

keylezz[®]

Electronic furniture locks

keylezz[®]

Electronic furniture locking systems

Solutions with fixed assignment

> I have been assigned one or more lockers

2



Solutions with fixed assignment

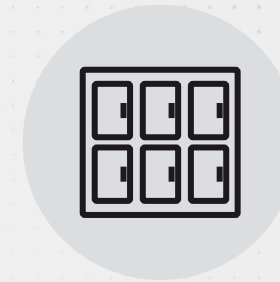
> I have been assigned one or more lockers

Two variants



1. networked systems

- 1.1 Network on Card
- 1.2 OSS Network on Card
 - 1.2.1. Complete OSS system
 - 2.1.2 OSS components for third-party systems



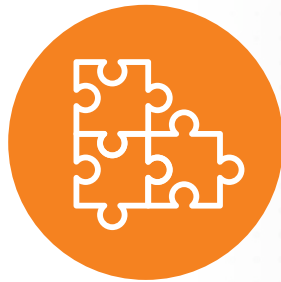
2. stand-alone systems

- 2.1 Card programming
- 2.2 Smartphone system
- 2.3 Software system

Solutions with fixed assignment

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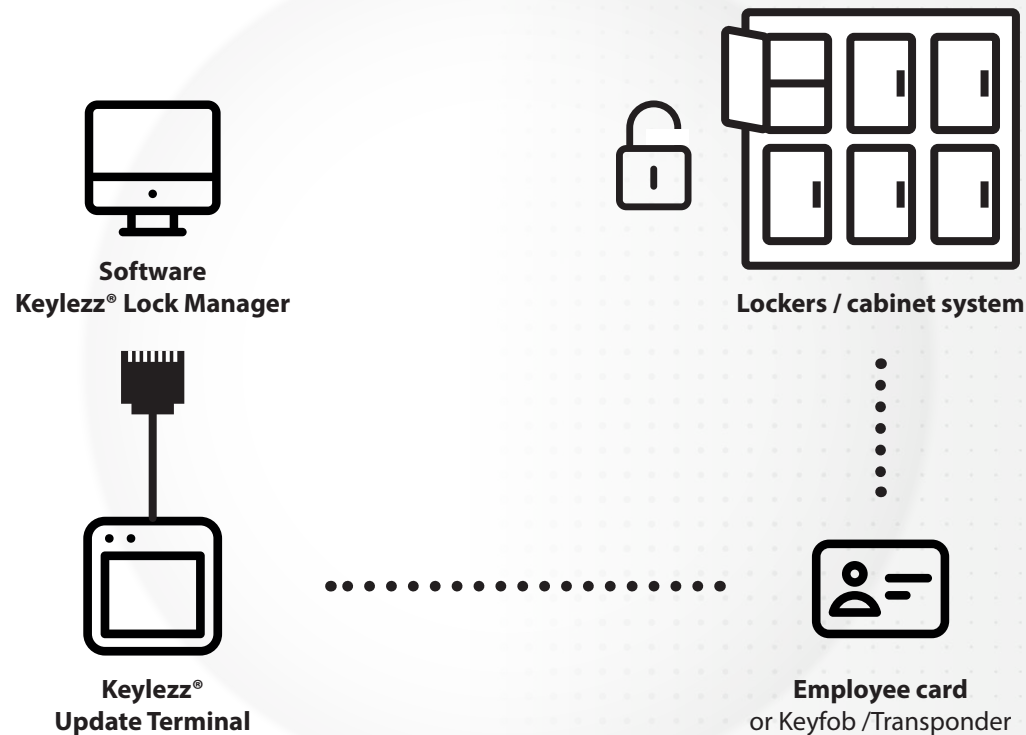
2. stand-alone systems

- 2.1 Card programming
- 2.2 Smartphone system
- 2.3 Software system

Network on Card

Networked systems

Short description



In the **Keylezz® Lock Manager** software, all users and locks of the system can be managed. Authorization for one or more locks can be assigned or revoked very easily.

Information is exchanged from the software to **the Keylezz® update terminal** via LAN or W-Lan - between the terminal and the lock via the user cards. In addition to authorizations, battery statuses, log files and certain error messages are also exchanged.

Although the locks operate wirelessly and are battery-supported, they are still connected in a network, the network on card. Authorizations are always bound to a freely definable authorization period (e.g. 12 h). After that, the user must renew his authorization again at the update terminal.

During this process, the information from the lock (e.g. battery status) is also transferred to the software. This ensures that authorizations and information are always up to date and, for example, cannot be used later if the card is lost. In the event of certain events (e.g. low battery), e-mails can be sent to the user or the administrator.

Network on Card

Networked systems

Requirements

- ▶ There must be memory of approximately 400 Kbytes available on the card so that the application can be applied to the card to transmit the information. One user / card could lock multiple lockers / locks as there is no feedback to the card.
- ▶ **Keylezz® Lock Manager** software requires a server.
- ▶ One or more update terminals must have access to the server running Keylezz® Lock Manager.

Extensions

- ▶ **Integration with customer's leading system**
In addition to complete management from **Keylezz® Lock Manager**, the system can also be used as a background system. In this case, an exchange takes place from the leading system, e.g. the access control, personnel management or similar, via interfaces or service, which users should have authorization to which locks. The user only sees the leading system and can operate the complete furniture locking system from it.
- ▶ **Graphical views of the lockers**
For a better overview, which lockers are currently occupied and which are still free, graphical representations of the system can be used, which show this. Occupied lockers are displayed in red, free lockers in green.
- ▶ **Web page for evaluation**

Advantages

- ✓ Complete management and access system
- ✓ Completely flexible location of the locks, as they are not wired
- ✓ Very low administration effort
- ✓ Simple granting and withdrawal of authorizations
- ✓ Complete system control, overview of usage and battery levels
- ✓ System can be completely integrated into leading access control or personnel management system

Network on Card

Networked systems

Components

Keylezz® furniture locks



Keylezz® Turn



Keylezz®
latch lock

Keylezz®
Outdoor antenna
(optional)

Keylezz® Terminal



Keylezz®
Update Terminal



Keylezz®
Lock Manager

(Software)



Master Card

for emergency opening
(e.g. in case of card loss)



Keylezz®
Smartphone App

- Configure and name the locks e.g. lock 001, 002 etc.
- Log files, battery status and error messages to be read out directly at the lock, in addition to the selection in online mode.
- Emergency opening via smartphone (instead of master card)

Network on Card

Networked systems

User recommendation

The **Network on Card** with concrete user assignment is recommended when ...

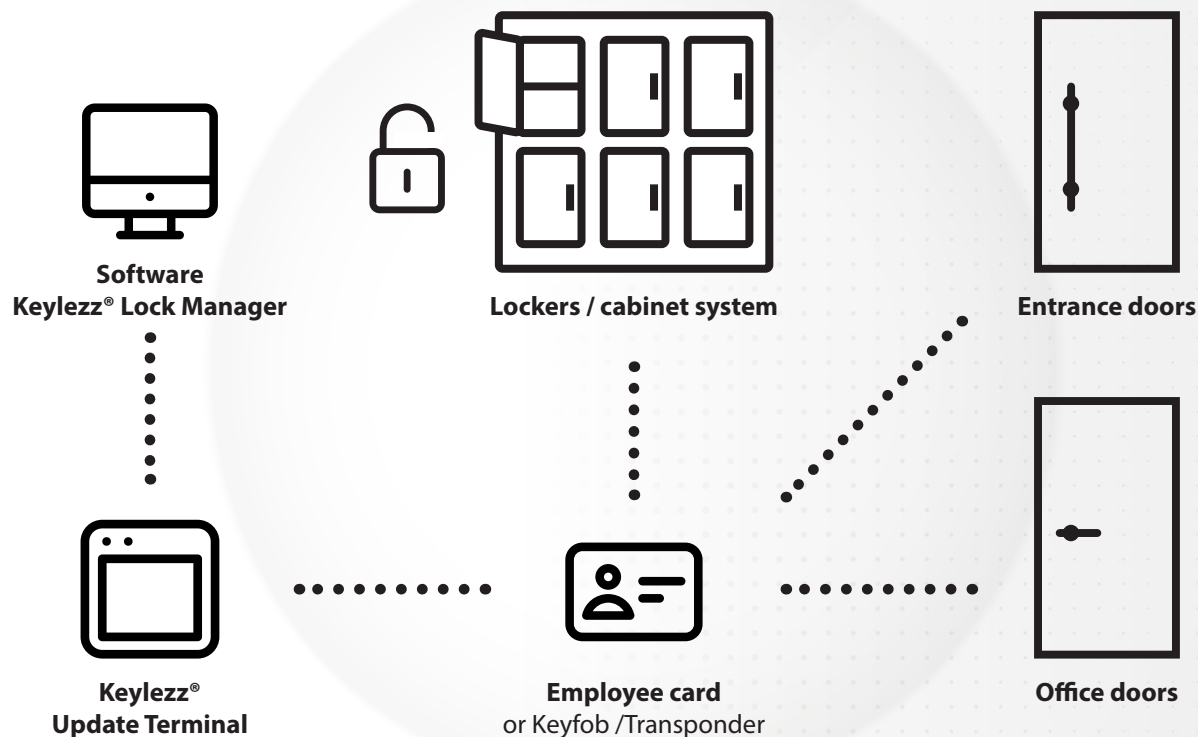
- ✓ ... More complex requirements are placed on the system
- ✓ ... The administrator wants to combine full system control and even
- ✓ ... wants to combine little administration effort
- ✓ ... as soon as a system with concrete user assignment exceeds 100 locks
- ✓ ... if the installation is to be controlled by a leading system
- ✓ ... Cards can be written on the cards
- ✓ This system can be used anywhere if the system requirements are met



OSS Network on Card

Networked systems

Short description



OSS complete system

The OSS Network on Card solution is a special form of the Network on Card system. The Open Security Standard (OSS) aims to allow an end user to use access components - electronic cylinders, hardware, furniture locks, etc. from different manufacturers - in one system via the OSS standard.

Keylezz® offers a complete system with management software (Keylezz® Lock Manager), update reader (Keylezz® Update Terminal) and the furniture locks. Update Terminal) and the furniture locks, which can also be used to manage components from other manufacturers that are OSS-enabled.

OSS components for third-party systems

Alternatively, there is also a configuration software including app that can be used to manage the Keylezz® furniture locks in an existing OSS system as a component.

OSS Network on Card

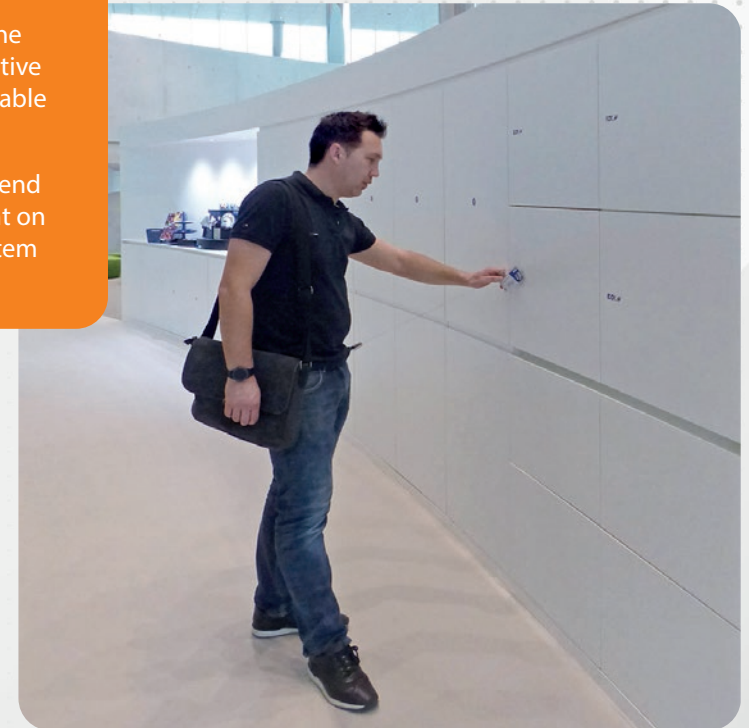
Networked systems

System requirements

- There must be memory of approximately 400 Kbytes available on the card so that the application can be applied to the card to transmit the information. One user/one card could lock multiple lockers/locks as there is no feedback to the card.
- **Keylezz® Lock Manager** requires a server
- One or more update terminals must have access to the server containing **Keylezz® Lock Manager**

Advantages

- ✓ End customer can select the components of the respective manufacturer that are suitable for his system
- ✓ System is not proprietary, end customer is not dependent on the dependent on the system partner



OSS Network on Card

Networked systems

Components

OSS complete system



Keylezz® Lock Manager

OSS Solution (Software)



Master Card

for emergency opening
(e.g. in case of card loss)



Keylezz® Smartphone App

- Configure and name the locks e.g. lock 001, 002 etc.
- Log files, battery status and error messages for reading out directly at the lock, in addition to the selection in online mode.
- Emergency opening via smartphone (instead of master card)

Keylezz® furniture locks and Keylezz® Update Terminal



Keylezz® Turn



Keylezz® latch lock

Keylezz® Outdoor antenna (optional)

Keylezz® Update Terminal

Components

OSS third-party systems

Keylezz® furniture locks

Keylezz® Lock Manager

OSS Configuration (Software)

Keylezz® Smartphone App

- Configure and name the locks e.g. lock 001, 002 etc.
- Log files, battery status and error messages to be read out directly at the lock, in addition to the selection in online mode.
- Emergency opening via smartphone (instead of master card)

OSS Network on Card

Networked systems

User recommendation

The **OSS Network on Card** with concrete user assignment is recommended if ...

- ✓ ... other OSS components are already in use (e.g., door fittings or entrance terminal) are already in use
- ✓ ... more complex requirements are placed on the system
- ✓ ... the administrator wants to combine full system control and even low administration effort
- ✓ ... as soon as a system with concrete user assignment exceeds 100 locks
- ✓ ... if the installation is to be controlled by a leading system is to be controlled
- ✓ ... the cards can be written on
- ✓ This system can be used anywhere if the system requirements are met



Solutions with fixed assignment

> I have been assigned one or more lockers

Two variants



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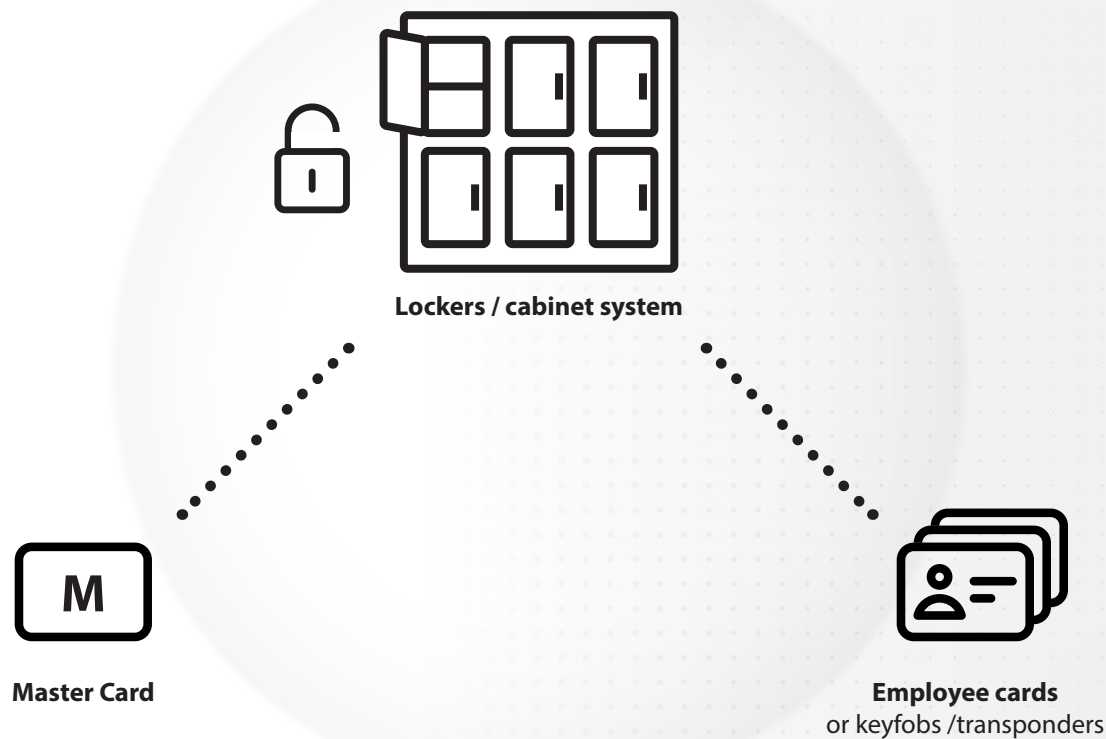
2. stand-alone systems

- 2.1 Card programming
- 2.2 Smartphone system
- 2.3 Software system

Card programming

Stand-alone systems

Short description



Card programming is the simplest system with direct user assignment. Master cards are used to assign one or more ID media to a lock.

Presenting the master card to the respective lock starts the teach-in mode. In this mode, all credentials that are to have access to the lock can be taught in. The master card can also be used to delete access authorizations and to perform emergency openings.

Notice: Also possible with lock version **BASIC**.

Card programming

Stand-alone systems

Extensions

(with Keylezz® Multiflex)

▶ Data readout

via Keylezz® App (and Master Card) directly at the lock

- Battery status
- Logfiles (who used the lock and when - can also be anonymized)
- Error messages

▶ Switching on / off the opening sound

▶ Extend motor running times

▶ Change control direction of the motor

Pros & Cons

- ✓ Very easy to use
- ✓ No system requirements necessary
- ✓ Works with almost all RFID technologies
- ✓ No software necessary
- ✗ No overview of who has access to which lock
- ✗ User (medium) must always be physically at the lock
- ✗ No information on log files and battery levels
- ✗ If a user loses a card, all authorizations on the lock must be deleted (at least the entire group in the case of Multiflex)
- ✗ Only suitable for a small group of users

Card programming

Stand-alone systems

Components

Keylezz® furniture lock



Keylezz® Turn (has LED indicator for visibility of document status)



Keylezz® latch lock (optional with external antenna to indicate voucher status via LED and emergency power option).



**Keylezz®
Outdoor antenna
(optional)**



Master Card

Administrative cards, if necessary

optional



Keylezz® Smartphone App

- Configure and name the locks e.g. lock 001, 002 etc.
- Log files, battery status and error messages to be read out directly at the lock, in addition to the selection in online mode.
- Emergency opening via smartphone (instead of master card)

Card programming

Stand-alone systems

User recommendation

The **card programming** is ideal ...

- ✓ ... for small systems up to max. 100 locks and only a few users per lock
- ✓ ... if the authorizations do not change often, because you always have to access the lock with the respective medium to change them
- ✓ ... for small test projects

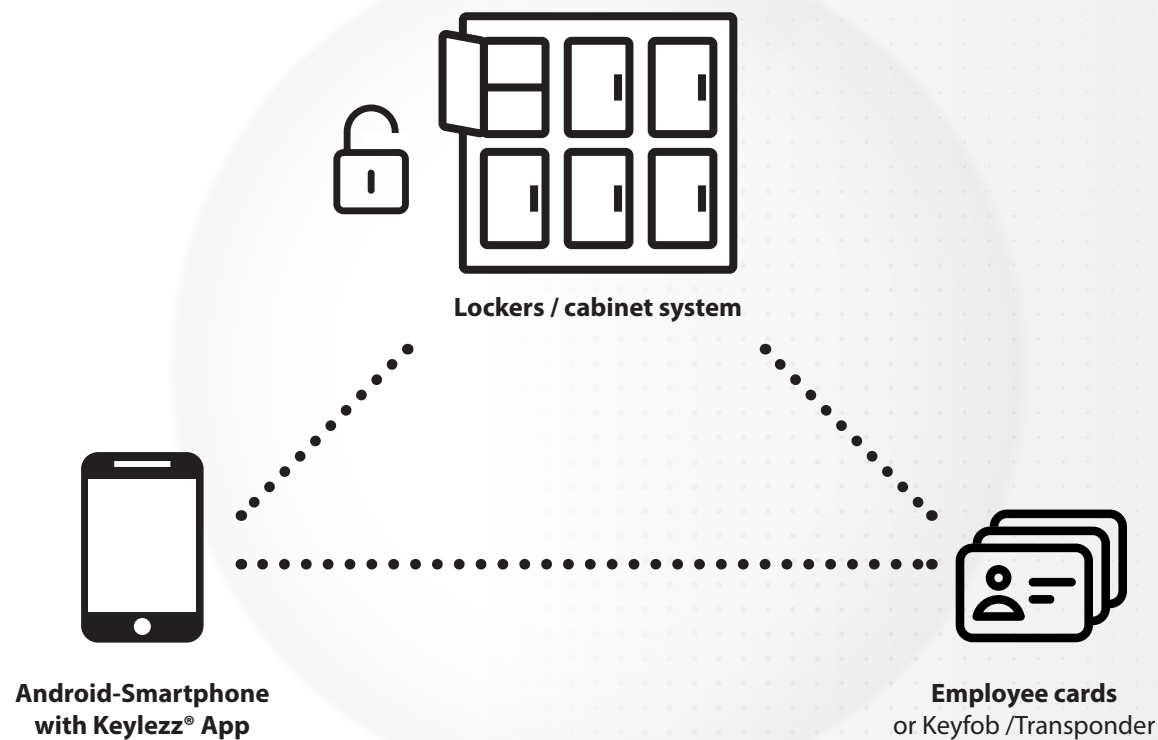


Smartphone System

Stand-alone systems

Short description

With the smartphone solution, an Android smartphone and the **Keylezz® app** can be used to teach in ID media and locks and also assign names (e.g. Max Mustermann and Lock1). Users can then be assigned to the respective locks (and vice versa). The system can therefore be completely configured and managed via the smartphone.



Smartphone System

Stand-alone systems

Extensions

- ▶ **RFID frequencies can be switched off**
- ▶ **Log files, battery levels and error messages can be read out via the app**
- ▶ **The locks can be configured via app**

Pros & Cons

- ✓ Simple system configured and managed entirely through the Keylezz app and a smartphone or tablet with NFV - no software required
- ✓ Easy assignment and revocation of permissions
- ✓ Full control of who has access to which lock
- ✓ Changes can be made without the badge medium (card virtualized)
- ✓ Nothing has to be written to the card
- ✗ Management on smartphone for larger systems unclear
- ✗ No integration into other systems possible

Smartphone System

Stand-alone systems

Components

Keylezz® furniture lock



Keylezz® Turn (has LED indicator for visibility of document status)



Keylezz® latch lock (optional with external antenna for displaying the document status via LED and emergency power supply option)



**Keylezz®
Outdoor antenna
(optional)**



Keylezz® Smartphone App

and smartphone or tablet with NFC

- Configure and name the locks e.g. lock 001, 002 etc.
- Log files, battery status and error messages to be read out directly at the lock, in addition to the selection in online mode.
- Emergency opening via smartphone (instead of master card)

Smartphone System

Stand-alone systems

User recommendation

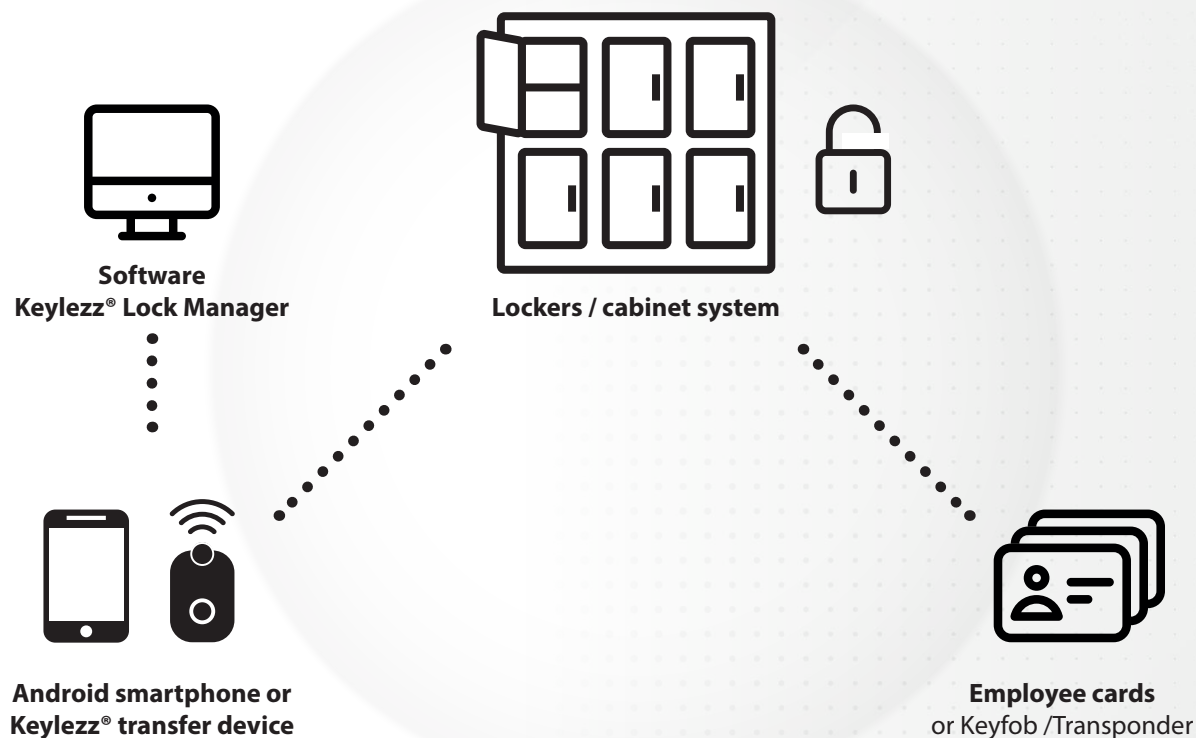
The **smartphone system** is ideal for small complex installations up to 200 locks and users. For larger installations, we recommend either the software solution or the networked, integrable solutions.



Software System

Stand-alone systems

Short description



The **Keylezz® Lock Manager** software can be used to manage all users and locks of the system. Users can easily be assigned or revoked permissions for one or more locks. The exchange of information between the software and the lock takes place via a smartphone with a **Keylezz® app** (or Keylezz® transmission device). In addition to authorizations and battery levels, log files and certain error messages are also transmitted.

Software System

Stand-alone systems

Extensions

▶ **Graphical views of the lockers**

For a better overview of which lockers are currently occupied and which are still free, graphical representations of the system can be used to show this. Occupied lockers are displayed in red, free lockers in green.

▶ **Website for evaluation**

System requirements

▶ **The system can be operated locally on a PC / laptop or on a server**

Pros & Cons

- ✓ Complete management and access system
- ✓ Completely flexible location of the locks, since not wired
- ✓ Low administration effort
- ✓ Easy granting and revoking of authorizations
- ✓ Nothing has to be written on the card
- ✗ Changes, e.g. of authorizations, must be transmitted via the smartphone directly at the lock
- ✗ No automatic transmission of log files, battery status and error messages, etc.

Software System

Stand-alone systems

Components

Keylezz® furniture lock



Keylezz® Turn (has LED indicator for visibility of document status)



Keylezz® latch lock (optional with external antenna for displaying the document status via LED and emergency power supply option)



**Keylezz®
Outdoor antenna
(optional)**



Keylezz® Lock Manager

(Software)



Master Card

for emergency opening
(e.g. in case of card loss)



Keylezz® Smartphone App

- Configure and name the locks e.g. lock 001, 002 etc.
- Log files, battery status and error messages to be read out directly at the lock, in addition to the selection in online mode.
- Emergency opening via smartphone (instead of master card)

Software System

Stand-alone systems

User recommendation

The **Keylezz® Software System** with direct assignment is recommended ...

- ✓ ... for larger systems with more than 100 locks
- ✓ ... especially if no Network on Card is desired or is desired or possible (e.g., because it is not possible to write to the cannot be written to the badge medium (no memory) or this is not desired).

