

Networkable ESD Personnel Grounding Control System

Enhanced Safety and Convenience
for Your ESD Protection Zones





EPApro[®] – The System

The innovative EPApro[®] end-to-end solution for your ESD protected working areas combines a user-friendly precision hardware with a forward-looking software solution designed for the measurement of your ESD safety equipment as well as the comfortable and standard-compliant documentation and central management of the collected data. Multifunctional EPApro[®] interfaces and switch outputs allow for a simple integration in the existing infrastructure of your company. With the browser-based user interface, the system is always up-to-date without additional work and costs.

Advantages

- Quick measurement, extensive measuring options with short test time
- User-friendly, simple handling
- Standard-compliant testing in compliance with DIN EN ISO 61340-5-1 and ANSI ESD S20.20
- Intuitive user interface with clear display of the results
- Suitable for the use in access control systems
- Simple, menu-driven calibration on-site
- Adjustable measuring voltage and configurable thresholds
- Compliant with all usual standards
- Data logging in compliance with GDPR
- Suitable for cross-location networking via LAN or WLAN
- Simple data handling and secure archiving on a central server
- Vast report functions
- Simple backup functions allow retrieving backup files with Single Click at any time
- Automated data exchange with other programs
- Centralized device firmware update from Control Server
- No client software required, server installation via VM (Virtual Machine) or via DEB package
- Simple update function and maintenance via the EPApro[®] portal
- The range of functions can be expanded with optionally available additional modules

EPApro[®] – The Components

EPApro[®] ESD-Personnel-Tester 1000

The EPApro[®] 1000 is a compact measuring device to verify the personnel grounding and fulfills the requirements of DIN EN ISO 61340-5-1, ANSI ESD S20.20 and GDPR (general data protection regulation). Programmable switch outputs allow using it as access control.

A privacy mode offers the possibility to log and display the measurement without names.

The measurements are logged in accordance with the standards on the EPApro[®] 1000 device and stored in compliance with the GDPR. Measurement data can be accessed over the network or maintained locally on the device when using the Stand-Alone function.



EPApro[®] Control Server Software

The EPApro[®] Control Server software allows for a central management across locations of the measurement, device and employee data collected by the ESD personnel testers and transmitted to the EPApro[®] Control Server by means of the company network. All data is stored in a central database directly on your company server in compliance with the GDPR.

It is possible to configure the EPApro[®] 1000 devices centrally via the EPApro[®] Control Server. Modifications of the device parameters are automatically synchronized with the server.

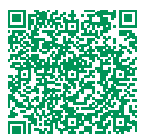


EPApro[®] Support

In addition to our employees who supply you with detailed advice and instruction on site, our EPApro[®] support provides you with advice and assistance. It is possible to calibrate EPApro[®] 1000 devices directly on site by using an optionally available menu-driven calibration unit. A return to the factory is thus not necessary. Update packs will be regularly available for download in the EPApro[®] portal.



Comprehensive information about the entire EPApro[®] program can also be found on our website www.dpv-elektronik.de/EPA-pro



EPApro[®] Personnel Tester 1000



EPApro[®] 1000 at a Glance

- Simultaneous measurement of shoes and wrist-straps with short test time < 2 seconds
- Comfortable guest function e. g. for changing visitors
- Measurement of single shoe or in series as well as hands-free mode
- Adjustable measuring voltage with individual voltage reduction for sensitive persons
- Configurable thresholds
- Person identification with integrated Multi RFID reader
- Compliant with all usual standards, existent ID cards can still be used
- Access release / barrier controllable via configurable switch outputs
- Suitable for personnel access control systems
- Documentation of the measured values
- Intuitive user interface with clear display of the results
- Privacy mode: display mode without showing personal data
- Password-protected access for administrators and managers
- Standard-compliant testing in compliance with DIN EN ISO 61340-5-1 and ANSI ESD S20.20
- Data logging in compliance with GDPR
- Menu-driven calibration mode for simple calibration on site (returning the device for calibration is not necessary)
- Connectable via LAN or optionally WLAN adapter
- Languages: German and English (GB)

Technical Description

Display and Operation

Display and operation are done via a 7-inch HD color touch display. The access for managers and administrators to the menus and parameters is protected by password.

When using the optional EPApro[®] Control Server software, it is possible to configure the networked EPApro[®] 1000 devices centrally with the software.



Measurements

The measurements are made quickly and precisely within < 2 seconds. This avoids delays or long waiting times at the entrance.



Shoes and wriststraps can be tested simultaneously. Configurable measuring voltage and thresholds enable optimal adaptation to your requirements.

The reduction of the measuring voltage to 35 V for sensitive persons is adjustable for the respective employee.

The measurement of the resistance comprises a test of the shoes, wriststraps or ESD coats (measurement of the ESD coats if they are used for primary personnel grounding, see standard).

There are several special functions like e.g. hands-free measurement (serial measurement of the shoes), variable measuring intervals, etc.

The measured data are stored in the database integrated in the device. After the measurement, the employee obtains immediately a feedback on the screen.

Guest Function

In case of visitor and guest cards, it is possible to enter the names directly on the device without any further administrative expense.

Multi RFID-Reader

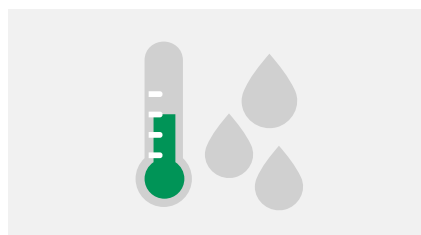
An integrated Multi RFID reader is compatible with the usual RFID standards and enables the identification of the person and the personal logging of the measurement.

Using existing RFID cards is possible. It is optionally also possible to use other readers via the USB port e. g. barcode reader, etc.



Temperature and Humidity Sensor

The integrated temperature and humidity sensor captures the ambient conditions at the time of measurement and logs these together with the measured values in the internal database.



Control

The EPApro[®] 1000 has a powerful multicore and graphics processor to control the measurements and the touch user interface.

Integrated Calibration Function

The EPApro[®] 1000 has an integrated menu-driven calibration mode.

It is possible to connect an optionally available calibration unit to the calibration input of the device.



Thanks to this feature, it is not necessary to return the device for calibration. When using EPApro[®] Control Server software, the calibration data is additionally stored on the server.

Connection with EPApro[®] Control Server

The EPApro[®] 1000 device can be connected as a single device (Stand Alone) or via the company network with the optionally available EPApro[®] Control Server software, even across locations.

The EPApro[®] Control Server offers the advantage of being able to manage the EPApro[®] 1000 devices centrally and to store all data in a central database.



EPApro[®] 1000 – Structure and Technical Data

7-inch HD color touch display
for an intuitive operation on the console

Integrated multi RFID reader
compliant to all usual RFID standards

Connections
1 x snap connection 10 mm
2 x banana jack
(other connections possible with adapter)

Integrated T/RH sensor
for temperature and humidity measurement

Network, LAN and Ethernet connection
Customer system, database server, computer, WLAN via USB antenna

Configurable switch output
for signal lights, turnstiles / door release

USB connection
for e.g. keypad, magnetic card reader, barcode reader or USB antenna

Contact plate

Outputs and connections

- Integrated multi RFID reader reads all usual standards
- 2 x USB ports for external HID readers
- Two configurable potential-free switch outputs
- Connection for footwear electrode
- GBit Ethernet/LAN, optionally WLAN via a USB antenna
- Input for calibration

By means of the programmable switch outputs, it is possible to control door closers or the release of access systems.

Switch outputs: max 2 x PhotoMOS relays (24 V / 2 A resistive load)

Voltage / power	6 W (9 V/DC) (power supply unit 100 – 230 V/AC)	
Operating conditions	+ 10 bis 40° C / bis 75% up to 75% relative humidity	
Test time	< 2 seconds	
Device: dimensions / weight	265 x 180 x 100 mm / 1 kg	
Footwear electrode: dimensions / weight	500 x 350 x 8 mm / 2,6 kg	
Test voltage	Selectable: 100 V / 50 V / 30 V/DC (tolerance ±5%)	
Test	Measuring range – upper thresholds	Measuring range – lower thresholds
Wriststrap	1 MΩ – 200 MΩ	none / 100 kΩ / 750 kΩ / 1000 kΩ
Footwear worn against metal plate (value per shoe)	1 MΩ – 200 MΩ	none / 100 kΩ / 750 kΩ / 1000 kΩ
Footwear measurement in series (hands-free)	1 MΩ – 200 MΩ	none / 100 kΩ / 750 kΩ / 1000 kΩ

EPApro[®] 1000 – Versions and Accessories

1 EPApro[®] Personnel Tester 1000

with 7-inch HD color touch display and integrated multi RFID reader

Scope of delivery:

- EPApro[®] Personnel Tester 1000
- Footwear electrode (fig. 7)
- Power supply unit
- User's guide
- Factory calibration certificate



1 a) Wall-mounted unit

Article no.: EPApro.1000.2W

1 b) Tabletop unit

Article no.: EPApro.1000

2 ID card high frequency

PU = 5 pieces, printable

Article no.: EPApro.1001.ID.HF



2 ID card low frequency

PU = 5 pieces, printable

Article no.: EPApro.1001.ID.LF

3 EPApro[®] calibration unit 1000

Including calibration certificate

Article no.: EPApro.1001.CU

4 EPApro[®] WLAN adapter

Connection via USB (150 Mbit/s)

Article no.: EPApro.1001.WL1

5 Pedestal Set for EPApro[®] 1000

consisting of / scope of delivery:

- Pedestal
- Support for EPApro
- Floor mat

Article no.: EPApro.1001.ZSF.SET



6 Test mat for EPApro[®] 1000

(footwear electrode separately available)

Article no.: EPApro.1001.ZPM

7 Footwear Electrode for EPApro[®]

(included in the scope of deliver of item 1 EPApro[®] Personnel Tester 1000)

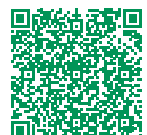
Article no.: EPApro.1001.SE

8 Divider for footwear electrode

for screwing

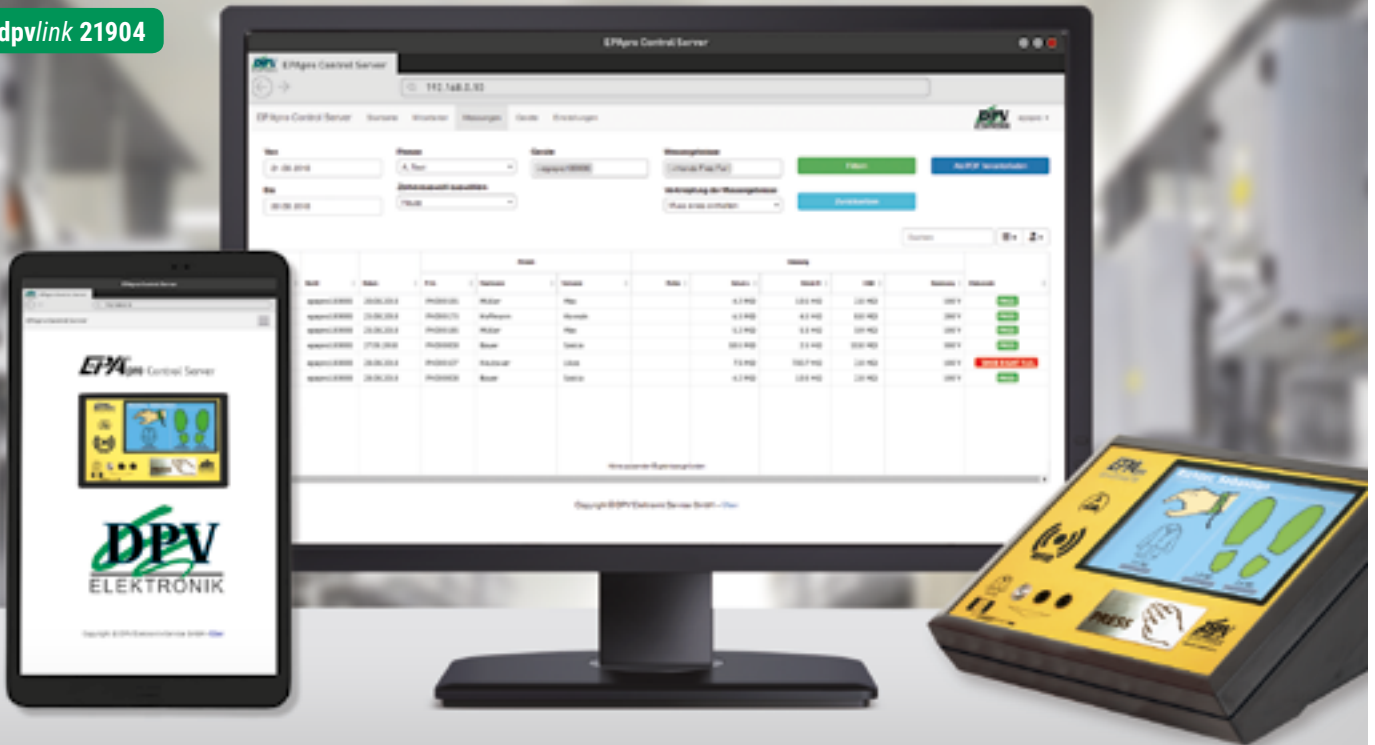
Article no.: EPApro.1001.TS

Detailed information about the entire EPApro[®] product range is available on our website
www.dpv-elektronik.de/EPA-pro



EPA[®]pro Control Server at a Glance

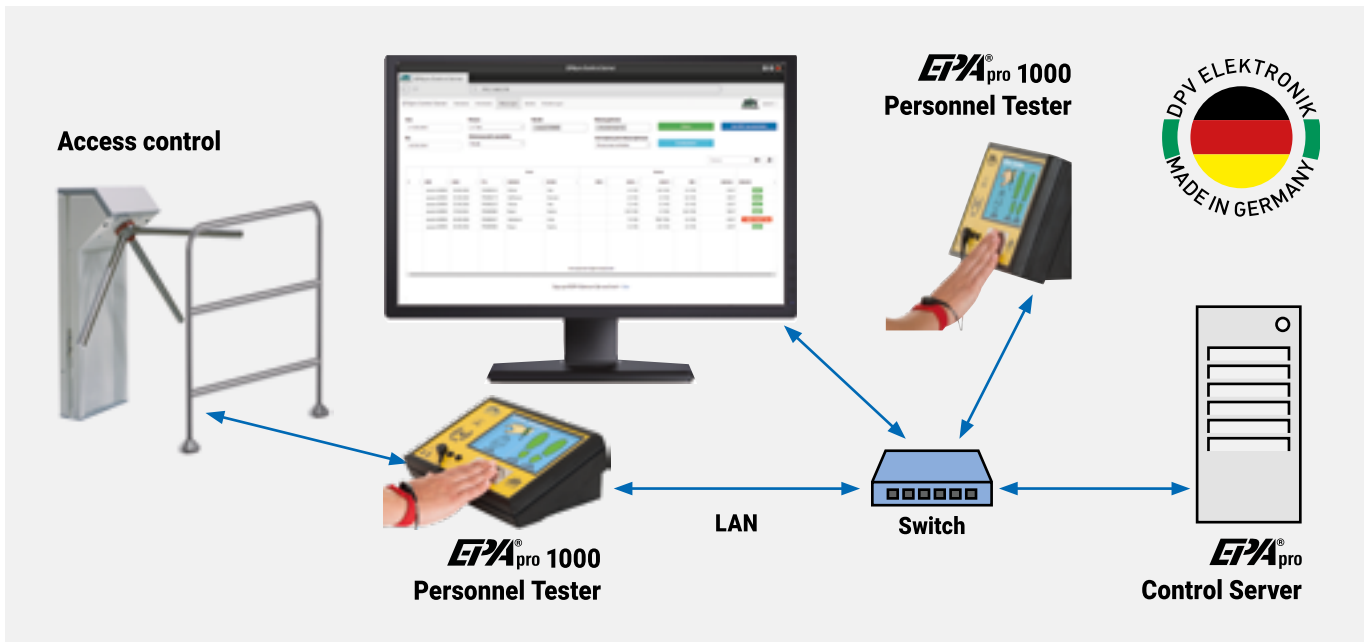
dpvlink 21904



The Advantages

- Networking of several EPA[®]pro devices within your company network – also across locations
- Central, password-protected and role-based administration
- Central administration of employees and access authorizations on the server
- Simple import of the employee master data into the system e. g. Excel, CSV
- Employee administration with group function e. g. teams and departments, EPA, laboratory, etc.
- Guest function: simple creation of visitors to document the measured values
- Synchronization and central storage of device data on a server
- Safe and central archiving of your measured data offering the possibility to set a date for an automatic deletion of the measurement protocols
- Backup functions allow retrieving backup files with Single Click at any time and storing them in a directory you specified
- REST API data interface (key-protected) enabling an automatic data exchange with other programs
- Report functions, i. a. for audits as PDF file
- Subscribable report function by e-mail for evaluations and reports
- Installation via a Virtual Machine (VM) installation in your data center or via DEB package
- Client access via browser, installation of a client software is not required
- Simple update function and maintenance of the software via the EPA[®]pro portal
- Updating the EPA[®]pro device firmware via the network from the server (instead of via USB stick)

Technical Description



Interface and Operation

The client access is password-protected and possible via browser from any terminal. It is not necessary to install an additional client software.

The user interface of the EPA^{pro} Control server is optimized to be viewed on a PC, but can also be used on mobile devices like tablets or smartphones.

Authorization of the Employees for Individual Devices

The authorization of the employees for the access to an EPA^{pro} 1000 device can be restricted in the employee profile. If the EPA^{pro} 1000 are connected to access systems, the access to individual manufacturing areas can be controlled.

Employee Groups

For an easier management and surveillance, it is possible to assign employees to a group. Groups can be structured hierarchically facilitating the mapping of employee and department structures.

Users of the EPA^{pro} Control Server obtain the access authorization to these groups. A department head can e. g. see and manage the employees of his department, a team leader may only see the employees and the measurement protocols of his team. Therefore, only authorized persons are allowed to see and manage the data in compliance with the GDPR.

Guest Function

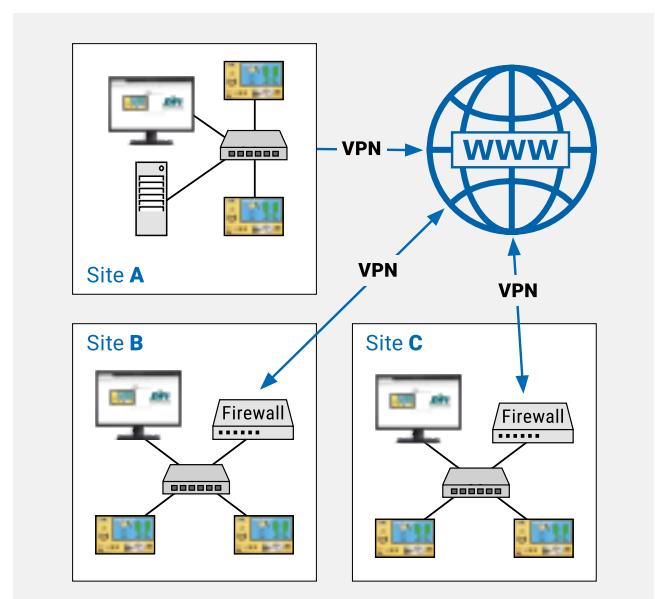
Visitors can be created quickly and simply to document the measured values.

Installation of the Server Software

The EPA^{pro} Control Server software is installed via a virtual machine provided by us in your data center or via the DEB package as an installation file for your own Ubuntu Linux 22.04 LTS environment.

Network

The EPA^{pro} 1000 devices are connected to the EPA^{pro} Control Server via LAN. Every EPA^{pro} 1000 device has its own IP address. The connection across locations is also possible via your company VPN.



EPA^{pro}® Control Server Features

Role-Based Access Control

The assignment of authorizations of the EPA^{pro}® Control Server users can be implemented by means of a role-based access model. So, it is possible, for example, to determine that certain users may only maintain the employee database.

Languages

The display language is adjustable, available languages are German, English and French.

Reports

It is possible to filter data and fade in and out columns in the displays. An export function facilitates to export the displayed data in the usual formats. In addition, configurable reports e. g. for the auditing can be created. The user can subscribe to the created reports. These reports are created at the specified time and sent via e-mail.



Import and Export of Employee Data

The EPA^{pro}® Control Server has several import and export functions allowing an import or export of the employee data e.g. via CSV or Excel files.

Export Functions for Measured Data

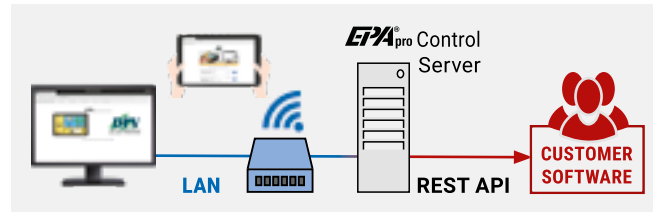
Measured data can be filtered and exported in all usual data formats using an export function.

Licensing

A license is once necessary for the EPA^{pro}® Control Server. To connect the EPA^{pro}® 1000 devices an EPA^{pro}® license key is required for each EPA^{pro}® 1000. Licenses for our Control Server additional modules (see page 11) can be requested via our shop.

Data Exchange with Other Programs

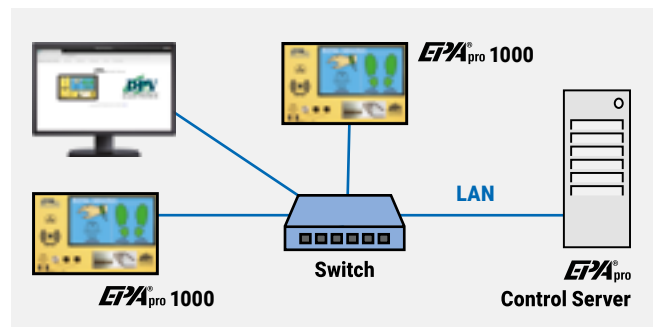
A REST (Representational State Transfer) API enable the secure exchange of data with other programs.



Behavior in case of Failure of Network or Server

If the EPA^{pro}® Control Server or the network fail, there will be no restrictions for the operation of the EPA^{pro}® 1000 devices.

Measurement data sets are stored in the EPA^{pro}® 1000 device and automatically transferred as soon as the EPA^{pro}® Control Server is available again. Maintenance work in the network of the server has thus no impact on the availability and functionality of the EPA^{pro}® 1000 device in the network. Even in case of a network failure, the smooth operation of the EPA^{pro}® 1000 devices is assured.



Update and Maintenance

Updates for the EPA^{pro}® Control Server can be imported easily via the installed EPA^{pro}® Server service tool. We provide the update packages for download in the EPA^{pro}® portal.



Bookable additional modules



EPApro[®] Control Server – Training module

License for EPApro[®] Control Server from version 2.3.0

Allows you to use the EPApro[®] Control Server training module.

- Management of ESD training for employees
- Notification directly on the EPApro[®] personal testing device when training is about to expire or has already expired
- **Optional:** Denial of access if training has expired
- **Optional:** Notify employees via email of their ESD training status

Inquire now



Article no.:
EPApro.Server.Mod1



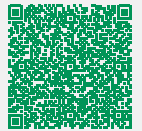
EPApro[®] Control Server – Measurement configuration module

License for EPApro[®] Control Server from version 2.3.0

Enables individual measurement configurations, instead of a fixed measurement configuration per employee.

- Different measurement configurations for each employee on different EPApro[®] personal testing devices
- **Optional:** Mapping time-dependent special functions to production areas via special function groups

Inquire now



Article no.:
EPApro.Server.Mod2



EPApro[®] Control Server – Microsoft SQL-Connector

License for EPApro[®] Control Server from version 2.3.0

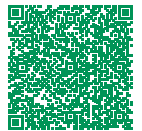
Enables the use of an external Microsoft SQL Server database to store data for the EPApro[®] Control Server.

Attention! Currently only possible for new installations. Data transfer from an existing EPApro[®] Control Server is currently not possible.

- Operation of the EPApro[®] Control Server database on an external Microsoft SQL server (instead of the internal MySQL database)
- This means you can use the familiar and widely used Microsoft database system
- Better scalability in larger environments (Database and web application run on different server systems)
- Support for Microsoft SQL Server 2017 (Windows / Linux) or newer

A license for the database management system Microsoft SQL Server is **not** included!

Inquire now



Article no.:
EPApro.Server.Mod3

Your System Supplier for Electronics Manufacturing



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