



## MATRIX Professional: Security, employee and facility organisation rolled into one

Access control,  
time & attendance,  
time recording  
and escape route  
security



# Contents



**04** Introduction



**06** Functions and applications



**08** System benefits



**10** System overview



**14** Access control



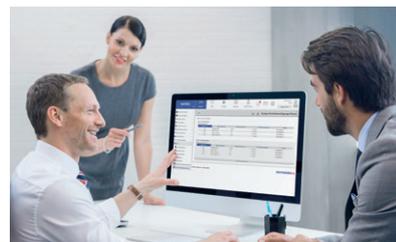
**16** Mobile Access



**18** Media overview



**20** Components for access control and time recording



**24** Time & attendance



**28** Time recording



**30** Escape route security



**34** Overview of dormakaba

# Professional control of access, time and escape route security

What has always been true at a personal level, now also applies to systems: good networking gets faster results. The better data is collected, pooled and evaluated, the easier and more efficient its management will be. This is a key advantage as data volumes for security, employee and facility organisation are increasing all the time. This is true of large companies, airports, stadia and SMEs alike. Access control, time recording, time & attendance and escape route security, as well as lift control and video

surveillance for example, must be organised and coordinated from the car park to the boardroom. It's useful to be able to control these different areas centrally. That's where MATRIX Professional comes in. This software system is the comprehensive browser-based and multilingual solution for industry, administration, commerce, public authorities, facilities and a lot more.

Companies with global aspirations shouldn't be held back by language or usability barriers: that's why MATRIX Professional is multilingual and browser-based.



**Ready for international use**

MATRIX Professional is multilingual: all processing dialogues and data are simultaneously available in several languages – in German, English, French, Dutch, Russian, Italian, Spanish, Portuguese, Turkish, Polish, Norwegian, Swedish, Hungarian, Czech, Danish, Chinese (simplified and traditional).

**Browser-based and stand-alone**

MATRIX Professional is fully browser-based, meaning installation and maintenance couldn't be easier. The system is based in your network and can be accessed from any networked PC.

**Adaptable and versatile**

The software platform has a modular structure. It pools data from various systems into one clearly structured user interface.

**Open interfaces for flexible networking**

Access control and time recording can also be networked with existing systems via open, standardised interfaces. Various buildings with different control systems and access authorisations are thus integrated into a working overall system.

**User-friendly with intuitive operation**

The dialogues are structured logically according to frequency of use. Thanks to basic entries, the configuration rarely needs to be changed. This reduces operation errors and training times.



# Basic functions



**01**  
**Hardware for access control**  
 Electrically operated door systems manage the effective and reliable control of emergency exits and access control systems.



**02**  
**Time recording and time & attendance**  
 MATRIX Professional records time bookings and access rights in a continuous workflow. The system allows you to evaluate the time bookings according to your individual requirements.



**03**  
**Escape route security**  
 The door management system for escape route security (TMS) can be easily integrated into the MATRIX Professional modular system. The system is also the perfect team player, for example with fire or burglar alarm systems.

# Key applications



**04**  
**Visitor management**  
 The visitor management function quickly registers new visitors or retrieves existing system data. So you always know when visitors came, who they visited and how long they stayed.



**05**  
**Pedestrian flow control**  
 Pedestrian flow control systems at security-relevant entrances permit access for individuals but not groups



**06**  
**Lift control**  
 The user authorisations for the lift units are activated individually and flexibly so that only selected persons have access after office hours, for example.



**07**  
**Car park management**  
 Car park barriers can also be integrated into the system. MATRIX Professional records all relevant door and access components in an easy-to-follow wiring diagram.



HR



Facility  
management  
system



Video



Communication

## Simply versatile

MATRIX Professional offers configurable interfaces (including a certified SAP interface), which forward data to subsystems. This includes data from access control, escape route control, alarm systems, building management and time & attendance systems.

# Comprehensive system – many specific benefits

Efficiency is a matter of organisation. As a networking system, MATRIX Professional solves the problem of unmanageable data volumes. The complex organisation is simplified into an overall system through the user-friendly browser application and the connection of open interfaces. All this can be done with one click, so you can get on with more important matters.





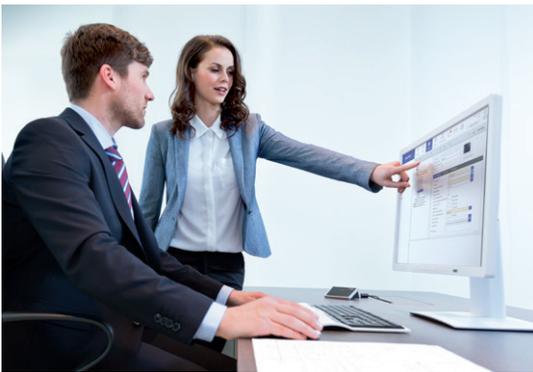
**Benefits for HR managers**

- Implementation of company rules or wage agreements Retroactive accounting for changes in processing regulations Due to the employee workflow, time management personnel work more effectively; flexible data exchange options with programs in the HR department



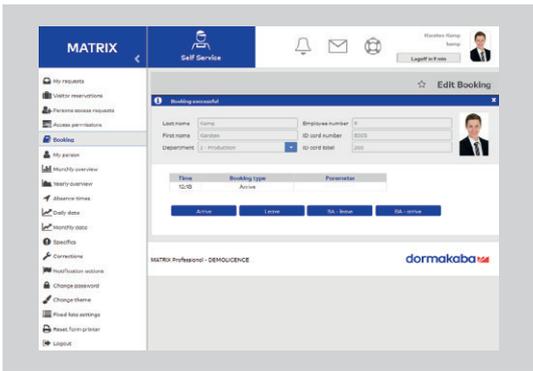
**Benefits for security managers**

- Sophisticated role concept defines clear responsibilities between security and HR
- No double data storage for time and access due to integrated system
- All system parametrisation definitions can be revised.



**Benefits for IT managers**

- Minimal outlay with browser-based system
- No installation costs for operator panels
- Can also be used for virtualisation
- Supports all current standards, such as e.g. TCP/IP, SSL, LDAP
- Easy-to-administer interfaces to third-party systems



**User as system manager**

- Quick and easy-to-find dialogues for standard tasks using the favourites concept
- Operation using a browser in the usual concept
- Useful evaluations that can be individually adapted



**User benefits**

- Fast response time for bookings
- Transparency thanks to the browser-accessed info portal
- Workflows for requesting corrections and absences

# The system in overview.

## Expandable

MATRIX Professional can be easily expanded later if needed. The wireless components are controlled wirelessly via radio link, so there is no need to open up walls, no structural work, no additional effort or costs. If departments have to move or are enlarged, the wirelessly networked components are simply moved too.

## Combinable

MATRIX Professional is suitable for almost any entrance and exit situation and as a platform for other systems such as lift control and video surveillance. Various systems can be easily combined with different online and offline components. All door components and contactless access readers from our range are connected via the configured access control panels. The corresponding circuit diagram can be used intuitively.

## Intuitive

The system is easy to operate. The effort required for training and data maintenance is low.

## Multilingual

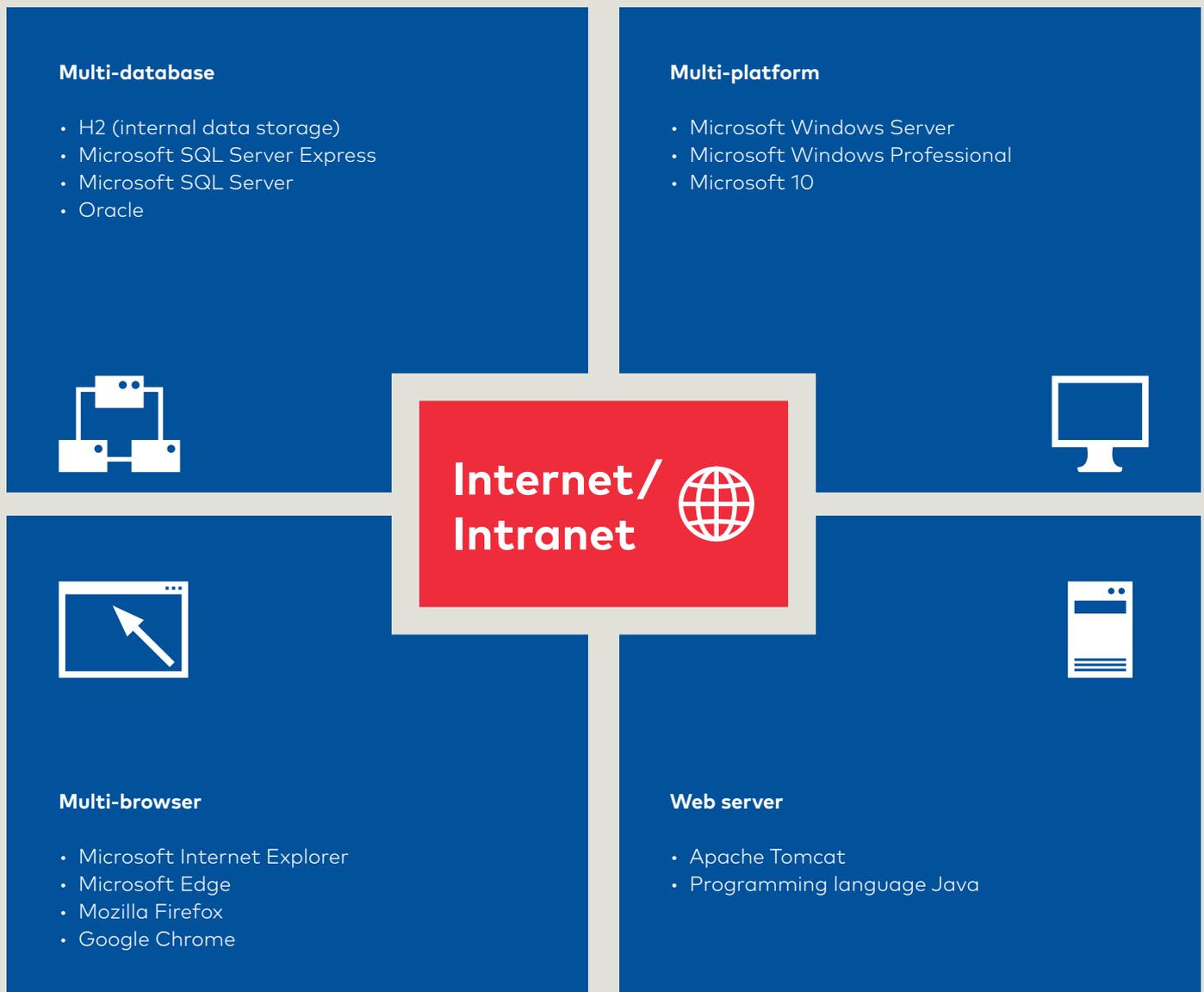
MATRIX Professional is multilingual: all processing dialogues and data are available simultaneously in several languages.

## Comprehensive system





# The universal software solution: browser-based, modular, adaptable



# The future is unpredictable, so it's best to be ready for it.

## Browser-based interface

The browser-based interface allows use and configuration from anywhere in the world

## Tenant Management

With the tenant management, several companies can access separate areas, reducing procurement and maintenance costs

## Support of internal company workflows

Company workflows are supported; for example, absences can be entered in the time module and access authorisations can be assigned in the access module

## The A to Z of MATRIX Professional system software

### A

Access rights: definition as full access or read only possible.

Authorisations: individual allocation possible.

### B

Bug fixing: via dormakaba Support.

### C

Code: 4- to 6-digit PIN code.

### D

Database: SQL-H2 database engine, Microsoft SQL Server or Oracle integration.

### Device management: via dormakaba

Terminal Manager (DTM); components and management set up via netbook.

### I

ID cards: unlimited number, depending on the license level.

### L

Lists: predefined or your own criteria for dynamic lists for personnel data in PDF format.

### O

Options: interlock control, lift control, arming/disarming of burglar alarm systems, presence table for visualising the presence status of persons in a certain area.

### P

Personnel data management: access authorisation defines where and when a person is permitted to pass an access point. With this in mind, authorisations can be issued for individual doors or room zones (door groups). The timing of when a person is permitted to pass through a door is defined within the authorisation based on the weekly access schedules in conjunction with an access calendar.

### R

Ready-to-run function: badge readers, doors, calendar, daily programs and weekly schedules are already predefined.

### S

Security options: repeat access block, dual-use lock and room zone change control.

### T

TMS door management: for every door, MATRIX Professional allows you to set time intervals in which only certain actions are permitted, regardless of the staff profile.

### U

User groups: as many as you like. The menu adapts dynamically to their rights.

# The access control that adapts to your needs

If your requirements change, MATRIX Professional simply adapts. This means you get investment security and a system that always works the way you need it to. Thanks to the open interfaces – for example for implementing video verification or lift control – your access control is compatible with other systems. Take advantage of dormakaba's experience and professional advice during planning and, if required, the assistance of specially trained employees.

## The key features for access control:

- Modular system for access control, time recording and time & attendance with the option of integrating the TMS for escape route control
- Tiered licensing model
- Additional modules/assistants for full integration of large companies' requirements
- Manages up to 300,000 ID badges/ persons
- Tiered licenses according to number of employees
- Connection to evolo and XS components
- Connection to 96 00 and 97 00 terminals
- Locking mechanism monitoring
- Activating/deactivating alarm systems
- Local override of alarm systems
- Isolation system (tripod barriers, interlock control)
- Ergonomic, browser-based interface
- High ease of use due to uniform operating concept
- Interfaces configurable to parent systems
- Supports all processes including online (radio)
- Pro planning with professional advice and, if required, on-site support from our specially trained staff

## MATRIX PRO options: Extension of technologies:

- Access on Card
- Radio online
- OSS
- Mobile Access

## MATRIX PRO options: Extension of additional modules:

- Alarm management including site plan visualisation and ONVIF camera control
- List configurator
- Tenant management/multi-client capability with separate or shared doors
- Workflow
- Visitor management with pre-registration (including visitor access and search via QR code)
- Contractor employee management
- Room management
- Security guard patrol
- Simple booking entry

## MATRIX PRO options: Extension of interfaces:

- DIM (dormakaba Integration Manager) for linking to external systems with fixed data structure
- General interface – import/export of data (database/LDAP/file/socket)
- REST API web service interface
- TMS coupling (door management/escape route)
- Badge issuing system





# Access is going mobile. With Mobile Access.

## Flexible, fast, secure

Mobile Access allows you to transfer access rights to a smartphone simply and flexibly. That means you can manage all access rights centrally in your dormakaba access solution and turn selected mobile devices into access media.

You can easily transfer access rights to a smartphone in advance or at short notice in real time. This saves you the workload of issuing and returning additional access media.

Keep an overview of all access events at all times – and control who is granted access, when, where and for how long. That's how easy it is with digitalisation!

### **Advantages:**

- Simple implementation
- Simple handling
- Process optimisation
- Resource-saving
- State-of-the-art technology



01

Assign access rights directly to a smartphone on request.



02

Mobile Access is the solution for those situations where things have to be done quickly.



03

Maintain control at all times: assign/ revoke rights in real time.

## Easily integrate Mobile Access into your existing units

With Mobile Access you benefit from a smooth process, because employees, visitors and service providers can use their smartphone as an access medium. You can also integrate new applications into your business solution via additional apps. With dormakaba you can take another important step in digitising your workflows.

**Besides the normal access application, Mobile Access is also suitable for special situations, such as:**

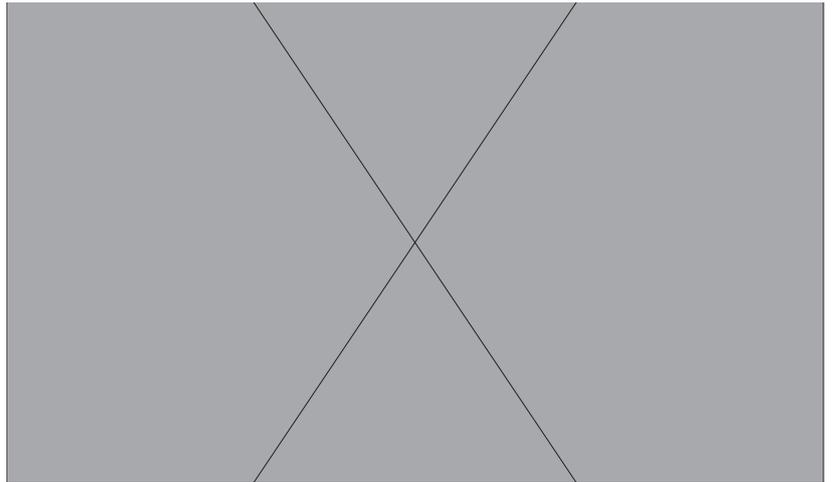
- Admission after business hours
- Access to an unmanned branch office
- Coordination of short-term access
- Night-time maintenance access



# Three options, one access solution

	Access card	Key fob	Smartphone
<b>In short</b>	 <p>The favourite one</p>	 <p>The robust one</p>	 <p>The digital one</p>
<b>Multi-application/-technology</b>	<ul style="list-style-type: none"> <li>• RFID chip</li> </ul>	<ul style="list-style-type: none"> <li>• RFID chip</li> </ul>	<ul style="list-style-type: none"> <li>• Via other apps</li> <li>• Near Field Communication</li> <li>• Bluetooth</li> </ul>
<b>Key applications</b>	<ul style="list-style-type: none"> <li>• Access</li> <li>• Operating data and time recording</li> <li>• Payment</li> <li>• Follow-me printing and copying</li> </ul>	<ul style="list-style-type: none"> <li>• Access</li> <li>• Operating data and time recording</li> <li>• Payment</li> <li>• Follow-me printing and copying</li> </ul>	<ul style="list-style-type: none"> <li>• Access</li> <li>• Operating data and time recording</li> <li>• Payment</li> </ul> <p>Also applicable:</p> <ul style="list-style-type: none"> <li>• After business hours</li> <li>• To vacant branch offices</li> <li>• For nightly maintenance</li> <li>• Short-term access rights</li> </ul>
<b>USP</b>	<ul style="list-style-type: none"> <li>• Can be printed all over</li> </ul>	<ul style="list-style-type: none"> <li>• Sturdy and robust</li> </ul>	<ul style="list-style-type: none"> <li>• No media transfer</li> <li>• Mobile Access can be integrated into a company app</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• Additional combination with PIN code or biometrics possible</li> </ul>	<ul style="list-style-type: none"> <li>• Additional combination with PIN code or biometrics possible</li> </ul>	<ul style="list-style-type: none"> <li>• Additionally protected by PIN code or fingerprint</li> </ul>
<b>In case of loss</b>	<ul style="list-style-type: none"> <li>• Rights can be revoked electronically (so no security vulnerability)</li> </ul>	<ul style="list-style-type: none"> <li>• Rights can be revoked electronically (so no security vulnerability)</li> </ul>	<ul style="list-style-type: none"> <li>• Rights can be revoked electronically (so no security vulnerability)</li> </ul>

# Our components for your various applications



# Every entrance is different. MATRIX Professional is the solution for all.

As a part or all-in-one solution, in one building or all over the world, at rarely or frequently used entrances: MATRIX Professional is the flexible solution for practically every door and entrance.

### Part or all-in-one solutions for large enterprises

You decide what data you want to collect. Other modules such as escape route security are integrated via open interfaces. It is possible to control a part of the building or several sites at the same time.

### Online system for comprehensive solutions and multiple locations

The online system networks the individual doors and components. Access rights can be changed during operation and activated directly at the corresponding doors. Events can also be queried live.

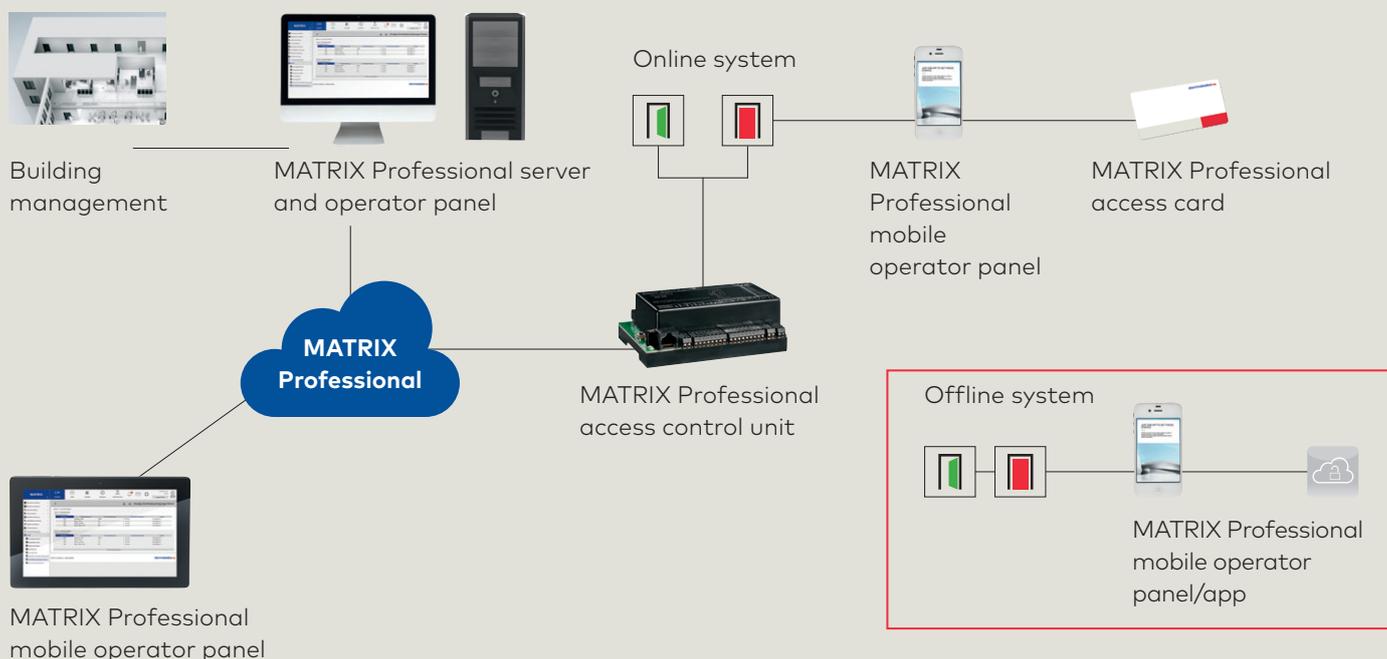
### The offline system is recommended for smaller solutions

Here the access rights are stored directly in the hardware component. Programming takes place directly on the component, without any wiring needed.

### Access on Card for more frequently used doors

The access rights are stored directly on the ID badge. This makes it easier to transfer changes without having to reprogram each component manually.

## Fast data access online and offline



# The MATRIX Professional components

Thanks to a modular concept and perfectly coordinated components, your access control and time & attendance systems are ready to go.

## Access manager

The implementation of efficient access control requires collecting and processing information in real time and granting access if the requester is authorised. dormakaba offers a selection of access control units specifically designed for their intended use.



### Access manager 92 00

The access manager 92 00 is a powerful control unit that manages and controls up to two doors depending on the system solution. There is a digital interface for setting up the type of control function required and the alarm management function.



### Access manager 92 30

The access manager 92 30 is optimised for single access points.

Two registration units can be directly connected. It's powered via the network cable. Its discreet design blends harmoniously into any building.



### Access manager 92 90

The access manager 92 90 has a very high degree of autonomy, so that it can be flexibly integrated into any existing unit and security concept.

## Reader

A reader is generally always connected to an access manager installed in the secured interior. This checks and interprets the data recorded by the reader and decides whether to grant access.



### Compact readers 91 04, 91 10, 91 12

The compact readers can be used universally in all access solutions. Constantly online, the readers, together with a control unit, give increased security. They are particularly well suited to access points within one organisation. Employees identify themselves by holding their contactless RFID badges up to the compact reader. This checks and interprets the data recorded and decides whether to grant access.



### Remote readers 91 15, 91 25

Remote readers are designed for both simple and more complicated entrances and offer the advantage of separation between the registration unit and door control. This makes them suitable for installations in secure internal areas to control access points located in unsecured external areas.

## Registration units

The registration unit is a separate reader unit which, together with the dormakaba control units and remote readers, forms a secure access solution with convenient user identification. It informs the user acoustically and visually whether access is granted. The registration unit can be used for indoor or outdoor access solutions depending on the installation type.



### Registration unit 90 02

The registration unit 90 02 has an innovative design and an eye-catching compact form. The wear resistant PIN entry pad can be used inside or outside when protected against weather.



### Registration units 90 00, 90 01, 90 03, 90 04

Registration units are generally positioned away from the control unit (remote reader or access manager). The control unit can be installed in a tamper-proof place while the registration unit is positioned right next to the door. There is a range of attractive designs for every installation location. Communication between the registration units and the control unit is encrypted, providing a high level of security.



## System components

- 01**  
c-lever air
- 02**  
Digital cylinder
- 03**  
OGRO door handle
- 04**  
Wireless gateway
- 05**  
Terminal 97 00

## Standalone access components

The digital access components are standalone (wireless) and can therefore be installed quickly and easily in any door. Existing mechanical locking systems can easily be managed and augmented with digital components.



### c-lever compact

The fitting is a flexible electronic solution which replaces the mechanical handle and is completely independent of the cylinder, so in most cases there is no need to change the lock.



### c-lever pro

The high-quality materials meet high demands in terms of robustness, weather resistance and security. In addition to offering protection against intrusion and fires, the c-lever pro can be used for emergency exits and escape routes.



### c-lever air

The c-lever air meets your access control's high aesthetic and functional requirements. The thin door-leaf design means that existing cylinders do not generally need to be replaced. Its slim shape has already won several design awards.



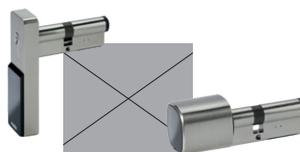
### Digital cylinder

Its energy-efficient electronics detect the RFID access media, check the authorisation and allow the door to be opened. Different versions offer the optimum solution for every door situation.



### Cabinet lock

With the electronic cabinet lock you can protect your personal documents and materials from unauthorised access in wardrobes, lockers and other furniture – easily and conveniently without turning a key.



### Mechatronic cylinder

Mechatronic cylinders bridge the gap between electronic access control and mechanical elements. As part of the tried-and-tested dormakaba evolo portfolio, they can be seamlessly inserted into existing mechanical master key systems. A whole world of new possibilities is now available, thanks to the combination of mechanical cylinders and electronic access control.



### Wireless Gateway 90 40

Access authorisations can be granted or withdrawn within seconds and take effect immediately.

## Terminals

With dormakaba terminals as end devices, individual staff hours and operating data can be displayed. Simple access solutions can also be implemented.



### dormakaba Terminal 96 00

The Terminal 96 00 impresses with its ease of use, compact shape and attractive design with touch screen. It's the ideal entry-level solution for anyone looking for a simple time recording application.



### dormakaba Terminal 97 00

The Terminal 97 00 carries out a wide range of tasks for professional time recording and access control, while providing customer-specific information and applications.



# MATRIX Professional: Your control centre for modern time management

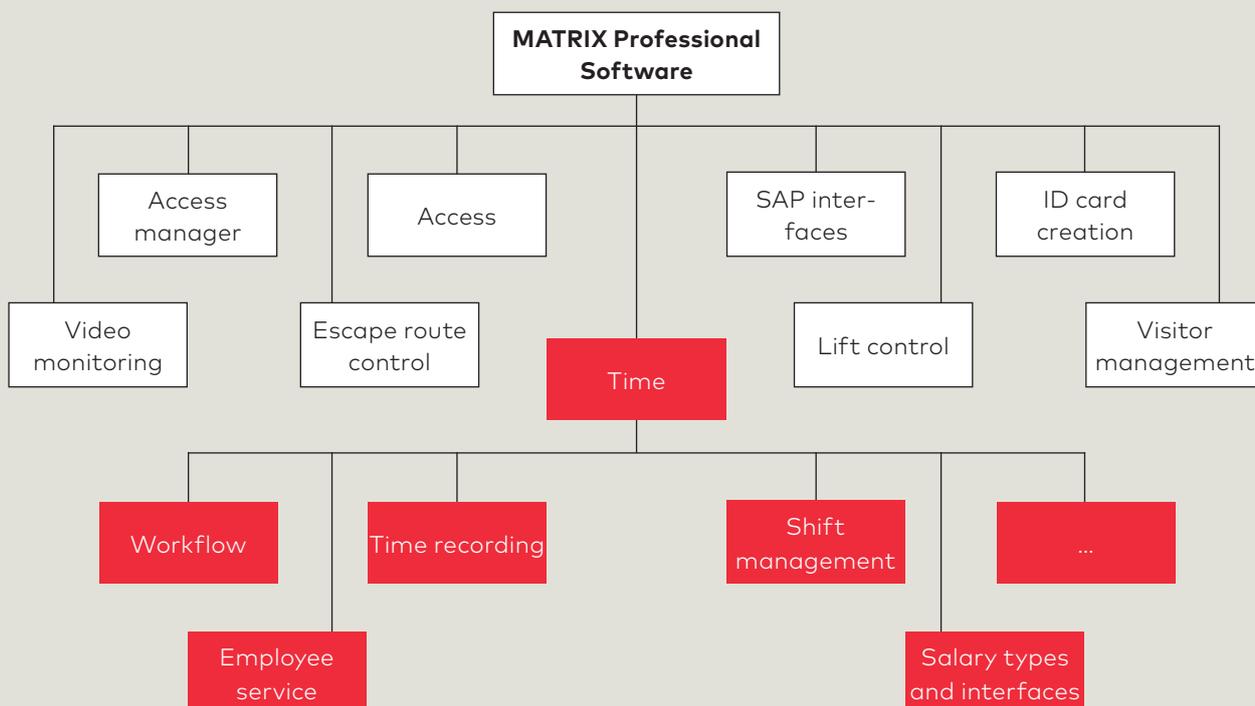
Everyone is talking about flexible working hours and the idea is an ever increasing part of business thinking. Fast and flexible adaptation to internal and market changes requires optimal support in the planning, development and retention of the "employee" resource. Whether staff are flexitime, part-time or job-sharing – modern time

recording and time & attendance guarantees fast, smooth processes and forms the basis for efficient and performance-oriented human resources. MATRIX Professional takes all these aspects into account with a modern solution for any size company in industry, authorities, administrations and trade.

## Smooth integration

MATRIX Professional seamlessly connects the core modules of time & attendance with other modules and existing systems via standardised and certified interfaces.

Thus, different buildings, often with different control requirements and individual time & attendance needs, can be combined into a functioning overall system.



# MATRIX Professional time & attendance in detail

MATRIX Professional's wide range of functions covers the key areas of modern human resources management. The application is designed as a modular system that can be expanded at any time with additional function modules. MATRIX Professional is also being constantly developed, so you always have an up-to-date and future-proof system.



# Overview of time & attendance functions

## Benefits for administrators

- ID badge management
- Tenant management
- Granular role concept
- Data groups revision

## Benefits for IT managers

- Import of master personnel records
- Integration of external systems (including data transfer)
- Certified SAP interface
- Integrated backup and recovery

## Benefits for HR managers

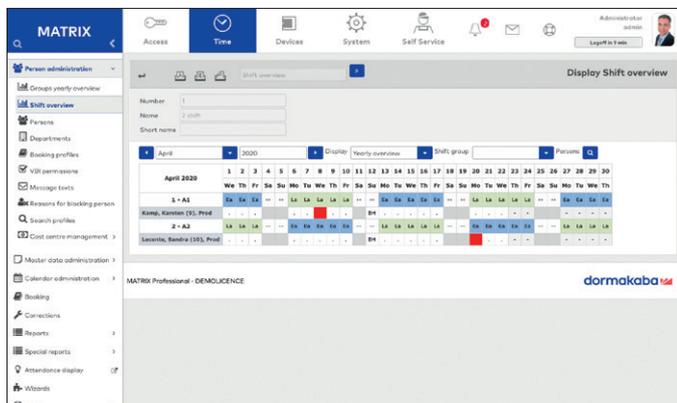
- Freely definable accounts
- Overtime management
- Implementation of company-specific rules
- Configured correction dialogues
- Retroactive implementation of corrections
- Surcharge management

## Benefits for supervisors

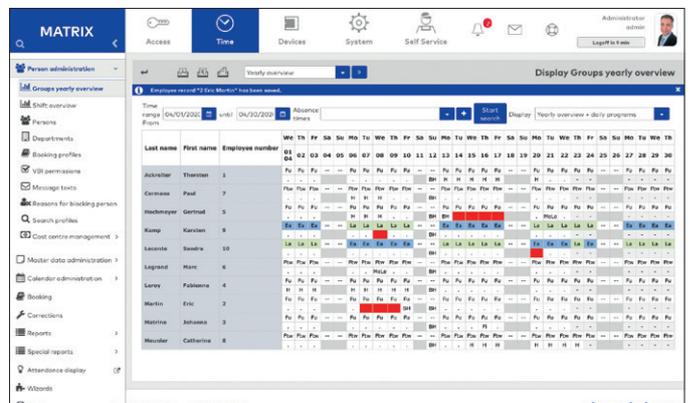
- Shift management
- Presence display
- Deputising rules
- Workflow processing of time requests (including holiday requests)
- Individual release workflows
- Individual dynamic lists

## Benefits for employees

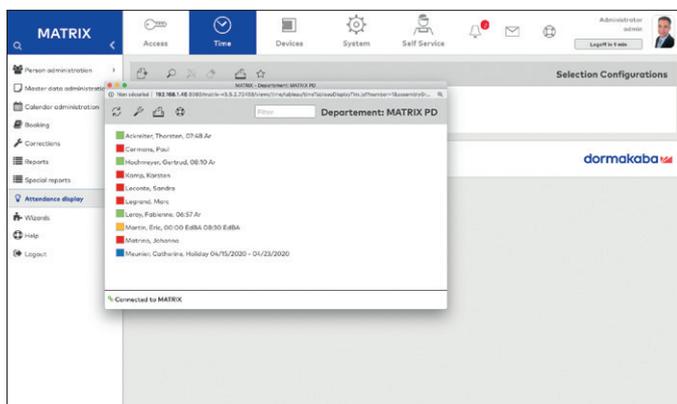
- Self-service with requests via workflow
- Web-based information and booking portal
- Booking via time terminals



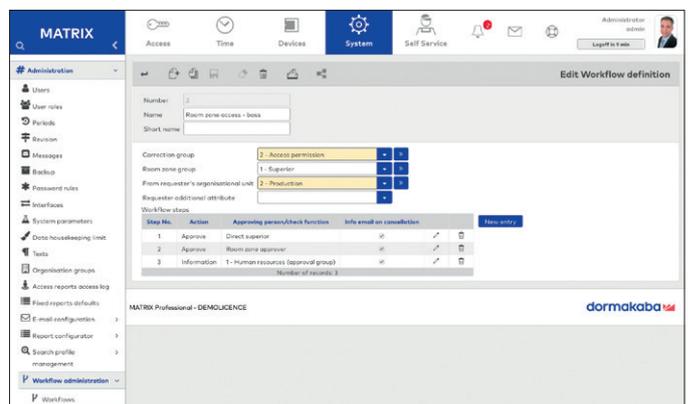
01



02



03



04



# Time recording according to your requirements

Whether it's used on a standard terminal or through already existing resources such as the workstation: MATRIX Professional offers a convenient and modern solution for recording employee hours. The system is highly fail-safe, as the time recording terminals record the time bookings autonomously. If the MATRIX Professional server is not available, the time bookings are automatically stored temporarily in the terminal and transferred at a later time.



## Hardware

The employees record their times via the dormakaba Terminals 97 20 and 96 20.



## Software

Registration without terminals – i.e. via the PC only – is an economically attractive variant since there are no hardware acquisition costs. The time data can be transferred easily and conveniently by means of clearly arranged net dialogues. The time balances – and optionally any remaining holiday – are displayed at the booking terminal or in the browser.



## Mobile booking

Mobile booking ideally complements the workflow. Employees can also make their bookings on the go. Supervisors can check requests and issue approvals if necessary as part of the workflow.

# Additions for customised expansion: everything to do with escape routes, security technology, automatic operation

An escape route security system must allow people inside to get out in case of emergency, while also effectively preventing unwanted use of the door from both sides day to day. dormakaba can meet these conflicting requirements simultaneously. The system also enables barrier-free access in combination with automatic drives.

# System components overview



## System components

**01**  
Touchscreen display

**02**  
Emergency button

**03**  
Key switch

**04**  
Design column

**05**  
OGRO door handle

**06**  
Digital cylinder

**07**  
Lock

**08**  
Door lock

**09**  
Sensor

**10**  
Automatic swing door  
operator ED 250

# The escape route security components

Personal safety in case of danger and the greatest possible protection of material assets: all components of our escape route security systems meet these two requirements proficiently. Whether it is a question of securing individual doors or extensive networked systems

with access control – virtually all requirements can be implemented simply and practically. All systems have one thing in common: uncompromisingly safe operation of the escape route door.

## Escape route security and door management



### Surface-mounted door terminal TL-G AP

Robust escape door terminal housing to accommodate connection boards (TL-S). Door terminals (TL-G) combine reliable function with very user-friendly operation.



### Panel system TMS

Panel systems for controlling and monitoring escape route doors and doors in security-relevant areas.



### Flush-mounted door terminal TL-UP

Door terminal sets for flush mounting with DCW bus technology for connection to dormakaba escape route control centres. The technology ensures the individual components can be quickly wired and independently addressed, making installation and configuration quick and easy.



### Escape route control box RZ TMS 2

Remote control for networked and unnetworked TMS escape route doors.

### Set components

As with access control, the components in System 55 are also available for escape route security and door management.

# Escape route security and door management



## Electromagnetic door lock TV 100/TV 100 DCW®

Electromagnetic door lock for doors in escape routes.



## Self-locking panic motor lock SVP 2000/SVP 4000

SVP locks lock doors automatically as soon as they close – conveniently and securely.



## Electromagnetic door lock TV 200/TV 200 DCW®

Electromagnetic door lock for doors in escape routes.



## Alarm components – Signal transmitter

dormakaba signalling transmitters for escape route security loudly and effectively warn of danger by emitting optical or acoustic signals.



## Electromagnetic door lock TV 500/TV 500 DCW®

Electromechanical door lock for concealed installation of frames for doors in escape routes.

We make access a **secure, smart** part of

## Our range

**Door technology**

**Automatic door systems**

**Access and time  
system solutions**

**Glass systems**

**Mechanical  
locking systems**

**Hotel access systems**

**High-security locks**

**Key systems**

**Movable walls**

**Services**



**Consultancy**

**Planning**

**Execution**

**Commissioning**

**Maintenance**

## Our focus sectors



Bank &  
Insurance



Airports



Office buildings



Public health



Energy & power



Residences



Industry &  
Production



Private  
Housing



Government &  
Administration



Rail  
transport



Education



Retail



Hotel &  
Catering



f everyday life.

dormakaba 

## Our values

---

### Customer first

All our activities focus on the needs of our customers, partners and users.

### Curiosity

Our constant search for and recognition of trends forms the basis for our development of future-oriented solutions.

### Performance

We go the extra mile to satisfy our customers and set the highest standards in terms of security, quality and reliability.

### Courage

We are determined to pursue our goal of continuously developing solutions with real added value for our customers and users.

### Trust

Our actions are all based on our key corporate value, so our customers can rely on being in good hands at all times.

## Our company

---

Over

**150**

years of experience

**130**  
countries

**16,000**  
employees

ISO 9001  
Certificate 



More than

**2,000**

patents



Sustainability Report  
GRI Standards



Listed on the stock  
exchange

SIX Swiss Exchange (DOKA)

We call it **Trusted Access**



**Door  
Hardware**



**Electronic  
Access & Data**



**Mechanical  
Key Systems**



**Lodging Systems**



**Entrance  
Systems**



**Interior Glass  
Systems**



**Safe Locks**



**Service**

**dormakaba**  
**International Holding AG**  
Hofwisenstr Product Launch Process  
**Product Launch Process**  
**asse 24**  
CH-8153 Rümlang  
T +41 44 818 90 11  
info@dormakaba.com  
www.dormakaba.com