



KNOW-HOW-NAVIGATOR

Digital locking systems

Everything you ever need to know about intelligent
alternatives to mechanical locking systems

Simons Voss
technologies

What advantages does a digital locking system offer?

Everything about digital locking systems is ideal. Technology long used in automatic doors – opening and closing at the press of a button – is now becoming established in increasingly more areas. Anyone who wishes to keep up with the times will choose digital locking. Electronic keys and locking cylinders far outperform their mechanical equivalents, because they can do much more than simply lock and unlock. They provide significantly greater security and are more economical in the mid-term.

The key arguments in favour of digital locking systems.

Quick, easy installation



- ❑ Electronic fittings are just as quick and easy to install as conventional models.
- ❑ No mains connection is required – installation is completed without any wiring and with no mess.
- ❑ The same applies to the retrofits.

One access medium for all locks



- ❑ All locking mechanisms can be activated with a digital key.
- ❑ All types of room and entrance doors, lift doors, cupboards, roll-up doors, desk doors, cabinet doors and similar.

No problem if keys are lost



- ❑ Misplaced, lost or stolen electronic keys can be deactivated at any time.
- ❑ Use SimonsVoss software conveniently on any suitable PC.
- ❑ No need to spend time or money replacing cylinders.

Greater control and security



- ❑ The key holder's rights can be determined on an individual basis in digital locking systems with access control.
- ❑ A few clicks on the PC are sufficient to determine who has access to a particular place at particular times.

SimonsVoss – always the right decision

With its headquarters and production in Germany and subsidiaries on five continents, SimonsVoss is a world leader among digital locking system manufacturers. More than 10,000 installed systems with over 1 million locking cylinders around the world are a clear indication of the SimonsVoss standard.

For optimum-quality, German-made digital locking systems.

SmartCard or transponder – which digital key is better?

Transponders clearly offer more advantages than SmartCards for most areas of use. Exceptionally robust, elegant transponders are a type of active access media. They perform exceptionally well, yet consume little power. Passive, card-based solutions are suitable when a large number of users need to be equipped with a simple key medium for authorised access or when it makes sense to link time-limited access authorisations to a single-use ID medium.

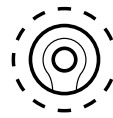
The key arguments for using transponders.

Convenient for locking



- ❑ Transponders transmit up to 40 cm and even reach 100 cm in conjunction with a SmartRelay. This ensures doors can be conveniently locked.
- ❑ In contrast, SmartCards must be held close to the reader, often not very convenient for opening cupboards.

Robust design



- ❑ Transponders are exceptionally sturdy. They last an age.
- ❑ SmartCards quickly stop functioning correctly if they are not stored or handled correctly.

Fewer installation costs



- ❑ There is no need for extensive outside installations as transponder signals travel a long way.
- ❑ Electronic readers can thus be installed at an optimised cost within vending machines, cupboards, switch cabinets and similar locations.

Exceptionally low power consumption



- ❑ Chip cards are powered based on energy-intensive induction.
- ❑ In contrast, transponders feature their own batteries, which can perform up to 400,000 locking operations, making them almost maintenance-free.

Explained in brief

SmartCards are passive locking media. The same size as a bankcard, these plastic cards with an integrated chip do not feature their own power supply (RFID technology). They use induction to draw power for data transfer from electronic reader media (locking cylinders or relays). Data is transferred automatically as soon as the card is less than 1 cm away from a reader.

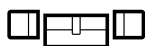
Transponders feature their own power supply in a battery. The data transfer to the reader needs to be actively triggered by pressing the button. This increases security against ID data being uploaded unintentionally or without being noticed.

Cylinder or handle – what do I need to think about?

SmartHandle, the electronic door handle by SimonsVoss, proves very advantageous thanks to its optimum locking convenience, particularly on heavily used interior doors. However, it does have its limits. If doors feature a multi-point lock, for example, deciding to use this elegant handle may involve additional costs. The digital locking cylinder is suitable as an economical, standard solution with excellent performance features. This intelligent all-rounder will fit perfectly almost anywhere.

The key arguments in favour of digital locking systems.

Nice and flexible



- The compact SimonsVoss cylinders can be used in all standard handles.
- In their timeless, elegant stainless steel design, they will blend perfectly into any surroundings or fitting.

Can be used anywhere



- Whether in lockable doors, laboratory cupboard doors or outside doors which face the elements – the greater the challenge, the more suitable the cylinder.

Favourably priced



- Digital locking cylinders offer an excellent price/performance ratio.
- Their acquisition and installation costs are affordable and pay off in a comparatively short time.

Quickly installed



- Whether installed in a new location or retrofit as a replacement, a locking cylinder is quickly and easily installed.
- No drilling, no mess, no wiring.
- No alterations to the door, escutcheon or handle.

Fully locked



- In contrast to SmartHandle, the cylinder can be locked.
- A cylinder can also be used in a lock with a multi-point locking system.

Explained in brief: power/battery management



Intelligent power/battery management is essential for reliable, problem-free, practical use of locking cylinders and SmartHandles. Highly dependable standard button cells are used for both access solutions. These conventional batteries allow up to 300,000 locking operations to be performed, even at low temperatures. Two redundant batteries per medium and a three-level warning system when the battery power is running low ensure that there are no unforeseen problems with power supply.

Fully or virtually networked – how much ,online‘ do I need?

If the system is fully networked, all components are permanently connected directly with the central system administration. If rights are changed, an ID medium is lost or a device signals a problem, appropriate action can be taken immediately. In an indirect network, i.e. a virtual one, information paths are longer and cannot be scheduled so readily.

The key arguments in favour of direct networking.

Appropriate response instantly



- If an access medium is reported as stolen, it can be deactivated online immediately.
- Unlike virtual networks, changes are implemented in real time and do not depend on users actually activating doors.
- In the event of panic or emergency situations, the doors can be opened or closed in the area concerned from a central point.

Simply more robust



- Fully networked systems are less complex than virtually networked systems. This increases system stability.
- Any SimonsVoss specialist retailer can carry out installation.
- Operating and using fully networked versions can be quickly learned – no special expertise is required.

In full control



- Routine system administration tasks can be completed centrally.
- Such tasks include querying door and battery statuses, uploading physical access lists, installing firmware upgrades or new features and changes to locking device configurations.

Satisfied users



- Access authorisation are always up to the minute.
- No need for users to make a detour to retrieve up-to-date access rights from special gateways. This increases satisfaction and acceptance among users.

Explained in brief: network

When in online mode, locking cylinders or SmartHandles are connected to their central control system via intelligent gateways with RS485 or TCP/IP ports. As an intermediary device between the intelligence in cylinders and door fittings on the one hand and the control centre on the other, the high-performance routers ensure that peripheral devices and the central control centre work together seamlessly. In contrast, in offline mode, changes to access authorisations are transmitted to each individual locking device wirelessly using a portable programming device.



Das ist SimonsVoss

SimonsVoss, the pioneer in remote-controlled, cable-free locking technology provides system solutions with a wide range of products for SOHO, medium and large-sized businesses as well as public institutions. SimonsVoss locking systems combine intelligent functionality, high quality and award-winning design Made in Germany. As an innovative system provider, SimonsVoss focuses on scalable systems, high security, reliable components, powerful software and simple operation. As such, SimonsVoss is regarded as a technology leader in digital locking systems.

Our commercial success lies in the courage to innovate, sustainable thinking and action, and heartfelt appreciation of employees and partners.

With its headquarters in Unterföhring, near Munich, and its production site in Osterfeld, eastern Germany, the company employs around 400 staff in eight countries.

SimonsVoss is a company in the ALLEGION Group, a globally active network in the security sector. Allegion is represented in around 130 countries worldwide (www.allegion.com).

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