ekey

YOUR FINGER. YOUR KEY.

ekey net finger scanners

Network access solutions

2018

Europe's No. 1 for fingerprint access solutions

More than one million satisfied customers are the best possible recommendation for our products! For many years, both private households and leading companies alike, along with organizations such as fire and rescue services, have been putting their trust in proven ekey finger scanners.

ekey was founded in 2002 and is now Europe's No. 1 for fingerprint access solutions. ekey puts authorization into the customer's hands! Keys, cards, codes, etc. can be lost, forgotten, or stolen. „Your finger is always on hand!" ekey's wide range of products includes finger scanners for doors, gates, alarm systems, and time recording.

The international company currently has 90 employees at its 5 locations in Austria, Germany, Liechtenstein/Switzerland, Italy, and Slovenia, and exports its products to over 70 countries, which exports makes up 73% of its business. ekey's main sales markets include Spain and the USA, in addition to Austria, Germany, Switzerland, Slovenia, and Italy.

QUALITY

All ekey products undergo a rigorous endurance test before they reach the market. The test involves intensive simulations of blazing heat, biting cold, and high humidity, and every finger scanner is subjected to these conditions, along with all of its components, countless times before reaching the customer.

Our quality formula comprises the highest standards of functionality, reliability, and security, which are refined by means of extensive testing.

Quality-tested products from ekey – you can count on us!

CERTIFIED QUALITY MADE IN AUSTRIA:

- Extensive production, manufacturing, and functional testing (zero tolerance)
- Testing for environmental and temperature resistance
- Vibration- and shock-tested
- Tested for penetration of water and mechanical parts
- Quality management system in accordance with EN ISO 9001:2015
- CE-compliant

Good reasons
for ekey finger scanners

Unique comfort with highest security

More than one million satisfied customers in over 70 countries around the world prove that ekey products are quickly becoming widespread among end users and companies. The many benefits of the finger scanner speak for themselves.

UNIQUE COMFORT
You can't lock yourself out: your finger is always on hand!

HIGHEST SECURITY
- No lost or stolen keys!
- Maximum protection against forgery thanks to liveness detection with RF sensor technology!
- Access rights (e.g., card or key) cannot be transferred!
- 1,000 times more secure than a 4-digit code!

USER-FRIENDLY
Easy installation and administration!

INTELLIGENT SOFTWARE
The ekey software is learning all the time – it can detect the growth of children's fingers as well as minor injuries and changes to users' habits.

KNOW WHO IS COMING HOME
By using the ekey fingerprint access control system, building control systems can now detect which person triggers an action.

5-YEAR QUALITY GUARANTEE
for all ekey products!

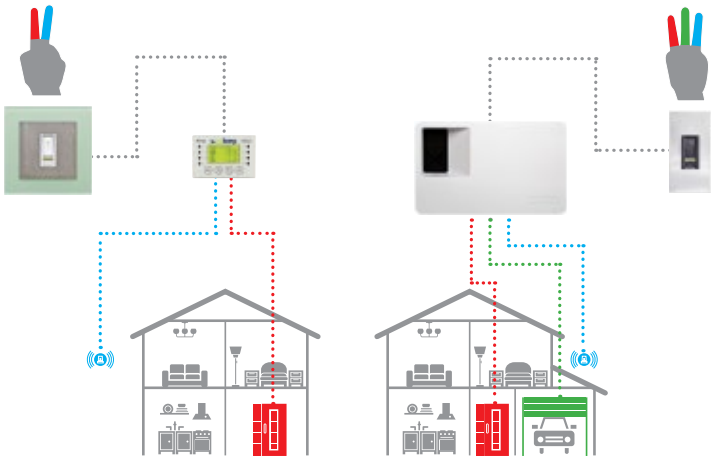
ekey MEDIA CENTER
You can find all the information on our products on our website:
www.ekey.net/en/pro-mediacenter

Contents

ekey home
Single-point access solutions

Control up to 3 functions with just one finger scanner*.

- Can store up to 99 fingerprints
- Can control from 1 to 3 functions (e.g., door, gate, and alarm system)
- Easy to operate with central user administration directly via the control panel
- Or by using the *ekey home app* *(ekey finger scanner integra, ekey finger scanner arte)*
- Optional: access by card (RFID) -> can also store up to 99 cards

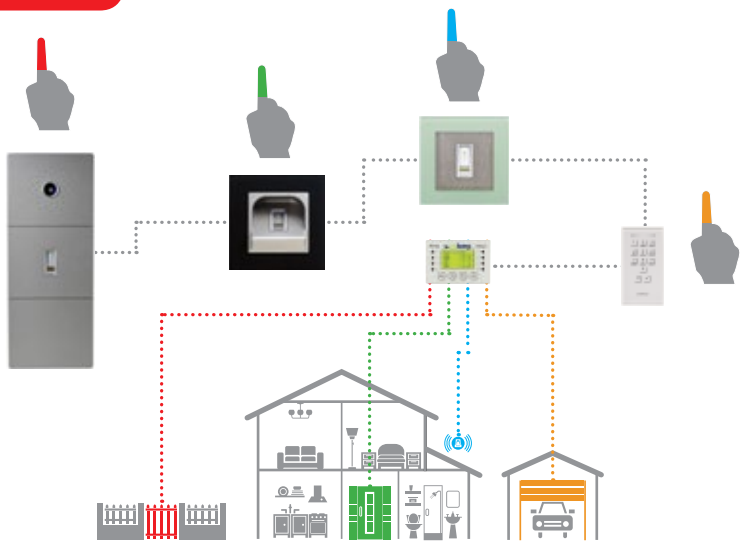


For single-point & multi-point access solutions, please see the **"ekey home | ekey multi" catalog**.

ekey multi
Multi-point access solutions

4 finger scanners* are managed by a single control panel.

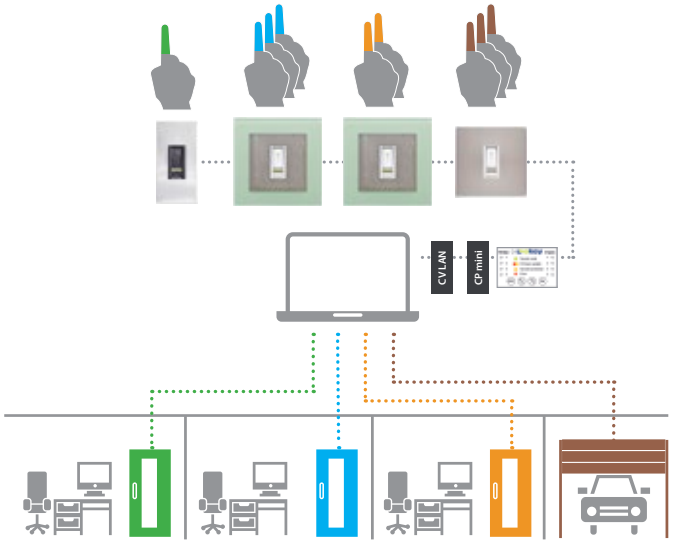
- Can store up to 99 fingerprints
- Supports up to 4 finger scanners
- Can control up to 4 functions per FS (e.g., door, gate, and alarm system)
- Individually programmable time slots
- Access log for every finger scanner
- Easy to operate with central user administration directly via the control panel
- User permissions can be assigned on a personalized basis (based on location and time)
- Vacation or permanent program
- Optional: access by card (RFID) -> can also store up to 99 cards



ekey net
Network access solutions

The networkable access solution for companies, organizations, and discerning households.

- Can store up to 2,000 fingerprints per finger scanner*
- Supports up to 80 finger scanners
- Can control up to 4 functions per FS
- Programmable time slots
- Access log for every finger scanner
- Supports cross-site administration
- Central administration via PC
- Calendar function
- Interfaces for establishing external connections
- Optional: access by card (RFID) -> can also store up to 2,000 cards



*Alternatively: code pad (keypad) -> can store up to 99 or 2,000 codes

ekey net
Network access solutions

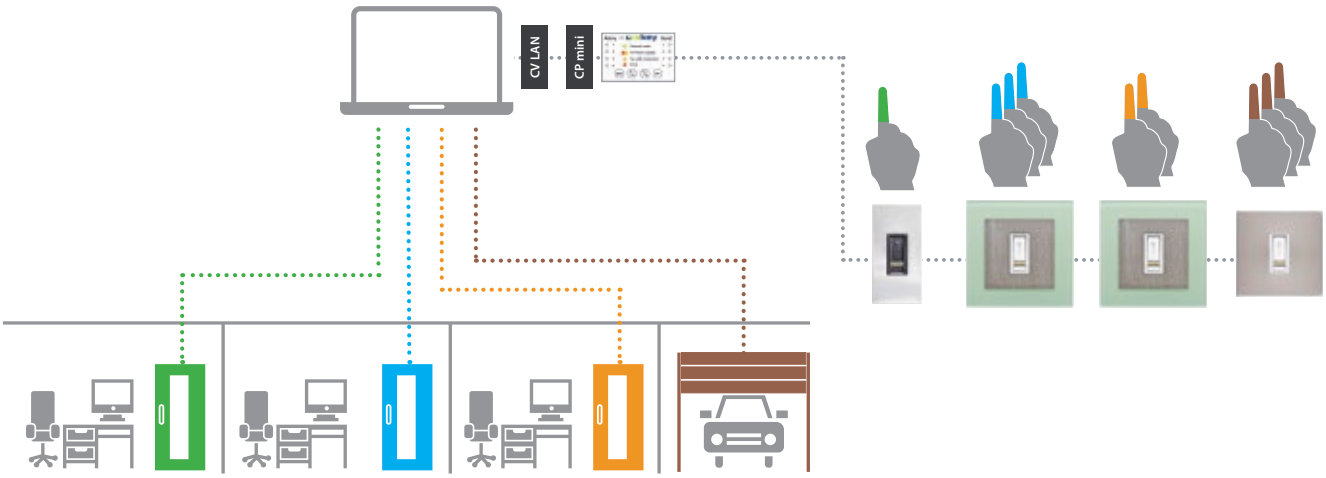
The networkable access solution for companies, organizations, and discerning households.

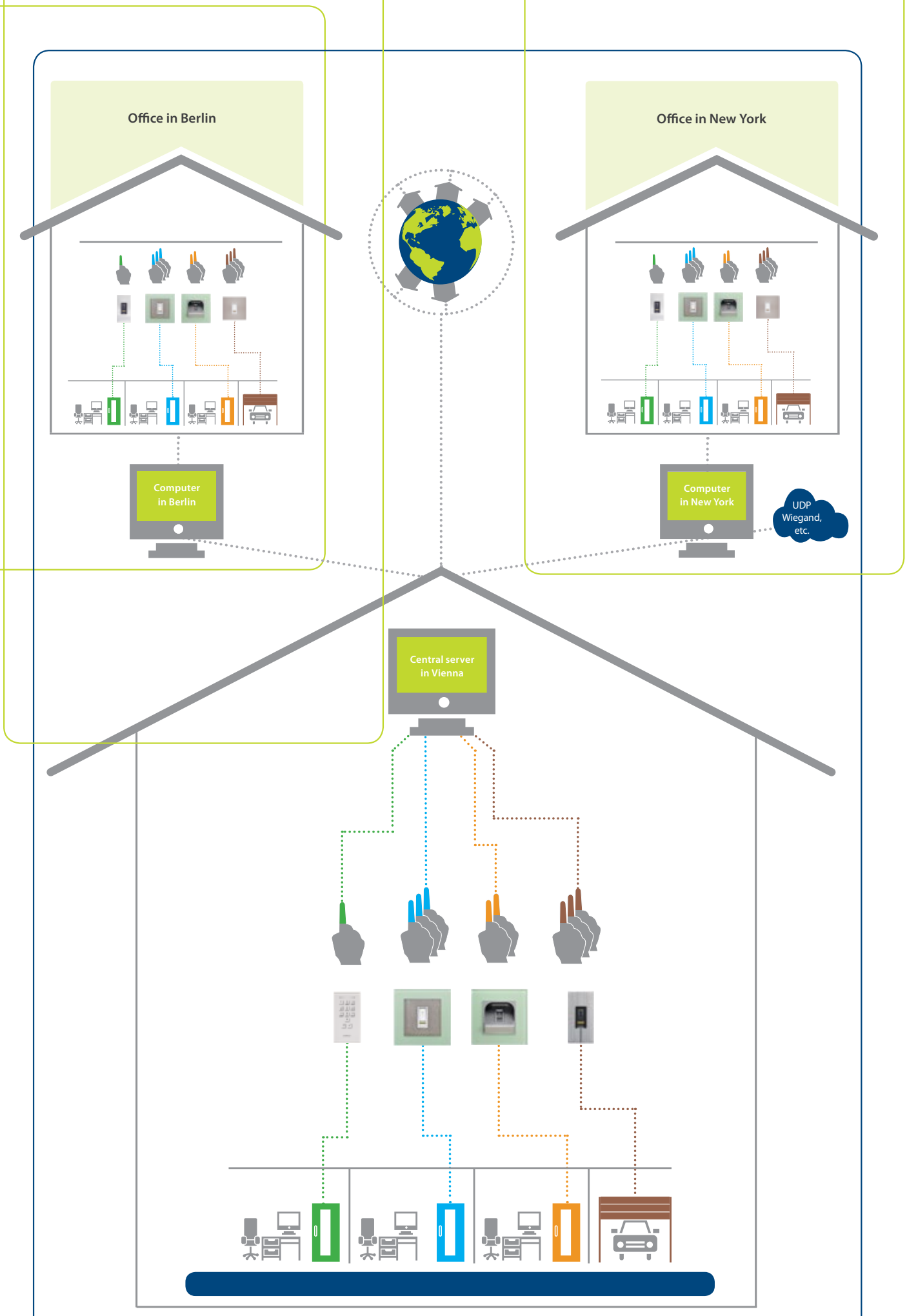
ekey net is a networkable access control system for up to 80 finger scanners. It allows you to manage all your access zones centrally via a PC – from the office entrance and the server room right through to the warehouse. Individual users are stored in the system with the user-friendly software, where they can be clearly arranged thanks to freely definable user groups. ekey net supports a range of interfaces so you can connect it to external systems (e.g., building control, time recording, printer management, Wiegand systems, etc.).

Short facts:

- Can store up to 2,000 fingerprints per finger scanner*
- Supports up to 80 finger scanners
- Can control up to 4 functions per FS
- Programmable time slots
- Access log for every finger scanner
- Supports cross-site administration
- Central administration via PC
- Calendar function
- Interfaces for establishing external connections
- Optional: access by card (RFID) -> can also store up to 99 cards

*Alternatively: code pad (keypad) -> can store up to 2,000 codes




Office in Berlin
Office in New York
Computer in Berlin
Computer in New York
UDP Wiegand, etc.
Central server in Vienna

Planning steps
for a successful project

Before you start planning, you must know exactly how many **users** and **access points** (and, if applicable, how many locations) your ekey net access solution is to be configured for. This requires you to be familiar with the **building and network architecture.**

1

Select a suitable license option:
a) light
b) business

2

Select a suitable finger scanner or finger scanners on the basis of model, function, and storage capacity, or a code pad:
a) Finger scanner wall-mounted (WM)
b) Finger scanner outlet-mounted E (OM E) or outlet-mounted I (OM I)
c) Finger scanner integra (IN)
d) Code pad keypad integra (KP IN)

Select suitable accessories, if required: Weather shield, wall mounting set, mounting frame, etc.

3

Select a suitable control panel:
a) ekey net control panel mini 1 or 2 (CP mini 1 or 2)
b) ekey net control panel wall-mounted 3 (CP WM 3)
c) ekey net control panel DIN-rail mounted 4 (CP DRM 4)

4

Select a suitable number of LAN converters.

5

Select a suitable number and type of power supplies:
a) Simple wall power supply (PS WPS)
b) Convenient DIN-rail mounted power supply inside the control cabinet (PS DRM)
c) Outlet-mounted power supply (PS OM)
d) Uninterruptible power supply (UPS)

6

Storage station:
Convenient finger storage on your PC at your workstation.

7

Server and system requirements:
a) ekey net server box
b) Minimum requirements to be met by system and computer

8

Select a suitable interface for connecting to third-party systems, if required:
a) ekey net Wiegand converter (CV WIEG)
b) ekey net LAN (UDP) converter (CV LAN)
c) ekey net software development kit (SDK)

9

Commissioning and customer service:
Contact an ekey PARTNER with ekey net certification!

Step 1: Select a suitable license option:

Functional scope

To cater for the broad range of possible applications, the ekey net software is available with 2 different license variants:

- ekey net light – supports basic access functions (e.g., high-end private homes)
- ekey net business (full version)

Functions available in ekey net	**light**	**business**
Finger scanner variants (S = 40, M = 200, L = 2,000 fingerprints)	S, M	S, M, L
Code pad ekey keypad integra (L = 2,000 codes)	L	L
Number of finger scanners that can be managed in the system	80	80
Number of time zones	3	UNLIMITED
Number of entries per time zone	31	31
Attendance list	✕	✓
Calendar function for public holidays and vacations	1	UNLIMITED
Terminal groups	1	UNLIMITED
User groups	1	UNLIMITED
Concierge mode (e.g., to open a door directly from the PC)	✕	✓
Wiegand connection	✕	✓
Ability to change basic settings (essentially those that are pre-defined)	✕	✓
Customized device templates (action, event conversion)	✕	✓
CSV sending	POSITIVE ONLY	✓
ODBC (SQL) sending	✕	✓
HTML sending	✕	✓
UDP sending	✓	✓
ekey reporting	✕	✓
Time-controlled anti-passback	✓	✓
Opening via cell phone browser with a single-use PIN for increased security	✓	✓
Simultaneous switching of up to 2 functions	✓	✓
Daytime switching operation with first entry	✓	✓
Daytime switching operation without first entry (automatic time-controlled operation)	✕	✓
Configurable inputs for triggering an action	✓	✓
2-person principle (e.g., code and finger scanner required)	✓	✓

License to upgrade from **light** to **business** on request (ekey net upgrade)!

Step

1

ekey net software licenses

Replace the digits 00 with the number of finger scanners you require*. The resulting number is your part number.

Important: A license must be obtained for each finger scanner*!

Part no.	*Description*
170000	**ekey net business**
	Example You have 14 finger scanners. Your part number is 170014

Example for 14 finger scanners*

Part number 170014

Part no.	*Description*
171000	**ekey net light**
	You have 7 finger scanners. **Your part number is 171007**

Example for 7 finger scanners*

Part number 171007

*Alternatively: Code pad (keypad)

Step 2: Select suitable finger scanners …

… based on function!

ekey finger scanner
ekey finger scanner without any additional functionality.

ekey finger scanner with radio frequency identification
The finger scanner has an integrated RFID card reader with MIFARE DESFire EV1.

ekey finger scanner with relay on board (“indoor” function)
The finger scanner has the switching relay already built in. Consequently, no additional control panel is required.*

ekey finger scanner with radio frequency identification + relay on board (“indoor” function)
The finger scanner has an integrated RFID card reader with MIFARE DESFire EV1 and the switching relay. Consequently, no additional control panel is required.*

Code pad ekey keypad integra
For the input of user codes containing 4 to 8 digits.

*For security reasons, the finger scanner is only suitable for internal use because it is not sufficiently tamper-proof.

… based on storage capacity!

Type	Fingerprints	Codes	RFID cards	Users
S	40	×	40	40
M	200	×	200	200
L	2,000	2,000	2,000	2,000

This is the maximum number of fingerprints that can be stored on this finger scanner*. **We recommend storing at least 2 fingerprints for each user.**

An upgrade is possible in theory but components will need to be replaced!

… based on model!

Wall-mounted
For wall mounting and easy retrofitting.

Outlet-mounted
For outlet mounting in switch frames or integration into door stations and mailboxes.

integra
For wall mounting, cavity wall mounting, or flush-mounting installation and integration into doors.

Step
2

ekey finger scanner **wall-mounted**

For wall mounting and easy retrofitting

Finger scanner

Technical specifications

- FAR: 1:10,000,000/FRR: 1:100
- Dimensions W x H x D: 45 x 81.6 x 60.3 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- IP code: IP 44
- Recommended mounting height: 135 cm
- Display: 3 multicolor LEDs
- Temperature range: -25 °C to 70 °C
- Tamper-proof, data is retained in the event of a power failure, bus termination can be deactivated on the device

Part no.	*Description*
101390	**ekey net FS S WM 2.0,** max. 40 fingerprints
101391	**ekey net FS M WM 2.0,** max. 200 fingerprints
101392	**ekey net FS L WM 2.0,** max. 2,000 fingerprints
101393	**ekey net FS S WM 2.0 RFID,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101394	**ekey net FS M WM 2.0 RFID,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101395	**ekey net FS L WM 2.0 RFID**, max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1
101396	**ekey net FS S WM 2.0 REL,** max. 40 fingerprints
101397	**ekey net FS M WM 2.0 REL,** max. 200 fingerprints
101398	**ekey net FS L WM 2.0 REL,** max. 2,000 fingerprints
101399	**ekey net FS S WM 2.0 RFID REL,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101400	**ekey net FS M WM 2.0 RFID REL,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101401	**ekey net FS L WM 2.0 RFID REL,** max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1

Accessories

Accessories	*Beschreibung*	
101406	**ekey weather shield FS WM 2.0 ST,** brushed stainless steel	
	• Dimensions W x H x D: 110 x 170 x 95 mm • Recommended mounting height: 135 cm	• Scope of delivery: Weather shield, 4 chipboard screws 4x35, 4 screw anchors S5, 3 countersunk head screws M3x16, 3 Torx countersunk head screws M3x6 GU

101418	**ekey cover FS WM 2.0 ST,** brushed stainless steel	
	• Dimensions W x H x D: 89 x 87 x 103 mm • Recommended mounting height: 100 cm	• Scope of delivery: Cover, 4 chipboard screws 4x35, 4 screw anchors S5, 3 countersunk head screws M3x16, 3 Torx countersunk head screws M3x6 GU

Accessories - RFID

Art.-Nr.	*Beschreibung*
101690	**ekey RFID card MIFARE DESFire EV1 2k logo,** ekey design, ISO 14443 A
101692	**ekey RFID card MIFARE DESFire EV1 2k WHI,** white, ISO 14443 A
101691	**ekey RFID fob MIFARE DESFire EV1 2k BL,** black, ISO 14443 A

ekey finger scanner **outlet-mounted**

For integration into door stations of well-known manufacturers

Finger scanner OM I

For integration into door stations

Technical specifications

- FAR: 1:10,000,000/FRR: 1:100
- Dimensions W x H x D: 50.4 x 50.4 x 30.1 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25 °C to 70 °C
- Recommended mounting height: 155 cm
- Display: 3 multicolor LEDs
- Tamper-proof, data is retained in the event of a power failure, bus termination can be deactivated on the device, compatible with many build-in modules for door stations, letterboxes, wall mounting sets

Part no.	*Description*
101350	**ekey net FS S OM I,** max. 40 fingerprints
101351	**ekey net FS M OM I,** max. 200 fingerprints
101352	**ekey net FS L OM I,** max. 2,000 fingerprints
101353	**ekey net FS S OM I RFID,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101354	**ekey net FS M OM I RFID,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101355	**ekey net FS L OM I RFID,** max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1
101726	**ekey net FS S OM I REL,** max. 40 fingerprints
101727	**ekey net FS M OM I REL,** max. 200 fingerprints
101728	**ekey net FS L OM I REL,** max. 2.000 fingerprints
101729	**ekey net FS S OM I RFID REL,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101730	**ekey net FS M OM I RFID REL,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101731	**ekey net FS L OM I RFID REL,** max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1

Accessories

Part no.	*Description*
	Build-in modules for Gira door stations
101380	**ekey Modul Gira TX44 AL,** aluminum colored
101381	**ekey Modul Gira TX44 AN,** anthracite
101382	**ekey Modul Gira TX44 PW,** pure white
	Build-in modules for Siedle door stations
101376	**ekey Modul Siedle Vario DG,** micaceous dark gray
101378	**ekey Modul Siedle Vario W,** white
101379	**ekey Modul Siedle Vario SM,** silver metallic
101858	**ekey Modul Siedle Vario AG,** anthracite gray
	Build-in modules for Elvox door stations
101552	**ekey Modul Elvox 8000 series GR,** gray
	Build-in modules for Bticino door stations
101533	**ekey Modul bticino Sfera AME,** Allmetal
101534	**ekey Modul bticino Sfera AWH,** Allwhite
101535	**ekey Modul bticino Sfera AST,** Allstreet
101536	**ekey Modul bticino Sfera ROB,** Robur
	Build-in modules for Comelit door stations
101473	**ekey Modul Comelit ikall BL,** black, incl. ekey home FS OM I
101629	**ekey Modul Comelit metal,** metallic, incl. ekey home FS OM I

Important: Availability of build-in modules varies from country to country!

Attention: RFID function is not possible behind stainless steel or aluminum!

Well-known manufacturers build ekey finger scanners into their door stations and letterboxes:

Upgrading a door station? Build-in module (parts shown in red) is available from ekey or the door station manufacturer.

Finger scanner OM E

For integration into Siedle Vario flush mounted door stations

Technical specifications

- FAR: 1:10,000,000/FRR: 1:100
- Dimensions W x H x D: 50.4 x 50.4 x 30.1 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25 °C to 70 °C
- Recommended mounting height: 100 cm
- Display: 3 multicolor LEDs
- Tamper-proof, data is retained in the event of a power failure, bus termination can be deactivated on the device, compatible with many switch ranges with 50 x 50 mm internal dimension
- Incl. bezel, mounting bracket, spacers, sealing flange

Part no.	Description
101150	**ekey net FS S OM E,** max. 40 fingerprints
101151	**ekey net FS M OM E,** max. 200 fingerprints
101152	**ekey net FS L OM E,** max. 2,000 fingerprints
101153	**ekey net FS S OM E RFID,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101154	**ekey net FS M OM E RFID,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101155	**ekey net FS L OM E RFID,** max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1
101156	**ekey net FS S OM E REL,** max. 40 fingerprints
101157	**ekey net FS M OM E REL,** max. 200 fingerprints
101158	**ekey net FS L OM E REL,** max. 2,000 fingerprints
101159	**ekey net FS S OM E RFID REL,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101160	**ekey net FS M OM E RFID REL,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101161	**ekey net FS L OM E RFID REL,** max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1

Accessories




Part no.	*Description*
	Build-in modules for Siedle Vario flush mounted door station*
101892	**ekey ModulS Siedle Vario DG,** micaceous dark gray
101893	**ekey ModulS Siedle Vario W,** white
101894	**ekey ModulS Siedle Vario SM,** silver metallic
101895	**ekey ModulS Siedle Vario AG,** anthracite gray
101897	**ekey ModulS Siedle Vario DG LED,** micaceous dark gray with alarm LEDs
101898	**ekey ModulS Siedle Vario W LED,** white with alarm LEDs
101899	**ekey ModulS Siedle Vario SM LED,** silver metallic with alarm LEDs
101900	**ekey ModulS Siedle Vario AG LED,** anthracite gray with alarm LEDs

Attention: This accessory is only available in combination with ekey FS OM E (101148 and 101673)!

***Important:** Not compatible with the Siedle Vario surface mounted door station.

Accessories - RFID


Part no.	*Description*
101690	**ekey RFID card MIFARE DESFire EV1 2k logo,** ekey design, ISO 14443 A
101692	**ekey RFID card MIFARE DESFire EV1 2k WHI,** white, ISO 14443 A
101691	**ekey RFID fob MIFARE DESFire EV1 2k BL,** black, ISO 14443 A

Step
2

ekey finger scanner **outlet-mounted E**

For integration into switch frames of well-known manufacturers

Finger scanner

Technical specifications

- FAR: 1:10,000,000/FRR: 1:100
- Dimensions W x H x D: 50.4 x 50.4 x 30.1 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25 °C to 70 °C
- Recommended mounting height: 155 cm
- Display: 3 multicolor LEDs
- Tamper-proof, data is retained in the event of a power failure, bus termination can be deactivated on the device, compatible with many switch ranges with 50 x 50 mm internal dimension
- Incl. bezel, mounting bracket, spacers, sealing flange

Part no.	*Description*
101150	**ekey net FS S OM E,** max. 40 fingerprints
101151	**ekey net FS M OM E,** max. 200 fingerprints
101152	**ekey net FS L OM E,** max. 2,000 fingerprints
101153	**ekey net FS S OM E RFID,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101154	**ekey net FS M OM E RFID,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101155	**ekey net FS L OM E RFID,** max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1
101156	**ekey net FS S OM E REL,** max. 40 fingerprints
101157	**ekey net FS M OM E REL,** max. 200 fingerprints
101158	**ekey net FS L OM E REL,** max. 2,000 fingerprints
101159	**ekey net FS S OM E RFID REL,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101160	**ekey net FS M OM E RFID REL,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101161	**ekey net FS L OM E RFID REL,** max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1

Accessories - RFID

Part no.	*Description*
101690	**ekey RFID card MIFARE DESFire EV1 2k logo,** ekey design, ISO 14443 A
101692	**ekey RFID card MIFARE DESFire EV1 2k WHI,** white, ISO 14443 A
101691	**ekey RFID fob MIFARE DESFire EV1 2k BL,** black, ISO 14443 A

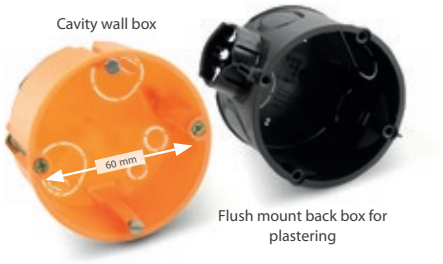
Accessory - bezel

Part no.	*Description*
101166	**ekey bezel FS OM PW 50x50,** plastic pure white
101167	**ekey bezel FS OM AL 50x50,** plastic aluminum colored
101168	**ekey bezel FS OM AN 50x50,** plastic anthracite

BUSCH-JAEGER merten by Schneider Electric B. Berker JUNG GIRA :hager

Parts shown in red must be purchased from the switch manufacturer!

The ekey FS OM E has been designed and built for flush mount back boxes in accordance with DIN 49073.



Accessory - frame

Part no.	Description	
101372	**ekey frame FS OM ST,** brushed stainless steel*	
	• Dimensions W x H x D: 85 x 85 x 7.2 mm	• Cover provides the device with IP 44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the electrical outlet.
101702	**ekey frame FS OM GL WHI,** glass white	
101703	**ekey frame FS OM GL BL,** glass black	
101704	**ekey frame FS OM GL MI,** glass mint	
	• Dimensions W x H x D: 100 x 100 x 7.5 mm	• Cover provides the device with IP 44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the electrical outlet.
101705	**ekey frame FS OM503 GL WHI,** glass white	
101706	**ekey frame FS OM503 GL BL,** glass black	
101707	**ekey frame FS OM503 GL MI,** glass mint	
	• Dimensions W x H x D: 125 x 100 x 7.5 mm	• Cover provides the device with IP 44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the electrical outlet type 503.

***Attention:** RFID function is not possible with ekey frame FS OM ST (101372)!

Accessories - mounting frame

Part no.	*Description*	
101779	**ekey mounting frame FS OM GL WHI,** glass white	
101780	**ekey mounting frame FS OM GL BL,** glass black	
101781	**ekey mounting frame FS OM GL MI,** glass mint	
101785	**ekey mounting frame FS OM GL MI LED,** glass mint with alarm LEDs	
101786	**ekey mounting frame FS OM GL BL LED,** glass black with alarm LEDs	
101787	**ekey mounting frame FS OM GL WHI LED,** glass white with alarm LEDs	
	• Dimensions W x H x D: • Mounting frame: 105 x 105 x 54 mm • Flush mount back box: 72 x 72 x 57 mm • Material: glass, plastic	• Recommended mounting height: 100 cm • Scope of delivery: Mounting frame and flush mount back box. A standard flush mount back box is not suitable.

101838	**ekey cavity wall box WHI,** for mounting frame FS OM	
	• Dimensions W x H x D: 83 x 83 x 65 mm	• Material: Plastic

101896	**ekey integrationkit FS OM E**	
101901	**ekey integrationkit FS OM E LED,** with alarm LEDs	
	The ekey integrationkit FS OM E is an accessory for the ekey finger scanner FS OM E and can be built into a wide variety of products (letterboxes, door stations, etc.). It is only ever mounted by the user, opening up a number of new possible applications.	• Suitable for RFID • Recommended mounting height: 100 cm • Scope of delivery: mounting bracket for FS OM E, adhesive tape as a mounting aid*

! *Notice: The adhesive tape is a mounting aid and has not been tested by ekey for all applications. The installer must always check the appropriate way to fix the ekey integrationkit FS OM E for each particular application.

Step
2

ekey finger scanner **integra**

For wall mounting, cavity wall mounting, and flush-mounting installation

Finger scanner

Technical specifications

- FAR: 1:10,000,000/FRR: 1:100
- Dimensions W x H x D:
  Housing: 43.6 x 89 x 17.3 mm
  with design element: 45.5 x 91.5 x 17.3 mm
- Power consumption: approx. 1 W
- Supply voltage: 10-24 VDC
- IP code: IP 54
- Temperature range: -25 °C to 70 °C
- Display: 3 multicolor LEDs
- Recommended mounting height: 155 cm
- Tamper-proof, data is retained in the event of a power failure, bus termination can be deactivated on the device
- Incl. 8 m connection cable
- Design element not contained within scope of delivery

Part no.	*Description*
101788	**ekey net FS S IN 2.0,** max. 40 fingerprints
101789	**ekey net FS M IN 2.0,** max. 200 fingerprints
101790	**ekey net FS L IN 2.0,** max. 2,000 fingerprints
101791	**ekey net FS S IN 2.0 RFID,** max. 40 fingerprints + 40 ekey RFID cards MIFARE DESFire EV1
101792	**ekey net FS M IN 2.0 RFID,** max. 200 fingerprints + 200 ekey RFID cards MIFARE DESFire EV1
101793	**ekey net FS L IN 2.0 RFID,** max. 2,000 fingerprints + 2,000 ekey RFID cards MIFARE DESFire EV1

Accessories - RFID

Part no.	*Description*
101690	**ekey RFID card MIFARE DESFire EV1 2k logo,** ekey design, ISO 14443 A
101692	**ekey RFID card MIFARE DESFire EV1 2k WHI,** white, ISO 14443 A
101691	**ekey RFID fob MIFARE DESFire EV1 2k BL,** black, ISO 14443 A

Accessory - design element

Part no.	*Description*
	Design element FS IN
101254	**ekey design element FS IN ST,** stainless steel
101305	**ekey design element FS IN BL,** black
101304	**ekey design element FS IN WHI,** white
101303	**ekey design element FS IN GO,** gold
	Design element FS IN RFID
101688	**ekey design element FS IN RFID ST,** stainless steel
101904	**ekey design element FS IN RFID BL,** black
101933	**ekey design element FS IN RFID WHI,** white

SPECIAL COLORS ON REQUEST!
You can find more information on our website:
www.ekey.net/en/pro-special_colors_integra

Accessory - mounting frame

Part no.	Description	
101716	**ekey mounting frame FS IN GL AN,** glass anthracite	
101717	**ekey mounting frame FS IN GL WHI,** glass white	
101801	**ekey mounting frame FS IN GL AN LED,** glass anthracite with alarm LEDs	
101802	**ekey mounting frame FS IN GL WHI LED,** glass white with alarm LEDs	
	• Dimensions W x H x D: 53.5 x 127 x 24 mm • Material: Stainless steel, glass	• Recommended mounting height: 155 cm

Accessory - mounting frame with bell module

Part no.	Description	
101803	**ekey mounting frame FS IN BeM GL WHI,** glass white	
101804	**ekey mounting frame FS IN BeM GL AN,** glass anthracite	
101807	**ekey mounting frame FS IN BeM GL WHI LED,** glass white with alarm LEDs	
101808	**ekey mounting frame FS IN BeM GL AN LED,** glass anthracite with alarm LEDs	
	• Dimensions W x H x D: 53.5 x 171 x 24 mm • Material: Stainless steel, glass	• Recommended mounting height: 155 cm • 2 buttons to trigger a bell electronically

Accessory - wall mounting set

Part no.	Description	
101302	**ekey wall mounting set FS IN ST,** stainless steel	
101301	**ekey wall mounting set FS IN ST LED,** stainless steel with alarm LEDs	
	• Dimensions W x H x D:	• Front plate: 96 x 142 x 2 mm • Flush-mounting housing: 60 x 122 x 36 mm
101147	**ekey weather shield FS IN ST,** stainless steel	
	• Dimensions W x H x D:	• Front plate: 126 x 142 x 65 mm • Flush-mounting housing: 60 x 122 x 36 mm
101300	**ekey flush mount back box FS IN,** for flush-mounting installation, 0.5 mm sheet	
	• Dimensions W x H x D: 42 x 87 x 25 mm	

Notice: Only available in conjunction with ekey design elements.

ekey MEDIA CENTER
You can find all the information
on our products on our website:
www.ekey.net/en/pro-mediacenter

Step
2

Code pad ekey **keypad integra**

The alternative to the finger scanner

Code pad

Part no.	Description	
101772	**ekey net KP L IN,** max. 2,000 codes	
	• Keypad: capacitive touchpad • Dimensions W x H x D: 51.7 x 97.1 x 21.4 mm • Power consumption: approx. 1 W • Supply voltage: 8-24 VDC • IP code: IP 54 • Temperature range: -25 °C to 70 °C • Display: 3 multicolor LEDs	• Up to 99 different 4- to 8-digit codes can be programmed simultaneously, tamper-proof, data is retained in the event of a power failure, optical and acoustic signals, modern backlighting (configurable) • Incl. 8 m connection cable • Design element not contained within scope of delivery

Accessory - design element

Part no.	Description
101677	**ekey design element KP IN GL STG,** glass stainless steel gray
101678	**ekey design element KP IN GL WHI,** glass white
101679	**ekey design element KP IN GL AN,** glass anthracite

Accessory - mounting frame

Part no.	Description	
101714	**ekey mounting frame KP IN GL AN,** glass anthracite	
101715	**ekey mounting frame KP IN GL WHI,** glass white	
101799	**ekey mounting frame KP IN GL AN LED,** glass anthracite with alarm LEDs	
101800	**ekey mounting frame KP IN GL WHI LED,** glass white with alarm LEDs	
	• Dimensions W x H x D: 53.5 x 127 x 24 mm	• Material: Stainless steel, glass

Accessory - mounting frame with bell module

Part no.	Description	
101782	**ekey mounting frame KP IN BeM GL AN,** glass anthracite	
101783	**ekey mounting frame KP IN BeM GL WHI,** glass white	
101805	**ekey mounting frame KP IN BeM GL WHI LED,** glass white with alarm LEDs	
101806	**ekey mounting frame KP IN BeM GL AN LED,** glass anthracite with alarm LEDs	
	• Dimensions W x H x D: 53.5 x 171 x 24 mm • Material: stainless steel, glass	• 2 buttons to trigger a bell electronically

Accessory - wall mounting set

Part no.	*Description*	
101302	**ekey wall mounting set FS IN ST,** stainless steel	
101301	**ekey wall mounting set FS IN ST LED,** stainless steel with alarm LEDs	
	• Dimensions W x H x D:	• Front plate: 96 x 142 x 2 mm • Flush-mounting housing: 60 x 122 x 36 mm
101147	**ekey weather shield FS IN ST,** stainless steel	
	• Dimensions W x H x D:	• Front plate: 126 x 142 x 65 mm • Flush-mounting housing: 60 x 122 x 36 mm
101300	**ekey flush mount back box FS IN,** for flush-mounting installation, 0.5 mm sheet	
	• Dimensions W x H x D: 42 x 87 x 25 mm	

Notice: Only available in conjunction with ekey design elements.

Step 3: Select a suitable control panel:

Control panel

DIN-rail mounted control panel

Part no.	*Description*
101164	**ekey net CP DRM 4,** 4 relays

- Dimensions W x H x D: 70 x 86 x 54 mm (4 HP)
- Power consumption: approx. 1 W
- Supply voltage: 10-24 VDC
- Temperature range: -20 °C to 70 °C
- IP code: IP 20

- Relays: 4 potential-free relays
- Max. relay voltage, max. relay current: 42V/2A
- Configurable inputs
- RS-485 termination: switchable

Wall-mounted control panel

Part no.	*Description*
100326	**ekey net CP WM 3,** 3 relays

- Dimensions W x H x D: 180 x 110 x 41 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-12 VDC
- Temperature range: -20 °C to 70 °C

- IP code: IP 20
- Relays: 3 potential-free relays
- Max. relay voltage, max. relay current: 42V/2A

Control panel mini

Part no.	*Description*
100666	**ekey net CP mini 1,** 1 relay
100667	**ekey net CP mini 2,** 2 relays

- Dimensions W x H x D: 25 x 60 x 42 mm (1 HP)
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -20 °C to 70 °C
- IP code: IP 20
- Normally open contact (NO/C)

- Relays:
  1 potential-free relay (CP mini 1)
  2 potential-free relays (CP mini 2)
- Max. relay voltage, max. relay current: 42 V/1 A
- Configurable input (for CP mini 1 only)
- Reset button on the control panel

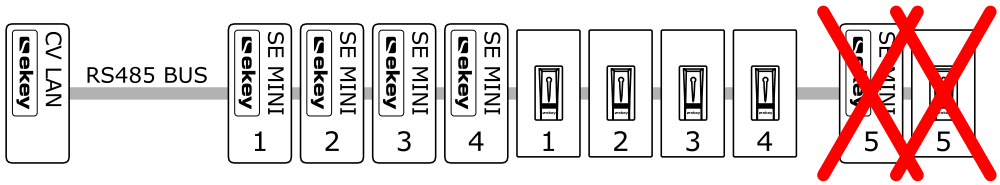
Step 4: Select a suitable number of LAN converters:

ekey net converter LAN RS-485

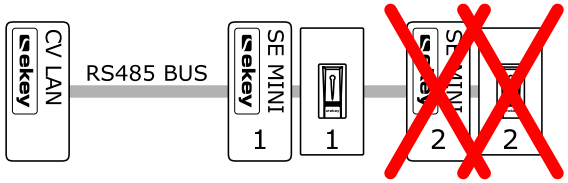
- The finger scanners and control panels – which communicate using the RS-485 protocol – are connected to the network (Ethernet) using the ekey LAN converter.
- A single ekey net LAN converter is capable of managing up to 4 "S" type finger scanners (40 fingerprints) or "M" type finger scanners (200 fingerprints) or up to 4 "L" type code pads (2,000 codes) plus 4 ekey net control panels. This means that each bus segment (CV LAN RS-485) can have up to 8 components. The individual components (finger scanners and control panels) must be connected in series. Star-type wiring between the ekey net LAN converter and the individual components is not permitted.
- If you opt for an ekey net "L" type finger scanner (2,000 fingerprints), you will need a separate ekey net LAN converter for each access point (not for "L" type code pads).
- For maximum operational reliability, a separate ekey net LAN converter for each door is recommended in the case of ekey net "S" type and ekey net "M" type finger scanners.

Part no.	*Description*	
100340	**ekey net CV LAN RS-485,** for the connection of the RS-485 protocol to the LAN	
	• Dimensions W x H x D: 25 x 60 x 42 mm (1 HP) • Power consumption: approx. 1 W • Supply voltage: 8-24 VDC • Temperature range: 0 °C to 75 °C	• IP code: IP 20 • UDP transmission • RTC

Maximum 4 finger scanners ("S" and "M" types) and 4 additional devices on the RS-485 bus



Maximum 1 finger scanner ("L" type) and 1 control panel on the RS-485 bus



Step 5: Select a suitable number and type of power supplies:

Power supply

	Part no.	Description	
	**101700**	**ekey PS WPS 230 VAC/12 VDC/800 mA,** wall power supply	
		• Dimensions W x H x D: 52 x 78.5 x 45 mm • Supply voltage: 230 VAC	• Output voltage, output current: 12 VDC/800 mA • Cable length: 3.5 m
	**100204**	**ekey PS OM 230 VAC/12 VDC/2 A,** power supply outlet-mounted	
		• Dimensions Ø x H: 54 x 31 mm • Supply voltage: 230 VAC	• Output voltage, output current: 12 VDC/2 A • Temperature range: -5 °C to 50 °C
	**100205**	**ekey PS DRM 230 VAC/12 VDC/2 A,** power supply for DIN-rail mounting	
		• Dimensions W x H x D: 52.5 x 93 x 68.5 mm (3 HP) • Supply voltage: 230 VAC	• Output voltage, output current: 12 VDC/2 A • Temperature range: -10 °C to 45 °C
	**100891**	**ekey PS DRM 230 VAC/24 VDC/2 A,** power supply for DIN-rail mounting*	
		• Dimensions W x H x D: 70 x 93 x 66.5 mm (4 HP) • Supply voltage: 230 VAC	• Output voltage, output current: 24 VDC/2 A • Temperature range: -5 °C to 50 °C

***Important:** Not compatible with ekey net CP WM 3 (100326).

Uninterruptible power supply

Recommended by us

The uninterruptible power supply (UPS) comprises a switched-mode power supply and a battery. In the event of a power failure, it can be relied upon to supply power to the finger scanner, the control panel, and the motorized lock for several hours.

Part no.	*Description*	
101559	**ekey UPS DRM 230 VAC/12 VDC/4 Ah,** DIN-rail mounted	
	• Dimensions W x H x D: UPS: 108 x 94 x 95 mm (6 HP) Battery: 157 x 93 x 66.5 mm (9 HP) • Supply voltage: 100-240 VAC • 2 parts: UPS (switched-mode power supply) and battery • Output voltage, output current: 12 VDC/5 A	• Temperature range: -10 °C to 40 °C • Function display: LED • Advantage: Replaces the power supply device; ensures a reliable supply of current to the system for several hours. Suitable for use in conjunction with a motorized lock.
101593	**ekey UPS DRM 230 VAC/24 VDC/4 Ah,** DIN-rail mounted*	
	• Dimensions W x H x D: UPS: 108 x 94 x 95 mm (6 HP) Battery: 157 x 93 x 66.5 mm (9 HP) • Supply voltage: 100-240 VAC • 3 parts: UPS (switched-mode power supply) and 2 batteries • Output voltage, output current: 24 VDC/3 A	• Temperature range: -10 °C to 40 °C • Function display: LED • Advantage: Replaces the power supply device; ensures a reliable supply of current to the system for several hours. Suitable for use in conjunction with a motorized lock.

***Important:** Not compatible with ekey net CP WM 3 (100326).

Step 6: Storage station

Storage station

Fingerprints and RFID cards can be stored conveniently directly on your PC at a workstation.

Part no.	*Description*	
101929	**ekey net station**	
	• For storing fingerprints and RFID cards (with MIFARE DESFire EV1) or RFID transponders in the ekey net system via a LAN connection. The fingerprints are displayed on the PC.	• Dimensions L x W x H: 150 x 100 x 32 mm • Power consumption: approx. 2 W • Incl. wall power supply 12 VDC/1 A and cable 1.5 m in length

Step 7: Server and system requirements

ekey net server box


Symbol photo

A mini-PC customized for the system and tested by ekey.

Part no.	Description	
100636	**ekey net server box**	
	• Dual core processor • 4 GB RAM • SSD hard disk • USB ports	• Digital video output • LAN • WLAN 802.11n/b/g • Operating system: Windows 10 Professional

Notice: Only available in Austria and Germany.

System requirements

General minimum requirements to be met by your system

Requirements	Detail	Dependency
TCP/IP	All computers connected to the ekey net system must be equipped with TCP/IPv4-capable network adapters. TCP/IPv4 must be activated. ekey net does not support TCP/IPv6.	Network communication
Name resolution (DNS)	It must be possible to mutually resolve the names (NetBIOS and DNS name) of all computers used in the ekey net system via DNS.	MSMQ, DNS
Routing	It must be possible to access all computers involved in the ekey net system in both directions via TCP and UDP.	MSMQ, UDP, HTTP
Local time on the computer	Deviations between computers equal to or greater than 3 seconds cannot be tolerated.	ekey net services, ekey net admin software

Processor, memory, and Ethernet

- x86 or x64 dual core processor with at least 1.0 GHz
- 2 GB RAM (minimum)
- SSD or HDD with at least 10 GB memory space available
- Ethernet port with at least 100 Mbit/s

Operating system

Windows 7 x86 SP1; Windows 7 x64 SP1; Windows 8 x86; Windows 8 x64; Windows 8.1 x86; Windows 8.1 x64; Windows 10 x86; Windows 10 x64; Windows Server 2008 R2 SP1; Windows Server 2012; Windows Server 2012 R2; Windows Server 2016

Step 8: Select a suitable interface, if required:

Interface

Interface for connecting the equipment to home automation systems

Part no.	*Description*	
100340	**ekey net CV LAN RS-485,** for the connection between RS-485 and LAN	
	• Dimensions W x H x D: 25 x 60 x 42 mm (1 HP) • Power consumption: approx. 1 W • Supply voltage: 8-24 VDC • Temperature range: -25 °C to 75 °C	• IP code: IP 20 • UDP transmission • RTC

It takes just a few clicks to activate the UDP interface in the ekey net admin software. The data packet is sent to a configurable IP address via the ekey net LAN converter. No additional LAN converter is required.

"ekey net" protocol

1	0012	7	80198504120001	1	6
Paket type	User ID	Finger ID	Finger scanner serial number	Action	Event

Control4 AMX CRESTRON GIRA VANTAGE

! The following output formats are also supported: ODBC, CSV, and HTML as well as interfaces with the ekey net SDK and the CursorFill method.

Interface for connecting the equipment to alarm systems or other access control systems

Part no.	*Description*	
100669	**ekey net CV WIEG RS-485**	
	• The ekey Wiegand converter converts the RS-485 protocol used by ekey into a 26-bit Wiegand protocol. Three options are available: the 26-bit standard protocol, the 39-bit Pyramid protocol, and a protocol with freely selectable ID bit lengths.	• Dimensions W x H x D: 25 x 60 x 42 mm (1 HP) • Power consumption: approx. 1 W • Supply voltage: 8-24 VDC • Temperature range: -25 °C to 75 °C • IP code: IP 20

Step 9: Commissioning and customer service

Commissioning and customer service

We recommend commissioning by our **ekey PARTNERS** with ekey net certification.
(Look for the ekey net symbol when using the dealer search!)

You can find all **ekey PARTNERS near you** on our website:
www.ekey.net/en/dealers/

ekey
lock

ekey lock radio cylinder

Retrofitting solution for all ekey systems

No more keys ...

The ekey lock radio cylinder makes it easy to retrofit existing doors with finger scanners. Say goodbye to heavy bunches of keys and lost keys. Finger scanners are the safe and secure alternative to keys, which can be easily lost, forgotten, or stolen.

Benefits of ekey lock:

- For internal, external, and glass doors
- No cables inside the door
- Easy mounting
- Suitable for single-point and multi-point locks
- Take it with you when you move house
- Existing fittings are retained

Short facts:

- Radio range indoors up to 10 m
- Encrypted communication (frequency: 868 MHz)
- Standby time approx. 6 years
- Ergonomically optimized mechanical knob
- „Made in Germany“ durable cylinder mechanism
- Long battery life (approx. 75,000 cycles)
- Batteries are easy to replace
- Compatible with all ekey finger scanners and the ekey code pad

What you need to get your system into operation:

Optional:

- ekey lock wireless transponder for emergency opening

Basic set

Part no.	Description	
101968	**ekey lock radio modules 4.0**	
	Scope of delivery: • Module knob (MOK) • Radio emitting module (REM) • Short antenna (SANT)	• REM supply voltage • Card set • Batteries (type CR2) • Battery replacement clamp
	Cylinders available in external/internal lengths ranging from 30/30 to 70/70 in 5 mm increments (see price list)	
	Scope of delivery: Mechanical knob (MEK) with permanently assembled cylinder	

Important: Use the measuring gage to determine the correct cylinder length. For cylinder lengths, see price list.

Accessory

Part no.	Description
101969	**ekey lock wireless transponder 4.0**
	Replacement key; backup for opening if there is no second entrance (battery type CR2032)

Electric strike

Part no.	Description
150021	**ekey lock electric strike**
	Scope of delivery: Electric strike 10-24 VAC/DC, flat shield 25 x 250 x 3 mm

Determine cylinder length
Cut out the measuring gauge from page 42 and slide it into the opening where the lock cylinder should be.

Tips and tricks

Congratulations on purchasing your ekey product!

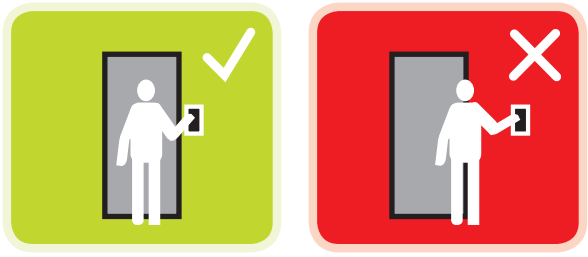
Your finger is now also your key! Our tips and tricks will help you to make the best possible use of your ekey finger scanners.

Installation position and mounting height

Installation position: Finding the right position for the finger scanner will make the finger swipe technique much easier to master and will improve finger recognition. The finger scanner works just as well whether you are right-handed or left-handed!

It is important to have enough moving space when standing in front of the finger scanner. Straining to reach the scanner will produce poor results.

Mounting height: The scanner can only be used ergonomically if it is mounted at the right height.

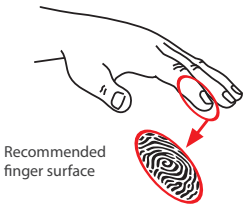


Type	*Recommended mounting height*
WM (wall-mounted)	135 cm
OM (outlet-mounted)	100/155 cm
IN (integra)	155 cm
AR (arte)	155 cm

Sensor and finger surface

The sensor is the narrow strip across the bottom part of the finger swipe area. You must swipe the front phalanx fully over the sensor in order to achieve optimal results. The sensor must not be subjected to any mechanical stress other than operation with a finger.

Do not scratch the sensor with your fingernail. Never clean the sensor with the rough side of a sponge or with any aggressive cleaning agents. Damaged sensors must be replaced.



Finger scan

From experience, the best fingers to use are as follows: **1. Middle finger, 2. Index finger, 3. Ring finger.** The thumb and the little finger should not be used. Each person will have fingers that are more or less suitable for scanning. It is a good idea to use the hand you write with (right-handed/left-handed), as you will have more feeling in this hand. You should choose a clean finger without any cuts or grazes. If your finger has very few lines due to abrasion or for genetic reasons, it will not be detected by the sensor. Clearly visible lines will make it easier to recognize.

Children should use their index finger or whichever finger they instinctively choose to use. Use the fingers that are most comfortable for you and those that are recognized the quickest.

Mounting the control panel

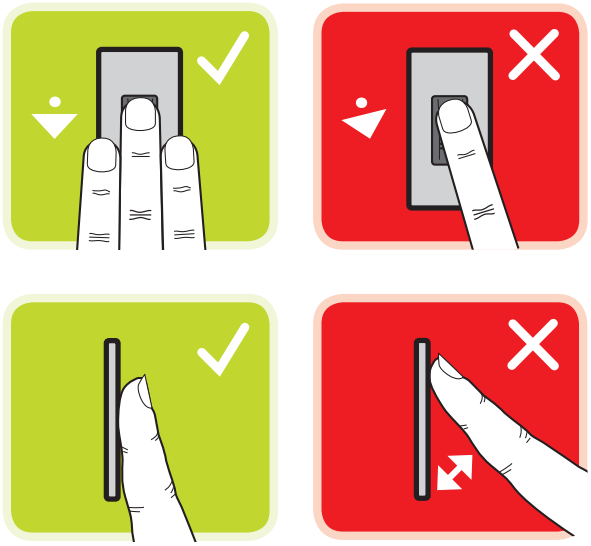
The control panel switches the relay and must, therefore, only be mounted in the protected internal area (tamper-proof). It should, however, be easily accessible for programming purposes.

Finger swipe area

A good finger swipe technique is crucial for optimal detection. The best method is to stretch out ALL of your fingers and place the finger to be scanned on the finger swipe area so that only the first phalanx is in contact with it. The joint of the first phalanx should be directly over the sensor.

Place the other fingers to the left and right of the scanner. Do not roll your finger onto the fingertip while swiping. Apply moderate pressure and swipe your finger evenly over the sensor at a medium speed: not too fast and not too slow. The incorrect amount of pressure will produce poor results.

The amount of pressure required will vary according to your skin type. Soft skin will require less pressure; dry skin will require more. Test a few different methods to see how you can achieve the best possible scan results for you. To begin with, the finger swipe technique takes a bit of practice. You will soon learn the best way to operate the scanner.



Storing a finger

To enable convenient operation with either hand, and as a backup in case of injury, you should store one finger from each hand.

For fingers that are not so easy to scan – for example, those of small children, elderly people, or manual workers – the same finger should be stored in several storage spaces.

It is generally better to enroll one finger several times rather than several fingers once. This increases the likelihood of detection and means that the system works better at the thresholds of operation (dry fingers, skin cream, or sweat after sport) or when operated under unfavorable conditions.

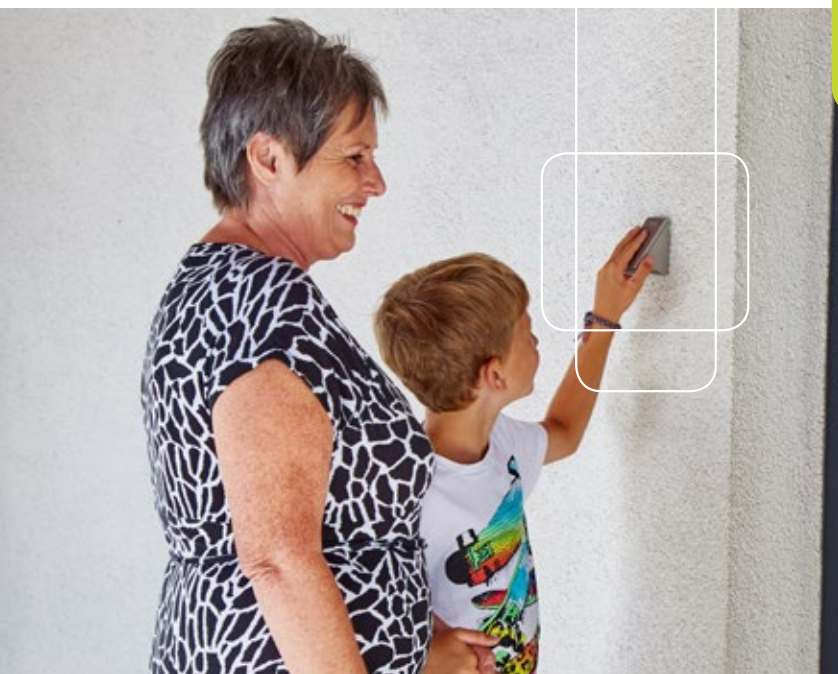
Intelligent software:
The ekey software is learning all the time – it can detect the growth of children's fingers as well as minor injuries and changes to users' habits.

Children's fingers:
Children's fingers generally work from around school age. The specified mounting height must be observed in order to ensure correct operation.

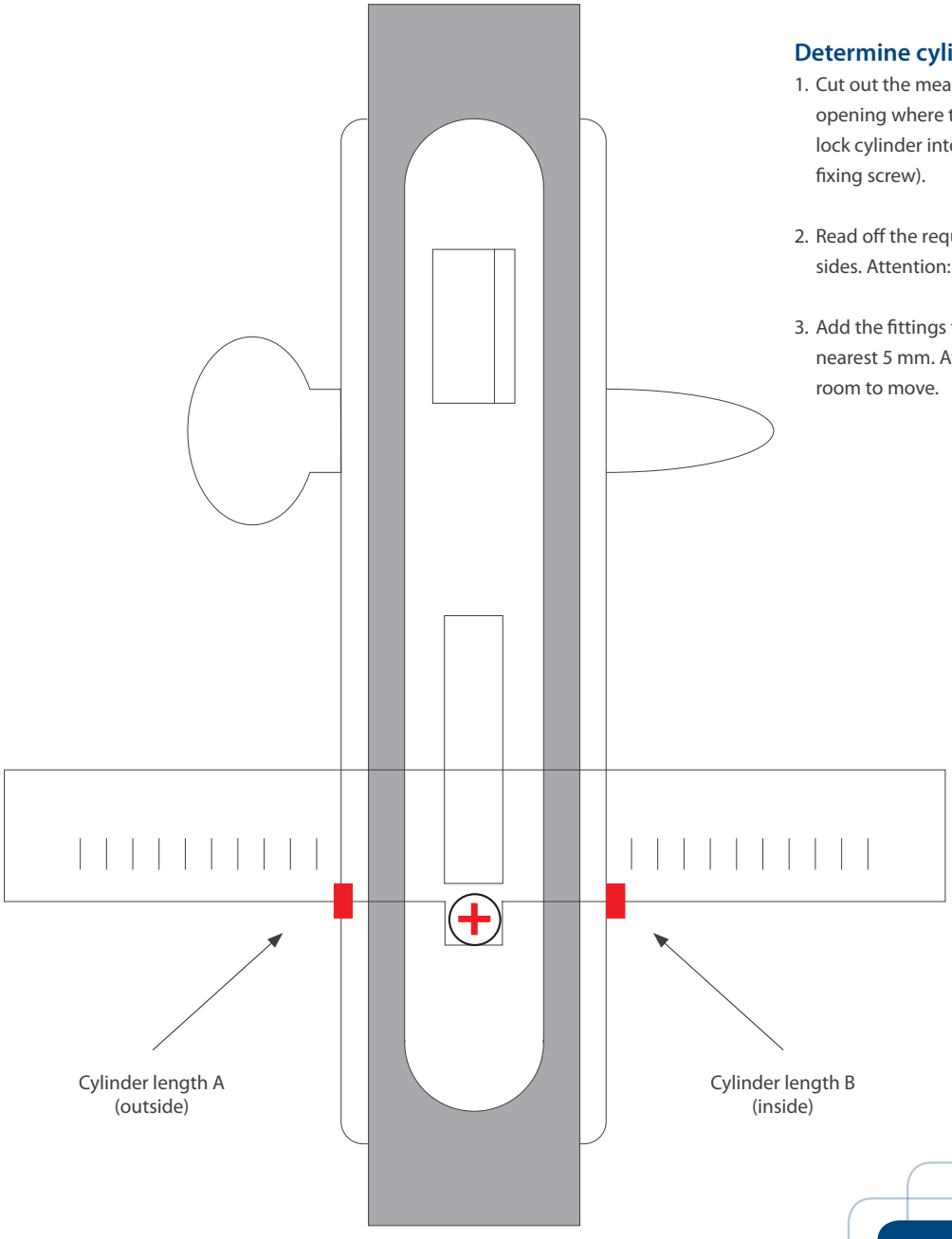
Support

Storing fingers and using the scanner is usually a straightforward process. However, if this information does not help you, please contact us:

International: +43 732 890 500 - 0



ekey lock - cylinder length



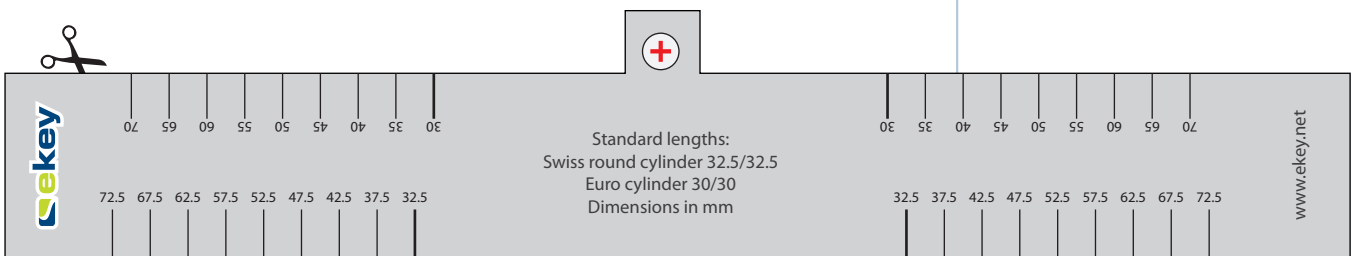
Determine cylinder length:

1. Cut out the measuring gauge and slide it into the opening where the lock cylinder should be. Slide the lock cylinder into the opening. Fix in ⊕ (= position of fixing screw).

2. Read off the required length of the cylinder on both sides. Attention: A is the outside measurement!

3. Add the fittings to the calculation and round up to the nearest 5 mm. Attention: Both knobs must have a little room to move.

ekey lock measuring gauge:
Cut out the measuring gauge and read off the required cylinder length.

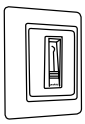


Wiring diagrams/Terminal configuration

ekey net finger scanner

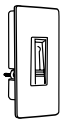
FS WM

PIN	DESCRIPTION
1	RS485 (Clamp 1)
2	RS485 (Clamp 2)
3	Power supply FS
4	Power supply FS
5	Relay C (common)
6	Relay NO (normally open)
7	Input
8	Input



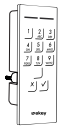
FS OM

PIN	DESCRIPTION
1	RS485 (Clamp 1)
2	RS485 (Clamp 2)
3	Power supply FS
4	Power supply FS
5	Relay C (common)
6	Relay NO (normally open)
7	Input
8	Input



FS IN

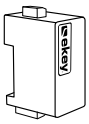
PIN	DESCRIPTION
4	RS485 (Clamp 1) - green
5	RS485 (Clamp 2) - yellow
7	Power supply FS - brown
8	Power supply FS - white



KP IN

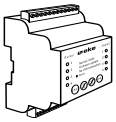
PIN	DESCRIPTION
4	RS485 (Clamp 1) - green
5	RS485 (Clamp 2) - yellow
7	Power supply FS - brown
8	Power supply FS - white

ekey net control panel



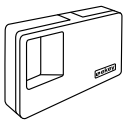
CP mini

PIN	DESCRIPTION
1	RS485 (Clamp 1)
2	RS485 (Clamp 2)
3	Power supply FS
4	Power supply FS
5	Relay 1 C (common)
6	Relay 1 NO (normally open)
7	Input - door status / Relay 2 C
8	Input - door status / Relay 2 NO
9	-VCC
10	+VCC (8-24V DC)



CP REG

PIN	DESCRIPTION
1	RS485 (Clamp 1)
2	RS485 (Clamp 2)
3	Power supply FS
4	Power supply FS
5	+VCC (8-24V DC)
6	-VCC
7	Relay 1 C (common)
8	Relay 1 NO (normally open)
9	Relay 1 NC (normally closed)
10	Input 1/2 common
11	Input 1
12	Input 2
13	Relay 2 C (common)
14	Relay 2 NO (normally open)
15	Relay 2 NC (normally closed)
16	Relay 3 C (common)
17	Relay 3 NO (normally open)
18	Relay 3 NC (normally closed)
19	Relay 4 C (common)
20	Relay 4 NO (normally open)
21	Relay 4 NC (normally closed)
22	Input 3/4 common
23	Input 3
24	Input 4



CP AP

PIN	DESCRIPTION
1	RS485 (Clamp 1)
2	RS485 (Clamp 2)
CH1	Relay 1 C (common)
	Relay 1 NO (normally open)
	Relay 1 NC (normally closed)
CH2	Relay 2 C (common)
	Relay 2 NO (normally open)
	Relay 2 NC (normally closed)
CH3	Relay 3 C (common)
	Relay 3 NO (normally open)
	Relay 3 NC (normally closed)
3	Power supply FS
4	Power supply FS
9VAC	+VCC (8-12V DC)
9VAC	-VCC

ekey net converter

CV LAN

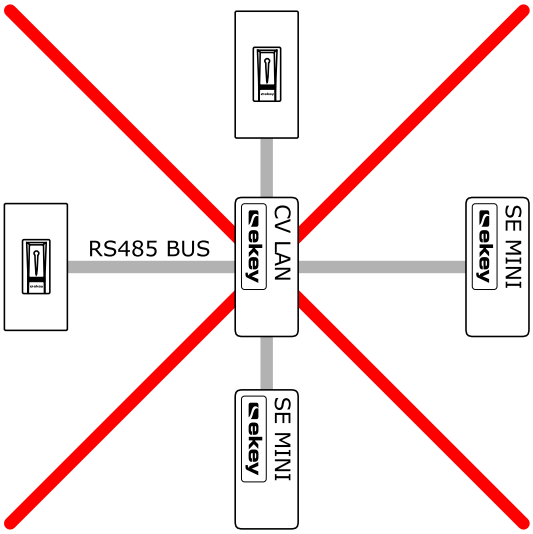
PIN	DESCRIPTION
1	RS485 (Clamp 1)
2	RS485 (Clamp 2)
3	Power supply FS
4	Power supply FS
	IP-address (default settings)
	192.168.1.250

CV WIEG

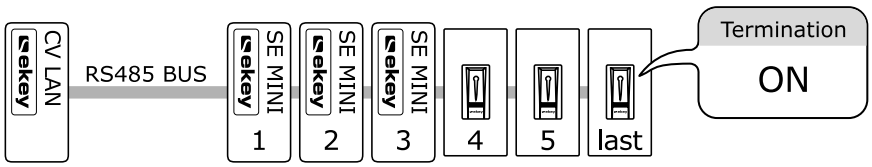
PIN	DESCRIPTION
1	RS485 (Clamp 1)
2	RS485 (Clamp 2)
3	Power supply FS
4	Power supply FS
5	WIEGAND D0
6	WIEGAND D1
7	GND
8	unused
9	unused
10	unused

General information:

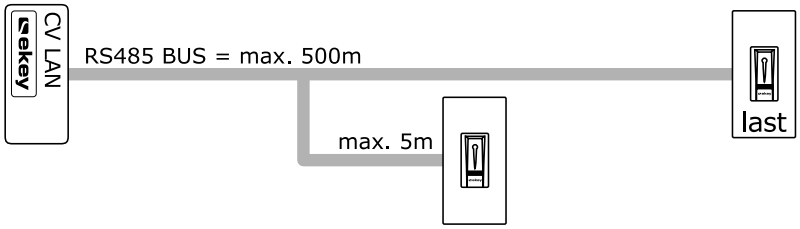
⚠ **No** star topology**!**



⚠ Switch the termination of the **last** device in the RS485 bus line to **"ON"**

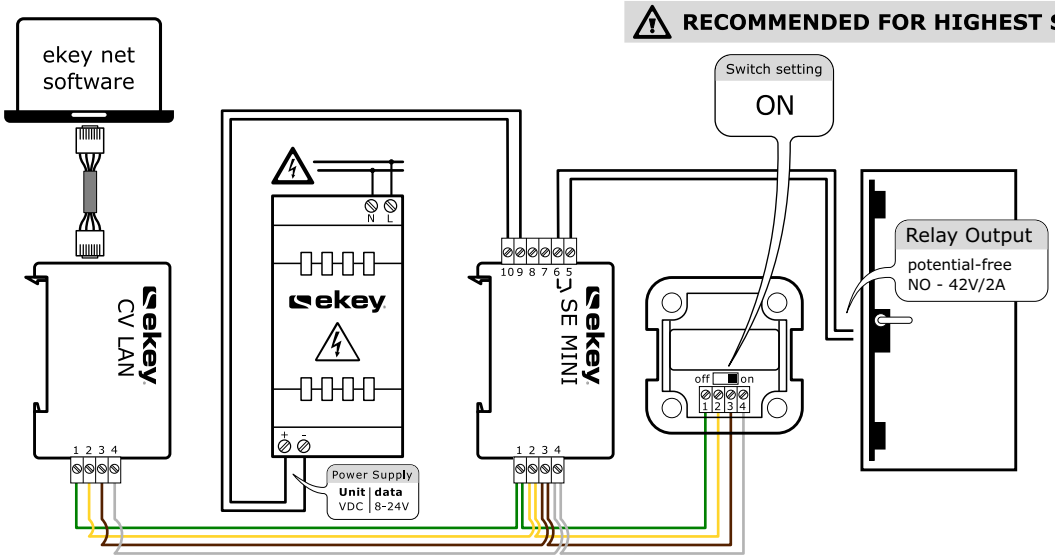


⚠ Mind the **maximum length** of the RS485 bus segment

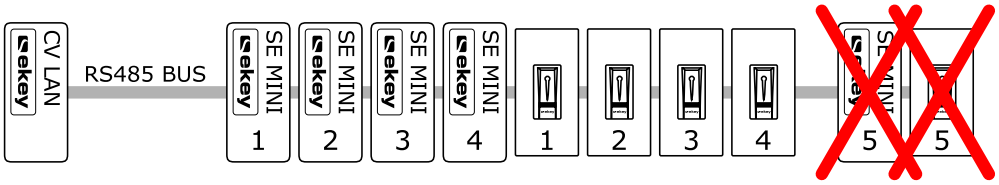


1 **Wiring example:** 1 ekey net CV LAN + 1 ekey net CP mini 1 + 1 ekey net FS [S/M/L]

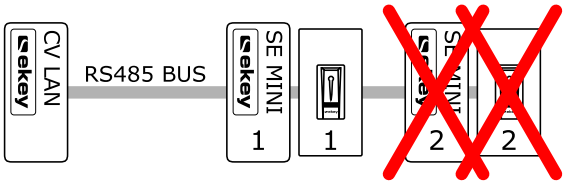
⚠ **RECOMMENDED FOR HIGHEST SYSTEM RELIABILITY!**



Maximum 4 FS [S and M] and 4 other devices in the RS485 bus segment

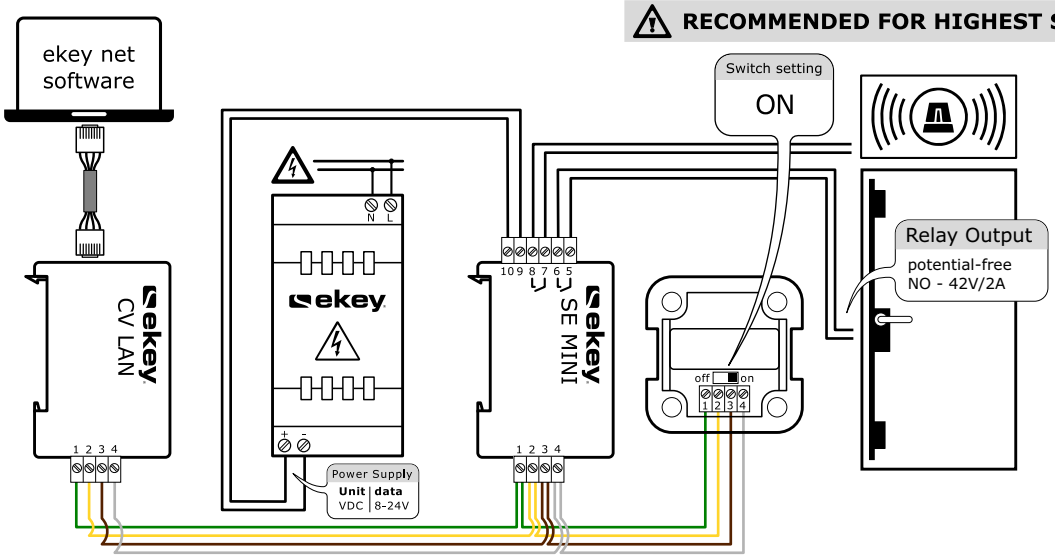


Maximum 1 FS [L] and 1 contol panel in the RS485 bus segment

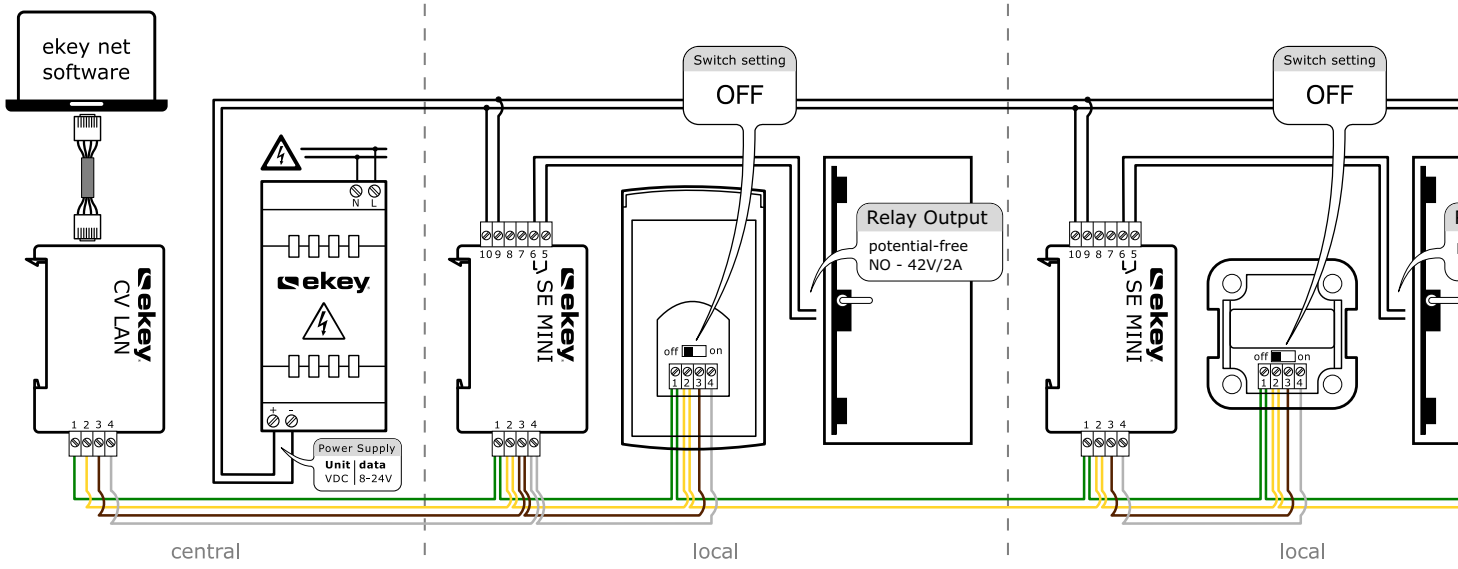


2 **Wiring example:** 1 ekey net CV LAN + 1 ekey net CP mini 2 + 1 ekey net FS [S/M/L]

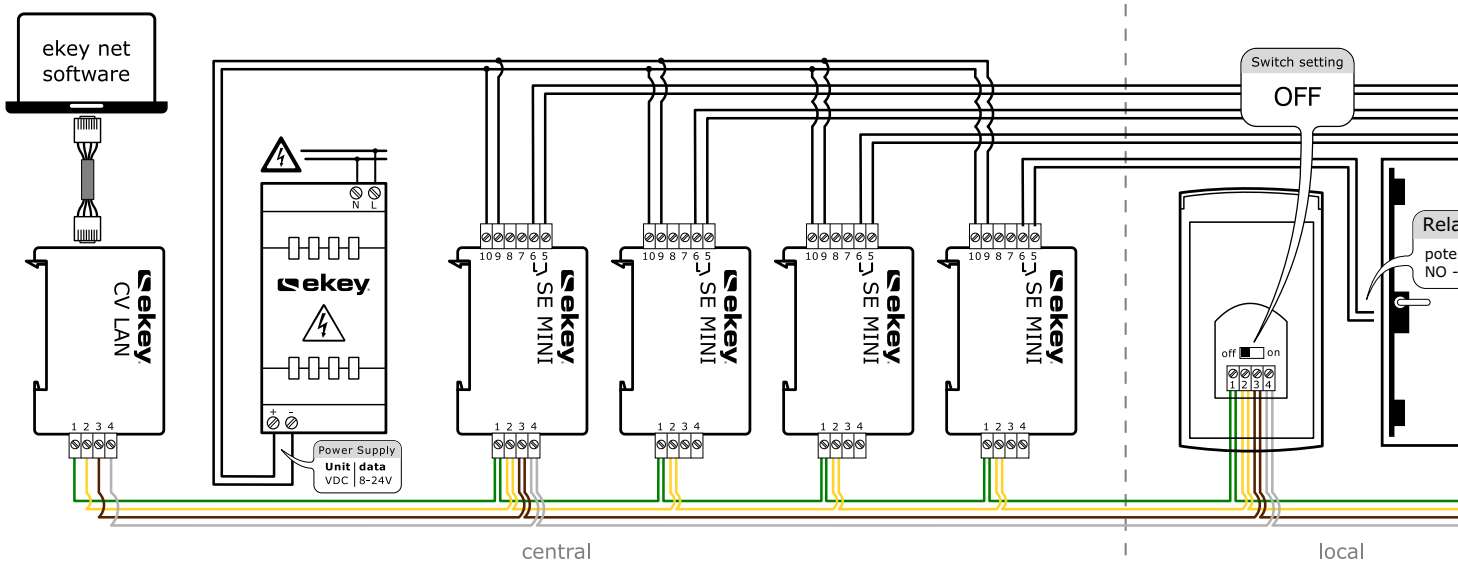
RECOMMENDED FOR HIGHEST SYSTEM RELIABILITY!



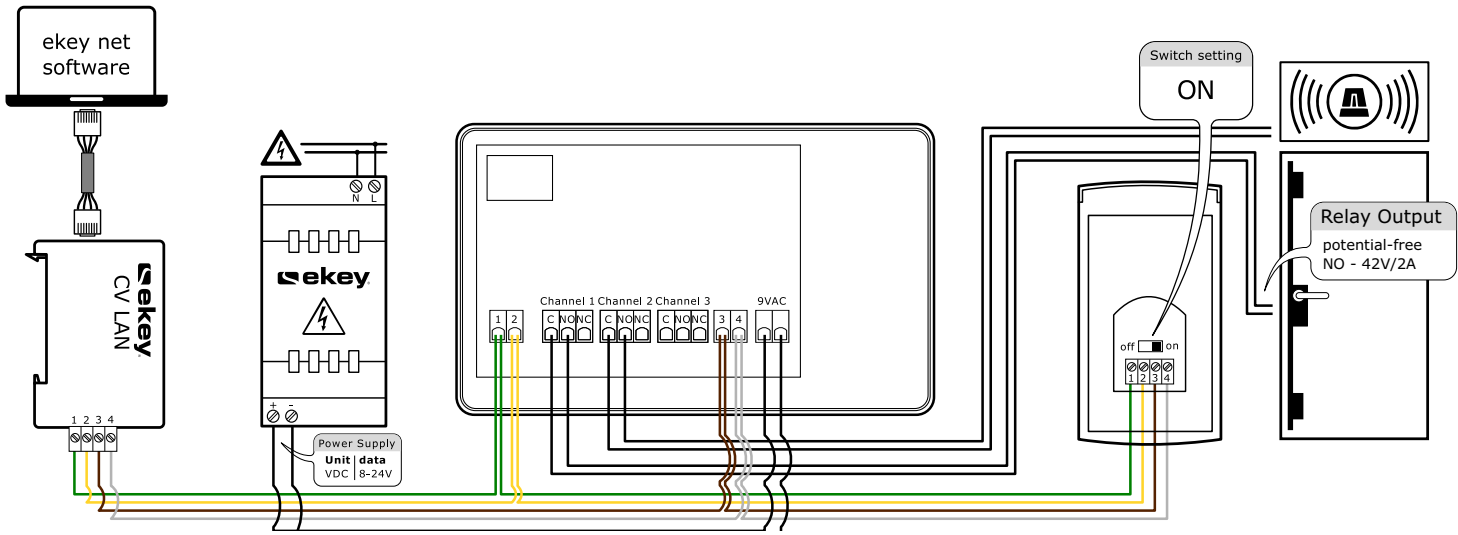
3a **Wiring example:** 1 ekey net CV LAN + 4 ekey net CP mini 1 + 4 ekey net FS [S/M]

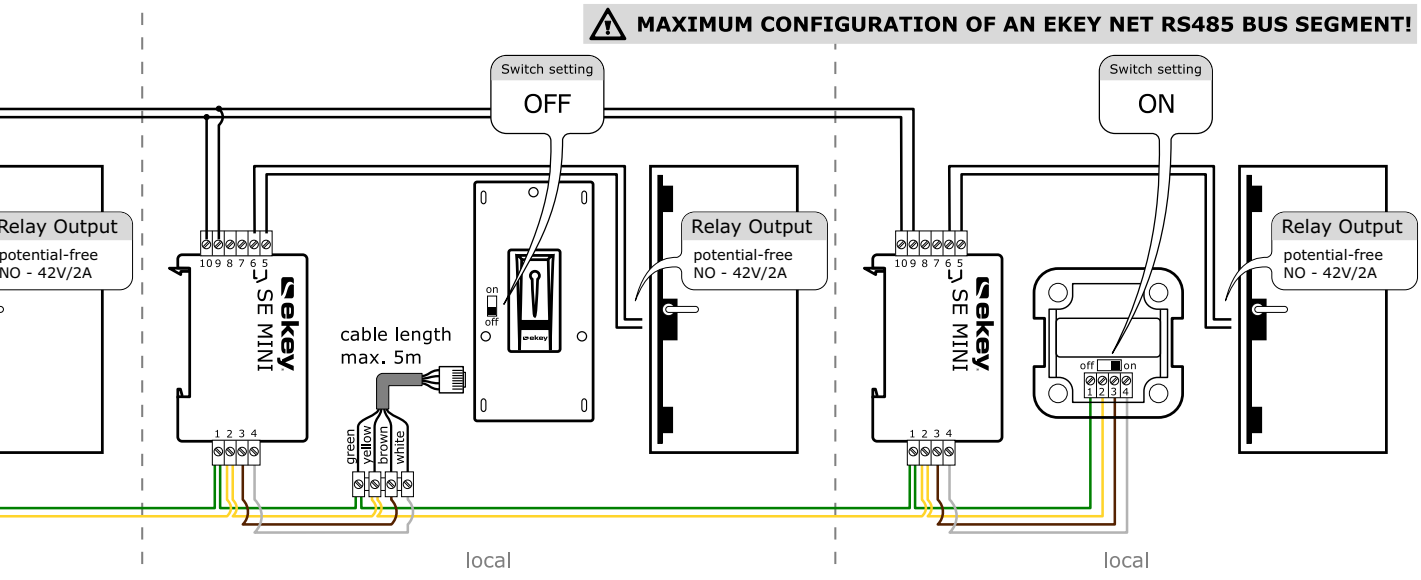


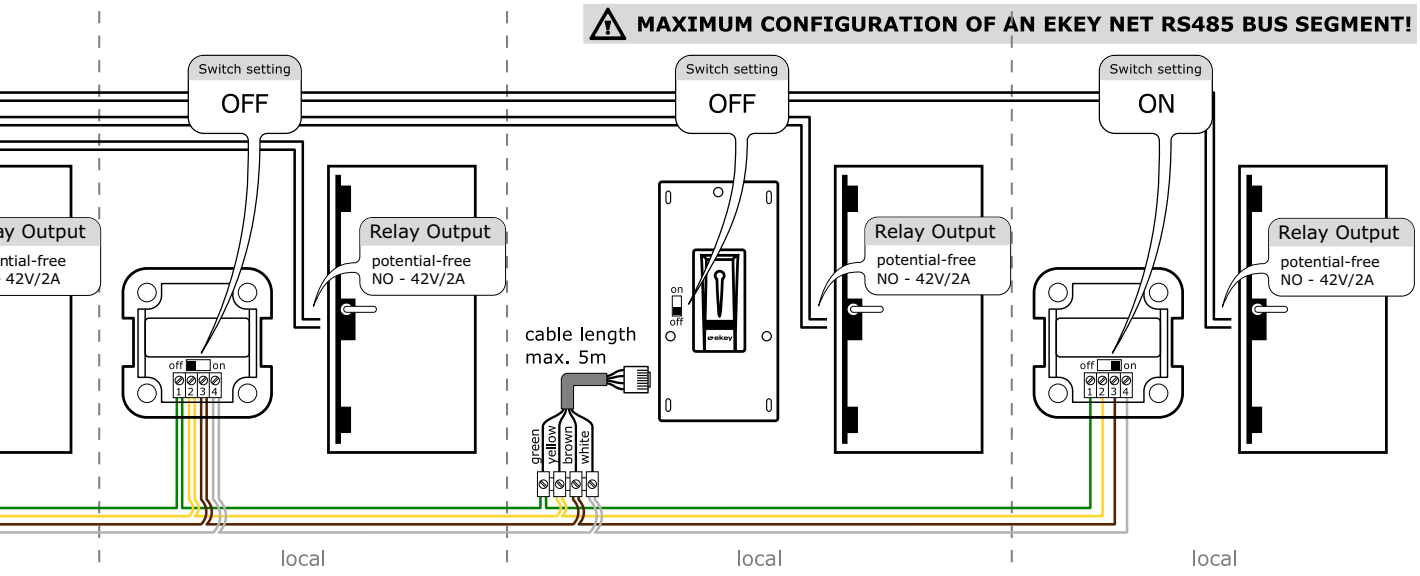
3b **Wiring example:** 1 ekey net CV LAN + 4 ekey net CP mini 1 + 4 ekey net FS [S/M]



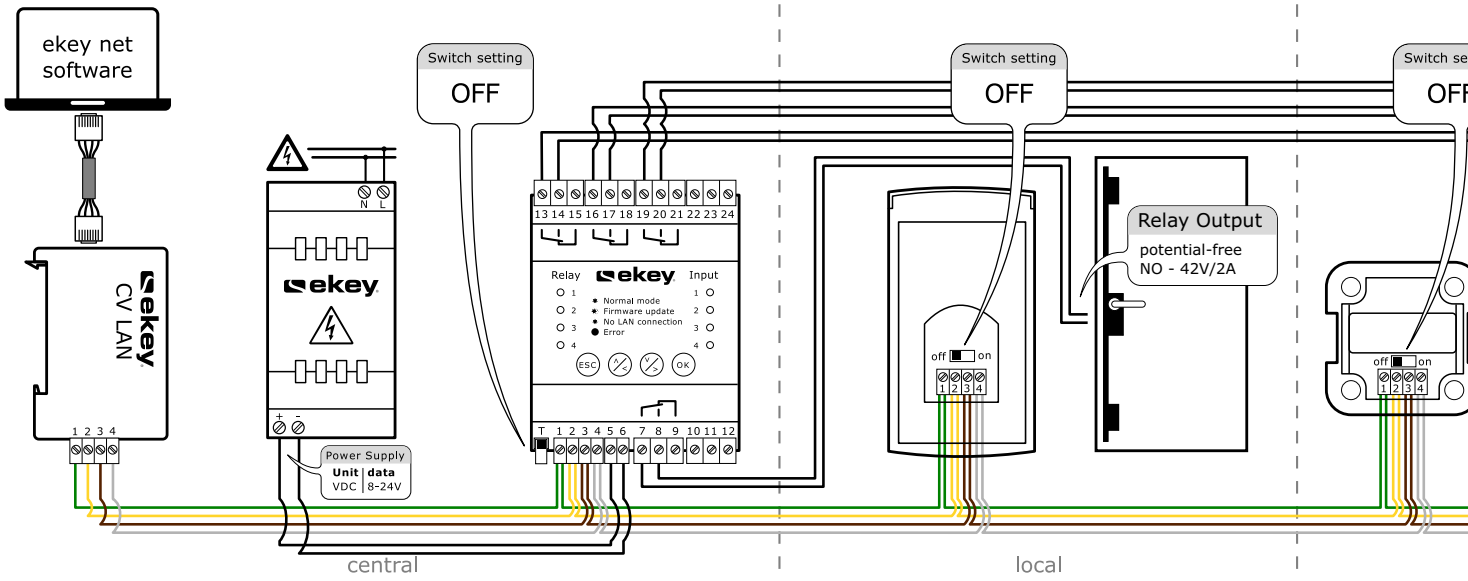
4 **Wiring example:** 1 ekey net CV LAN + 1 ekey net CP WM 3 + 1 ekey net FS [S/M/L]



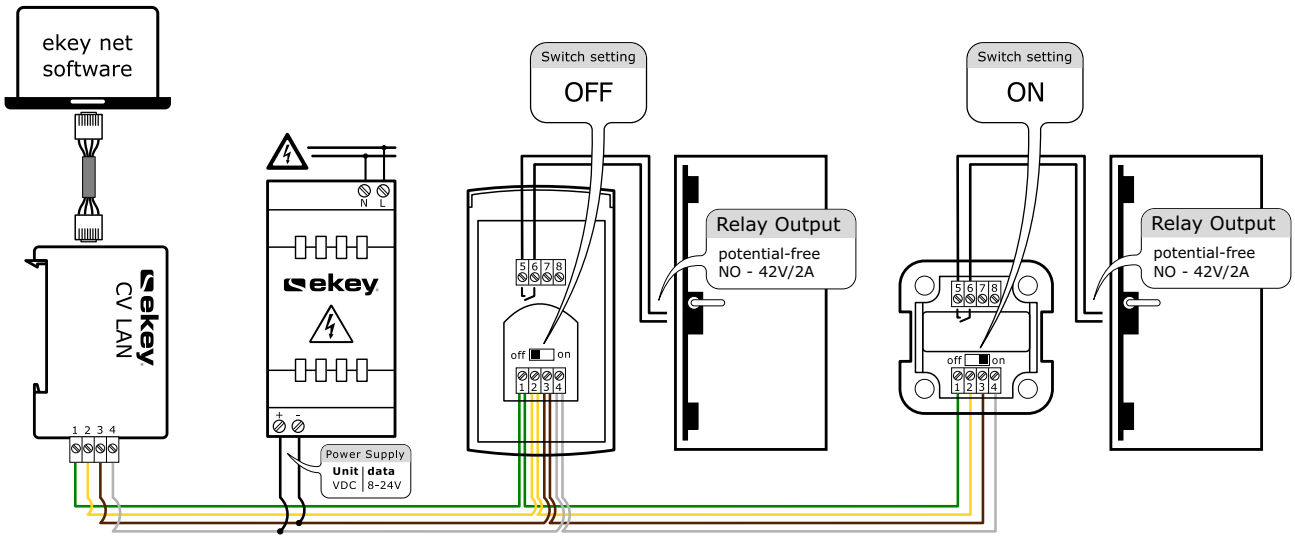

MAXIMUM CONFIGURATION OF AN EKEY NET RS485 BUS SEGMENT!
Switch setting
OFF
Switch setting
ON
Relay Output
potential-free
NO - 42V/2A
ekey
SE MINI
cable length
max. 5m
green
yellow
brown
white
local
local


MAXIMUM CONFIGURATION OF AN EKEY NET RS485 BUS SEGMENT!
Switch setting
OFF
Switch setting
OFF
Switch setting
ON
Relay Output
potential-free
NO - 42V/2A
cable length
max. 5m
green
yellow
brown
white
local
local
local

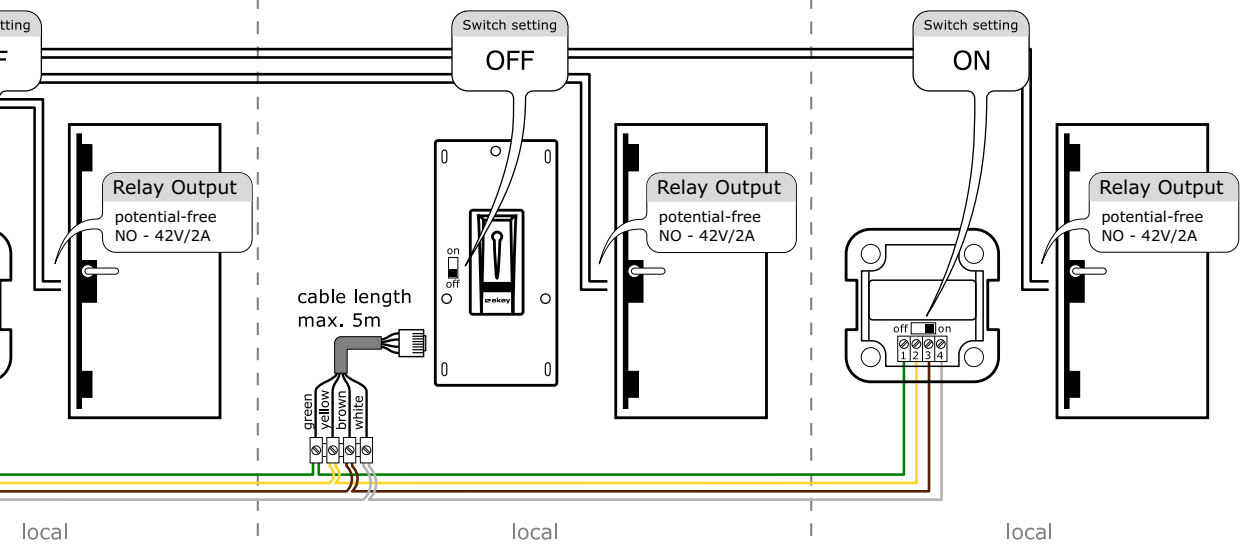
5 Wiring example: 1 ekey net CV LAN + 1 ekey net CP DRM 4 + 4 ekey net FS [S/M]



6 Wiring example INDOOR: 1 ekey net CV LAN + 2 ekey net FS REL [S/M]

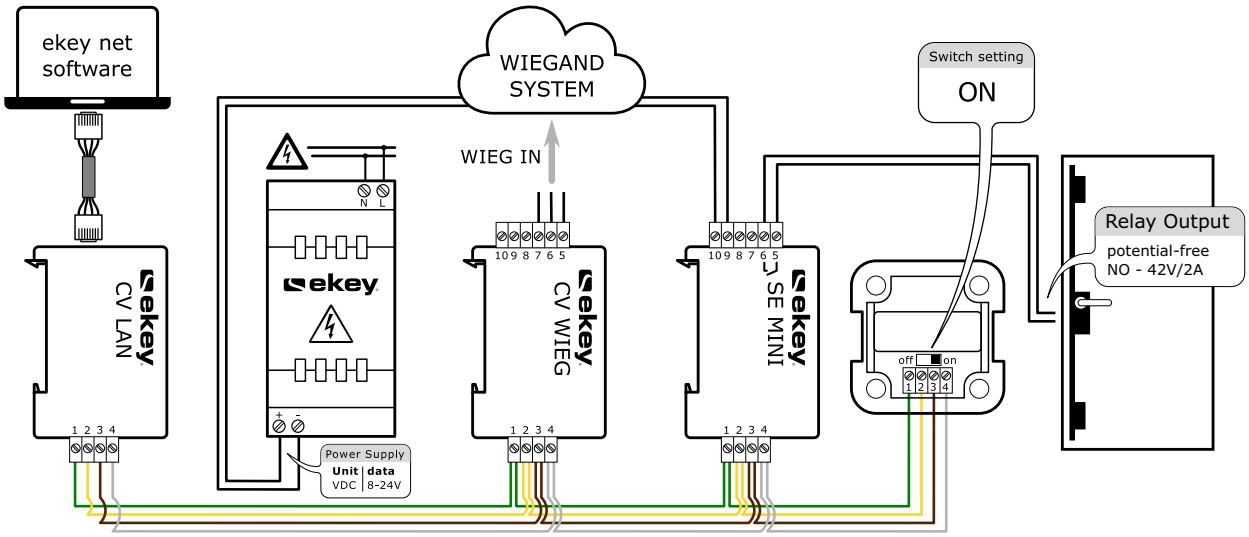


⚠ **EVENT CONVERSION REQUIRED!**

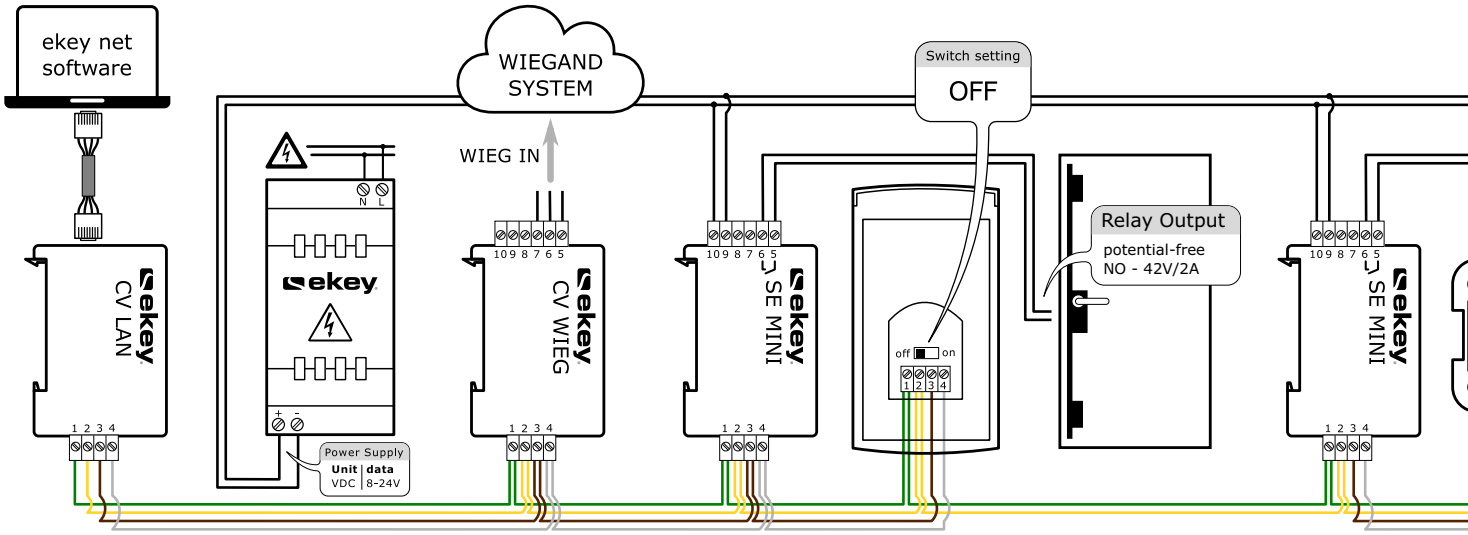


⚠ **NOT SUITABLE FOR EXTERIOR DOORS! (LOWER SECURITY LEVEL)**

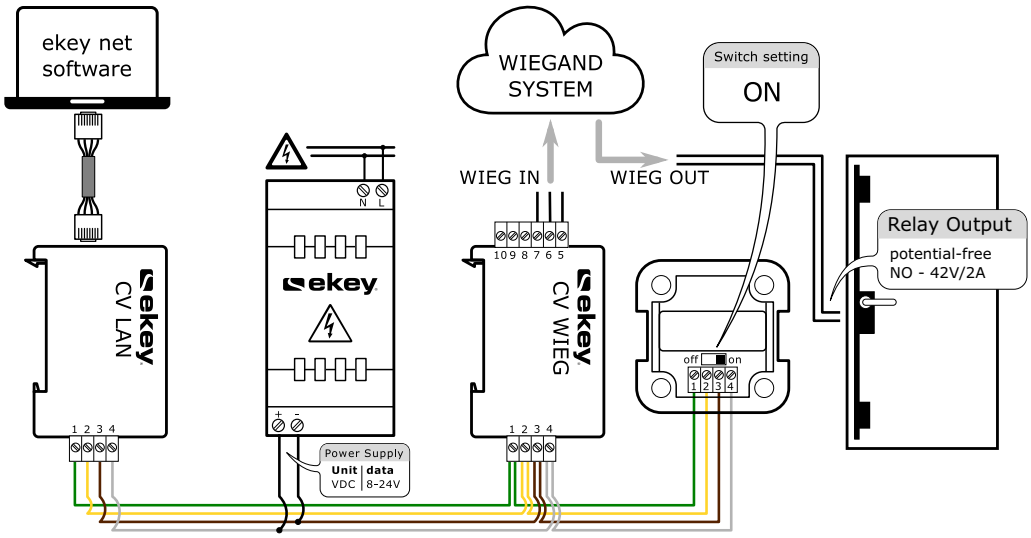
7 Wiring example WIEGAND: 1 ekey net CV LAN + 1 ekey net CV WIEG + 1 ekey net CP mini 1 + 1 ekey net FS [S/M



8 Wiring example WIEGAND: 1 ekey net CV LAN + 1 ekey net CV WIEG + 3 ekey net CP mini 1 + 3 ekey net FS [S/M



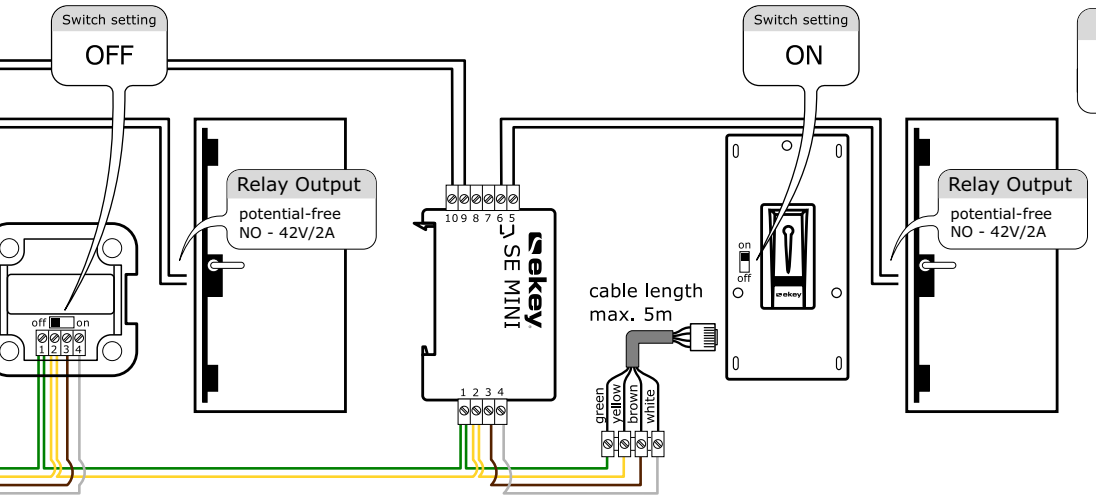
9 Wiring example WIEGAND: 1 ekey net CV LAN + 1 ekey net CV WIEG + 1 ekey net FS [S/M/L]



M]

]

ONLY ONE CONVERTER WIEGAND IS NECESSARY!



NOTE

Wiegand system must be able to interpret the facility code!

DOOR CONTROL VIA EXTERNAL SYSTEM!

ekey

YOUR FINGER. YOUR KEY.

Austria (headquarters)
ekey biometric systems GmbH
Lunzerstraße 89
A-4030 Linz
P: +43 732 890 500 - 0
E: office@ekey.net

Germany
ekey biometric systems Deutschland GmbH
Industriestraße 10
D-61118 Bad Vilbel
P: +49 6187 90696 - 0
E: office@ekey.net

Switzerland & Liechtenstein
ekey biometric systems Est.
Landstrasse 79
FL-9490 Vaduz
P: +41 71 560 5480
E: office@ekey.ch

Adriatic East region
ekey biometric systems d.o.o.
Vodovodna cesta 99
SI-1000 Ljubljana
P: +386 1 530 94 89
E: info@ekey.si

Italy
ekey biometric systems Srl.
Via Copernico 13/A
I-39100 Bolzano
P: +39 0471 922712
E: italia@ekey.net

www.ekey.net

Made in Austria