
(width x depth x height)

Weight: approx. 210 kg

Order No: 80.951.00

Requirements of access:

- card reader (is provided by the operator) recognizes access admission
- inspection of ESD-shoes was accomplished successfully
- access light barrier is disconnected

Basic position:

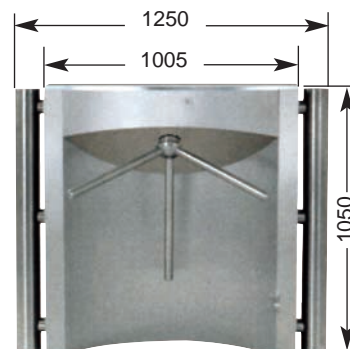
- turnstile is open
- flashing red LED-light at the entrance
- exit is always permitted out of the protected area

Access permitted:

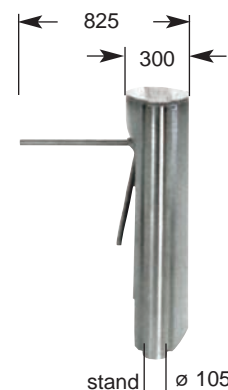
- person leads the personal access card through the card reader
- card reader recognizes the access authorization
- person positions onto the shoe-inspecting electrode with both feet - ESD-shoe test works contact-free
- LED at the turnstile changes from red into green and signalizes the access authorization
- turnstile remains deblocked until the person passed it

Access blocked because of:

- invalid card or attempt of access without the card (only when using card readers)
- inadequately ESD-protection



Dimensions of turnstile in mm



Optional with surmounting guard: In an attempt of surmounting or crawling underneath the turnstile an acoustic alarm occurs.

Automatic, non-contact access control suitable for ESD shoes and safety wrist bands (fully electrical)

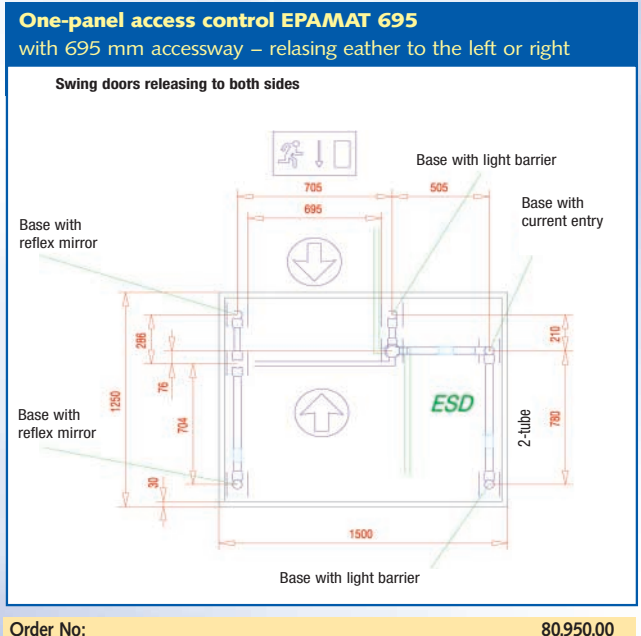
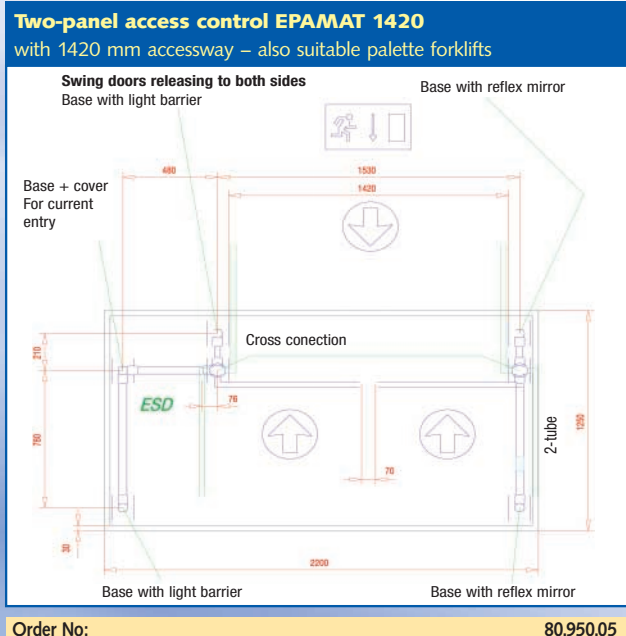
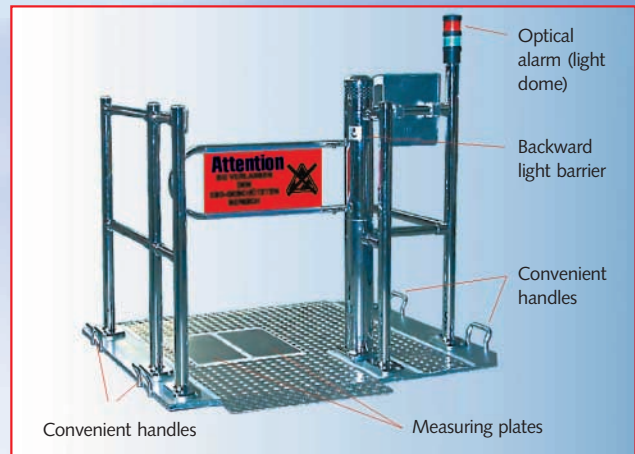


- **two plates provide automatic measuring – contact-free**
Transported objects don't have to be put aside by the entering person to make the EPA test. This saves time and space to guarantee a comfortable and reliable access control.
- **Mobile Design**
When displacing EPA protection zones the access control can be transported easily.
- **Consistent check-up**
Means employees with defective shoes and/or wrist bands including coil cords are not admitted to pass into ESD protection zones.
- **Acoustic signal and/or optical alarm through the built-in light dome**
red = defective shoes (access not allowed)
green shoes OK (barrier opens)
- **Swinging panels either 1-wing (opening to the left or to the right) or 2-wing swing panel**

The new generation of access control systems works "without any direct contact". If the front light barrier is passed, an impulse is set off, which activates the HSP 400 measuring device and the control unit. A new measurement process determines the bleeder resistor of the ESD shoes and provides automatic access to the ESD protection zone. (EPA – Electrostatic Protected Area). This works by measuring the series connexion of ESD shoes and the human body via two separated measuring plates. If required a measurement can also be made by pressing a key (IEC), in which the measurement is made in accordance with IEC 61340-5-1/5-2 additionally.



Surfaces are high glossy chrome-plated





ESD personnel grounding tester

Suitable for table and wall mounting according to EN 61340-5-1/5-2

The HSP 400 enables to recognize a failure of ESD and/or wrist straps and including grounding cords. Additionally an access control with integrated door opening function can be carried out.

Technical data:

- Test range: : 750 kOhm ... 35 MOhm
wrist strap/coil cord
50 kOhm ... 100 MOhm
shoes
- Test voltage: 30 V ... 100 V (adjustable)
- Operation: external power supply 230 V AC
- Signal: visible (LED) and audible
- Interface: RS 232



The device can be adjusted onto two control modes via an interior DIP switch. Single test (wrist strap or shoe test) and a combined test (wrist strap and shoe test). The instrument is controlled by a micro controller, for which the parameters can be set from a PC via internal accessible RS 232 interface. This is how the limiting test values and some time periods can be adjusted. The alignment of the resistor determination is also accomplished via this interface.

Order No: Supplied with

80.900.00 test instrument HSP 400, external power supply, shoe testing electrode, calibration certificate

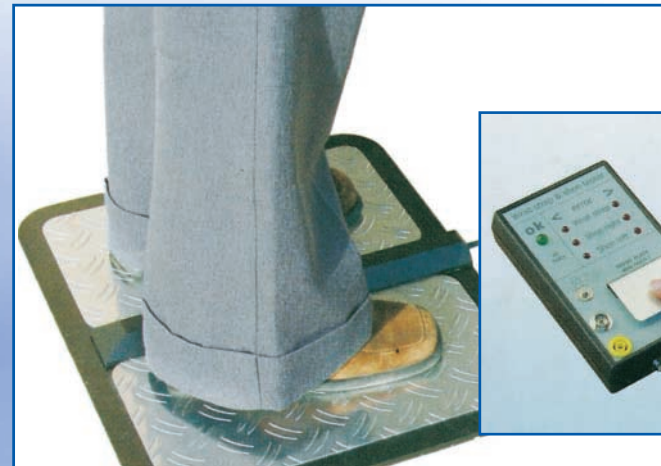
ESD test station WST 100

The functional tests of wrist straps and ESD shoes

- either combined testing of wrist strap and ESD shoes (separated measuring of right and left shoe) at only one keystroke
- Or only testing the wrist strap without testing the shoe
- Or only testing the shoe (separated measuring of right and left shoe)
- Statistic failure memory can be read out via PC
- The limiting values for the tests can be individually adjusted

Technical data:

- Dimensions: WST 100 : approx. 150 x 88 x 35 mm
Shoe electrode: approx.. 460 x 400 x 20 mm
- Power supply: 4 x Mignon Alkaline in the device
Optional : plug power 6 V 100 mA over a shoe electrode with a 4 Mignon accumulator NiMH
- Air gap switch: floating shutter 60 V / 2 A
- Measuring principle: current voltage measuring method therefore constant measuring voltage
- Measuring voltage: 20 V \pm 5 %
- Connection: all connections over 9-pole sub D jack
- Limiting value: limiting values are adjustable separately for the strap test and the shoe test via calibrated resistors



Order No: Supplied with

- 80.406.05 WST 100 without shoe testing electrode
test range: 750 kOhm .. 10 MOhm test of wrist straps
750 kOhm .. 35 MOhm test of shoes
PC-interface incl., statistic failure memory, 4 batteries, calibration certificate
- 80.406.10 WST 100 with shoe testing electrode like order no. 80.406.05, but with divided shoe testing electrode
- 80.406.15 PC software
For reading out statistic failure memory, including 9-pole connecting cable
WST 100 wall holder
- 80.406.20 Plug power unit
- 80.406.25 Calibrate resistors
Two calibrated resistors inside the sub-D plug
Lower limit: 750 kOhm
Upper limit: 10 MOhm
- 80.406.30 Calibrate resistors
Two calibrated resistors inside the sub-D plug
Lower limit: 750 kOhm
Upper limit: 35 MOhm



METRISO 2000

Digital high resistance meter

- Suitable for resistance to ground, volume and surface resistance measurements according to DIN EN 61340-5-1, DIN EN 61340-4-1 and DIN EN 61340-2-3 (VDE 0300, part 5-1/2-3, VDE 0303, part 83)
- Integrated data logger with infrared communication port for data transmission (2500 test values)
- Suitable for measurements of person-shoe-ground-resistance according to DIN EN 61340-4-5
- Clip-on humidity and temperature sensor



Test range: Resistance $10^3 - 10^{12}$ Ohm
 Temperature -10°C to $+50^{\circ}\text{C}$
 Humidity 10% to 90%

Test voltage: DC 10V, 100V, 250V, 500V

Operation: Battery and rechargeable battery operated

House Sizing: 140 x 50 x 270 mm (W x H x D)

Weight: 1120 g

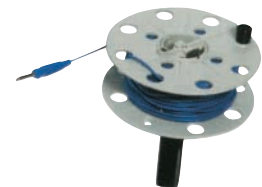
Order No:	Supplied with
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80.467.00	high resistance meter METRISO 2000, USB adapter, clip-on temperature and humidity adapter, communication software, connecting cables, 1 hand probe according to EN 61340-4-5, ESD carrying transportation case, connecting cables calibration certificate, user's instructions
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80.467.03	METRISO 2000 (single device) including: 1 high resistance meter METRISO 2000, connecting cables, certificate of calibration
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Accessories for METRISO 2000:

80.467.07	battery charger METRISO 2000
80.467.08	substitute connecting cables (2 pcs.)
80.467.09	50 m extension cable reel, with handle for floor measurements



Probe suitable for resistance to ground and surface resistance measurements

- Conductive contact rubber ($R < 20$ Ohm)
- Total resistance of probe $R < 150$ Ohm
- Diameter: 63,5 mm
- Weight: 2,27 kg

Order No: 80.466.03



Ring probe for surface resistance and volume measurements

- Conductive contact rubber ($R < 50$ Ohm)
- Diameter: 65 mm x height 120 mm
- Weight: 2,5 kg +/- 0,1kg
- Supplied with carrying case and coaxial cable

Order No: 80.466.04



Charged-Plate Monitor CPM 374

- for measuring the air ionizers efficiency and offset-voltage determines the time of discharge from a predetermined threshold value to a lower voltage value (standard +/- 1000 V to +/- 100 V).
- Measuring of the voltage potential via an integrated plate electrode (150 x 150 mm) using an embedded electrostatic field-metre
- storage of measuring data in the CPM.
- Serial interface for transferring measuring data to PC and for controlling

Dimensions: 152 x 152 x 152 mm (W x H x D)

Order No: supplied with

80.800.05 Charged-plate monitor, wall power supply, Ground cord, conductive carrying case, software, calibration certificate, handbook (German / English)

Electrostatic field-metre EFM 022 - CPS

- handy instrument detects and measures offset-voltage and ionizers efficiency
- Determines the time of discharge from +/- 1000 V to +/- 100 V.
- Measuring of voltage potentials via a plate electrode (75 x 150 mm) which can be attached onto the EFM 022.
- suitable measurements inside machines

Dimensions: 152 x 125 x 75 mm (W x H x D) including stand

Order No: supplied with

80.800.01 EFM 022 – CPS, carrying case, high voltage generator + / - 1200 V, stand, charging plate, ground cord, plug charging set for 9 V accumulators, additional 9 V accumulator, handbook (German/English), calibration certificate

Backfitting with the charged-plate set of electrostatic field-metres EFM 022 is possible on demand. (Assimilation of the software is necessarily enforced.)



EFM 022 electrofield-metre

The electrostatic field-metre is very operator-friendly due to its compact construction and its one-key-operation. The antistatic plastic housing is compatible with EPA. With menu-controlled preselection of the measurement distance, i.e. voltage potentials on the measuring object can be determined directly due to preselection of the measurement distance so that difficult and time-consuming conversions are no longer necessary. There are five measuring distances which facilitate optimal usage of the device even in problematic measuring ranges.

Measuring ranges:

Distance 1 cm = 0 ... 10 kV
 Distance 2 cm = 0 ... 20 kV
 Distance 5 cm = 0 ... 50 kV
 Distance 10 cm = 0 ... 100 kV
 Distance 20 cm = 0 ... 200 kV

Technical Data:

- Dimension: 122 x 70 x 26 mm
- Weight: approx. 130 g (without battery)
- Power supply: 9 V alkaline compound battery
- Display: 2-line alphanumeric LCD-display each with 12 digits

HOLD-Function: the measuring value can be frozen on the display, so that you can even measure at places with difficult accessibility.

Order No: supplied with

80.800.00 EFM 022 electrostatic field-metre with 9 V alkaline compound battery storage bag, ground cord, 2 measuring distance holders.

Order No: supplied with

80.800.95 Optionally available accessories: ESD-stand-by case with conductive foam insert, 9 V-NiMH-compound accumulator, plug charging set, ground helix cord and tapping clip.