ekey

YOUR FINGER. YOUR KEY.

ekey net finger scanners

Solutions for networked access control

2025

YOUR FINGER.
YOUR KEY.

Based in Linz, Austria, ekey is the European market leader for biometric access solutions. As we manufacture and develop our products ourselves, our technological expertise and patented software algorithm make us a reliable partner for business in international markets.

More than 1 milllion satisfied customers are the best possible recommendation for our products! For many years, both private households and leading companies, along with organizations such as fire and rescue services, have been putting their trust in proven ekey finger scanners.

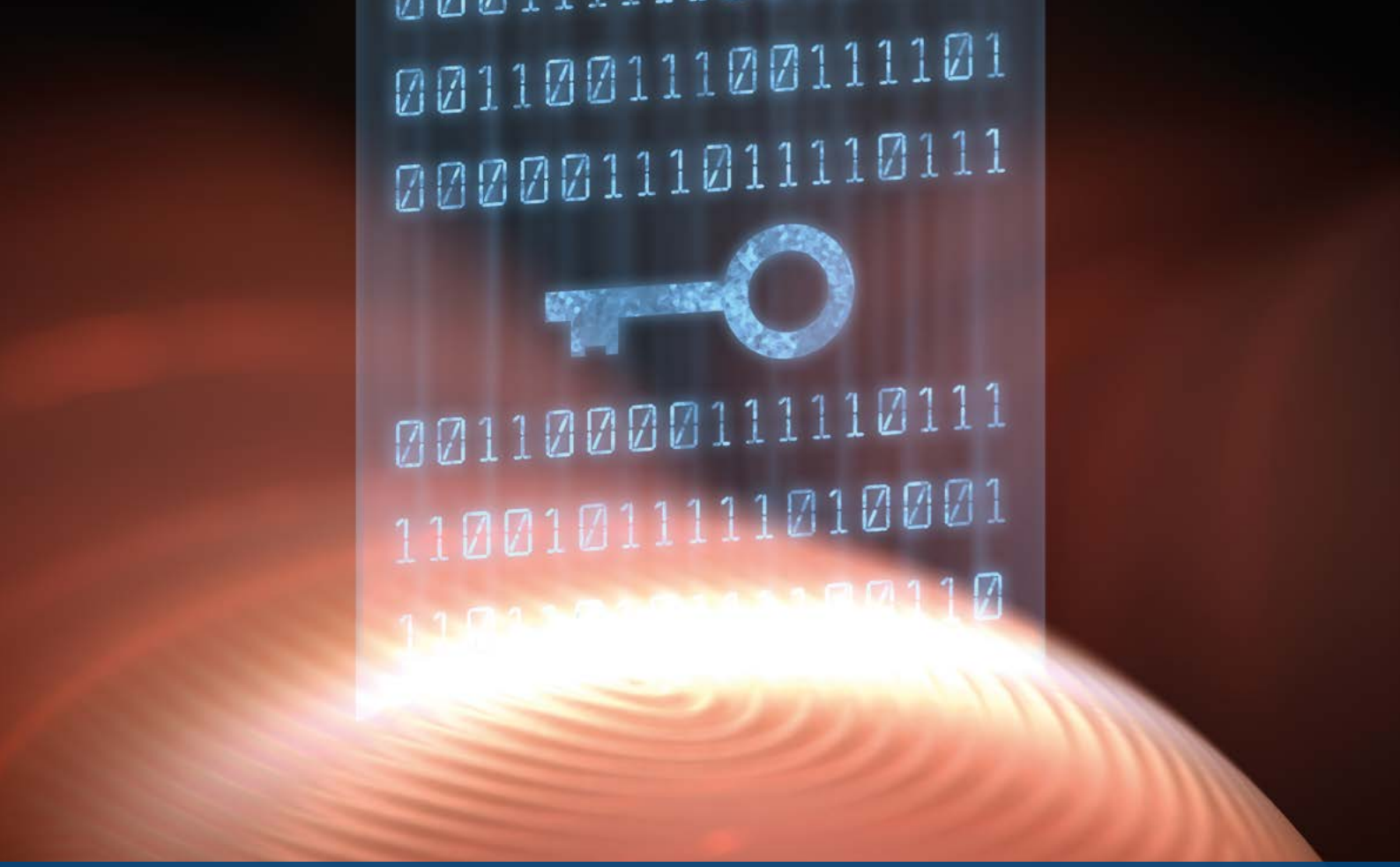
The right solution for every requirement.
Well-known manufacturers integrate ekey finger scanners in their products as standard.

ekey INTEGRATION:

- Wall-mounted/outlet-mounted variants
- Door stations
- Doors
- Door handles
- Switches

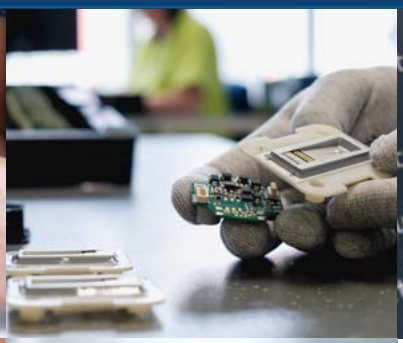
After hundreds of years, the key has served its time — now you literally have the future in your hands!

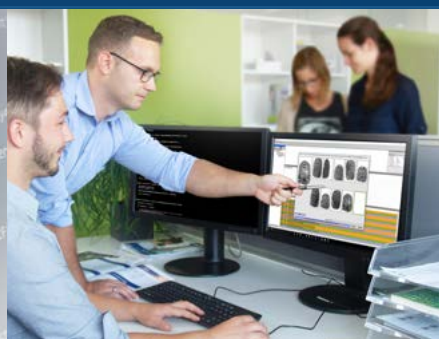
Dr. Leopold Gallner
CEO, ekey biometric systems GmbH



Europe's No. 1 for fingerprint access solutions

Made in Austria



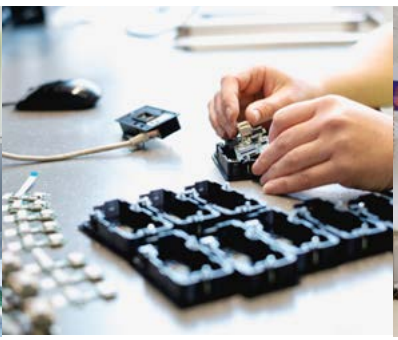


ekey was founded in 2002 and is now Europe's No. 1 for fingerprint access solutions. ekey puts authorization into the customer's hands! Keys, cards, codes, etc., can be lost, forgotten, or stolen. "Your finger is always on hand!" ekey's wide range of products includes finger scanners for doors, gates,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

Good reasons
to choose ekey finger scanners

- UNIQUE COMFORT WITH MAXIMUM SECURITY
- PERSONALIZED ACCESS CONTROL
- MANY INTEGRATION OPTIONS
- EASY INSTALLATION AND ADMINISTRATION
- CONNECTION TO BUILDING CONTROL SYSTEMS
- SIMPLE MAINTENANCE
- 5-YEAR QUALITY GUARANTEE



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; each finger scanner, along with all of its components, is subjected to these conditions countless times before reaching the customer. Our formula for quality consists of the highest standards of functionality, reliability, and security, which are refined through extensive testing.

CERTIFIED QUALITY – MADE IN AUSTRIA:

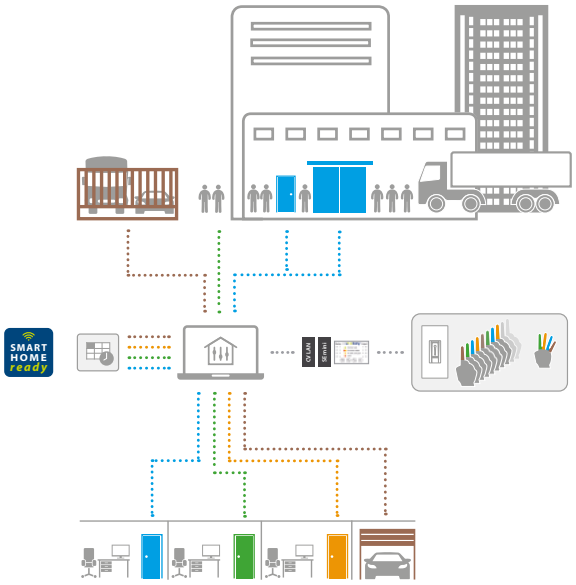
- Extensive production, manufacturing, and functional testing (zero tolerance)
- Testing for environmental and temperature resistance
- Vibration and shock-tested
- Tested for penetration of water and solid foreign bodies
- Quality management system in accordance with EN ISO 9001:2015
- CE-compliant

Contents

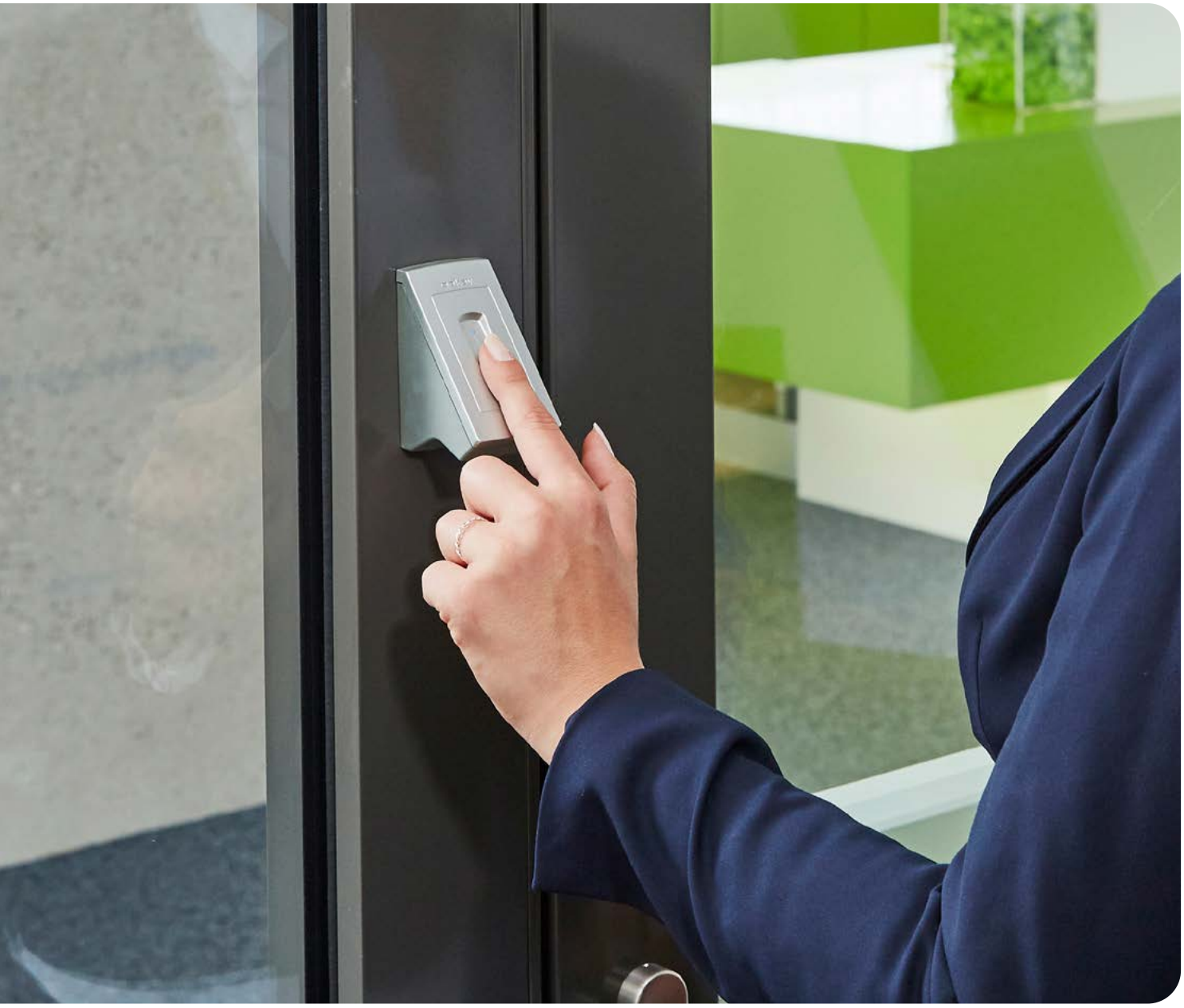
ekey net
Network access solutions

The networked 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 finger scanner
- Programmable time slots
- Access logging for every finger scanner
- Supports cross-site administration
- Central administration via PC
- Calendar function
- Interfaces for establishing external connections
- Optional: Access via transponder (RFID) possible
  -> Can also store up to 2,000 transponders



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



ekey net
Network access solutions

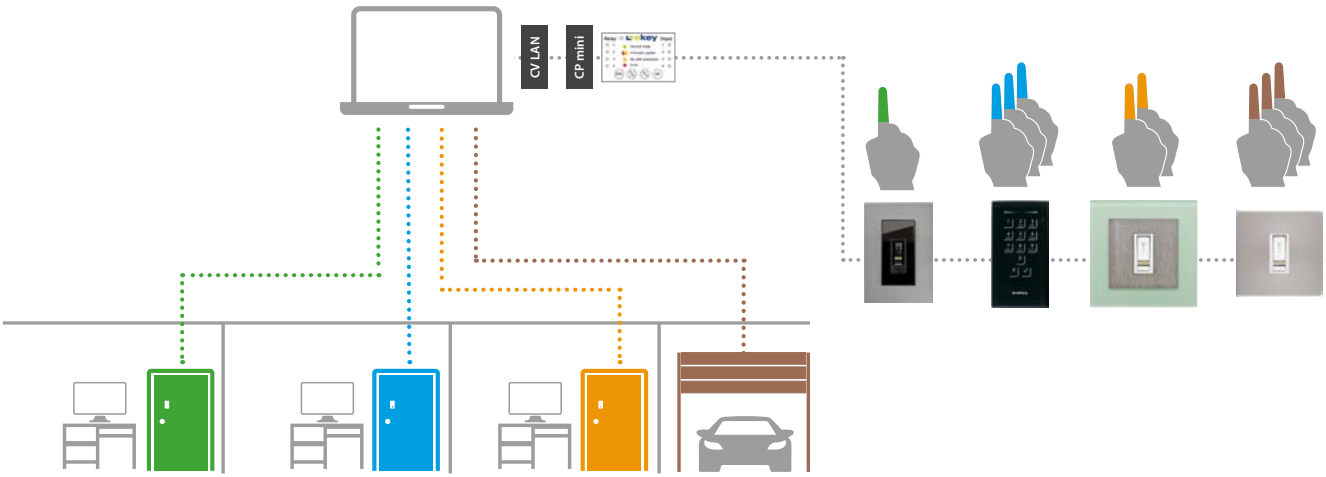
The networked access solution for companies, organizations, and discerning households.

ekey net is a networked 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. User-friendly software enables you to store individuals and organize them within freely definable user groups. *ekey net* supports a range of interfaces for connection 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 finger scanner
- Programmable time slots
- Access logging for every finger scanner
- Supports cross-site administration
- Central administration via PC
- Calendar function
- Interfaces for establishing external connections
- Optional: Access via transponder (RFID) possible
  -> Can also store up to 2,000 transponders

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



Steps in the planning process
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 variant:
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*)

4

Select a suitable number of LAN converters.

5

Select a suitable number and type of power supplies:
a) Convenient DIN-rail-mounted power supply inside the distribution box (*PS DRM*)
b) Outlet-mounted power supply (*PS OM*)
c) Uninterruptible power supply, DIN-rail-mounted (*UPS DRM*)

6

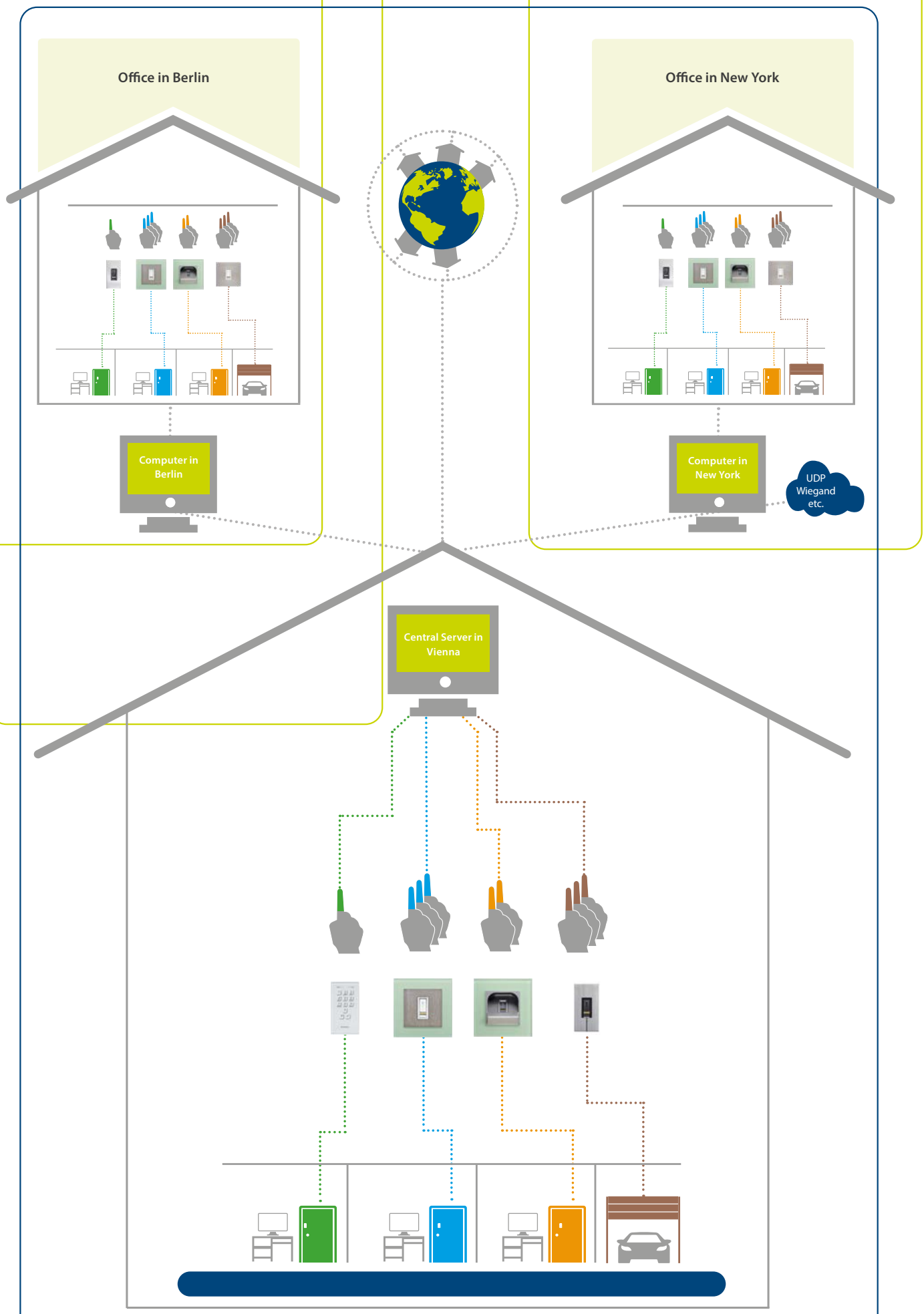
Storage station:
Convenient finger storage on your PC at your workstation.

7

Server and system requirements:
Minimum requirements for the 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 converter (*CV LAN*)
c) ekey net software development kit (*SDK*)
d) ekey KNX CONNECT (netyard)


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

Step 1: Select the suitable license variant:

Functional scope

To cater to the wide range of possible applications, the *ekey net* software is available with 2 different license variants:

- *ekey net light* – supports basic access functions (e.g., discerning 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 L 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)	✕	✓
Customer-specific device definition (action, event conversion)	✕	✓
CSV transmission	POSITIVE ONLY	✓
ODBC (SQL) transmission	✕	✓
HTML transmission	✕	✓
UDP transmission	✓	✓
ekey reporting	✕	✓
Time-controlled anti-pass back	✓	✓
Opening via cell phone browser with a single-use PIN for added 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
14 finger scanners*

Part number 170014

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

Example
7 finger scanners*

Part number 171007

*Alternatively: Code pad (*keypad*)

Step 2: Select the suitable finger scanner or 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 radio-frequency identification + relay on board ("indoor" function)
The finger scanner has an RFID card reader with MIFARE DESFire EV1 and the switching relay already built in. 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 tamper-proof.

… based on storage capacity!

Type	Fingerprints	Codes	RFID transponders
S	40	×	40
M	200	×	200
L	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 outlet mounting 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: IP44
- Recommended mounting height: 135 cm
- Display: 3 multicolored 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,** max. 40 fingerprints
101391	**ekey net FS M WM,** max. 200 fingerprints
101392	**ekey net FS L WM,** max. 2,000 fingerprints
101393	**ekey net FS S WM RFID,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101394	**ekey net FS M WM RFID,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101395	**ekey net FS L WM RFID**, max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1
101399	**ekey net FS S WM RFID REL,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101400	**ekey net FS M WM RFID REL,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101401	**ekey net FS L WM RFID REL,** max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1

Accessories

Part no.	*Description*
101406	**ekey weather shield FS WM 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

Accessories - RFID

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

Technische Daten

- 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 multicolored 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, mailboxes, 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
102017	**ekey net FS S OM I BL,** black, max. 40 fingerprints
102018	**ekey net FS M OM I BL,** black, max. 200 fingerprints
102019	**ekey net FS L OM I BL,** black, max. 2,000 fingerprints
101353	**ekey net FS S OM I RFID,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101354	**ekey net FS M OM I RFID,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101355	**ekey net FS L OM I RFID,** max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1
102020	**ekey net FS S OM I BL RFID,** black, max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
102021	**ekey net FS M OM I BL RFID,** black, max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
102022	**ekey net FS L OM I BL RFID,** black, max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1
101729	**ekey net FS S OM I RFID REL,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101730	**ekey net FS M OM I RFID REL,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101731	**ekey net FS L OM I RFID REL,** max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1

Accessories - *Gira TX44*

Part no.	*Description*
	Build-in modules for door stations Gira
101380	**ekey Modul Gira TX44 AIG,** aluminum gray
101381	**ekey Modul Gira TX44 AN,** anthracite
101382	**ekey Modul Gira TX44 PW,** pure white

Accessories - *Siedle Vario*

Part no.	*Description*
	Build-in modules for door stations Siedle
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

Important: Gira and Siedle are only available from ekey! Other modules can be ordered direct from the manufactur

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

Accessories

Part no.	Description
	Build-in modules for door stations Bticino
101533	**ekey Modul bticino Sfera AME,** Allmetal

Important: Not available in all countries. Ask your sales partner.

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

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

bticino · Telecom Behnke · urmet · Comelit · ELCOM · FERMAX · ELVOX · KOCH · 2N · MOBOTIX · SYSTEMS EPPIG · SIBLIK Wir schalten schneller. · SIEDLE · RITTO · STR ELEKTRONIK · Stentofon Baudisch · GIRA · RENZ · TCS · wantec

Finger scanner OM E

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 multicolored 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
102011	**ekey net FS S OM E BL,** black, max. 40 fingerprints
102012	**ekey net FS M OM E BL,** black, max. 200 fingerprints
102013	**ekey net FS L OM E BL, black,** max. 2,000 fingerprints
101153	**ekey net FS S OM E RFID,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101154	**ekey net FS M OM E RFID,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101155	**ekey net FS L OM E RFID,** max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1
102014	**ekey net FS S OM E BL RFID,** black, max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
102015	**ekey net FS M OM E BL RFID,** black, max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
102016	**ekey net FS L OM E BL RFID,** black, max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1
101159	**ekey net FS S OM E RFID REL,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101160	**ekey net FS M OM E RFID REL,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101161	**ekey net FS L OM E RFID REL,** max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1

Accessories - *Siedle Vario*

Part no.	*Description*
	Build-in modules for door stations Siedle Vario flush mounted*
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*!

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

Accessories - RFID

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

Accessories - *Gira 106*

Part no.	*Description*
101992	**ekey Modul GIRA system 106 TW,** traffic white
101991	**ekey Modul GIRA system 106 AL,** aluminum
101990	**ekey Modul GIRA system 106 ST V2A,** stainless steel V2A

Attention: RFID function is not possible with *ekey Modul Gira system 106*!

Accessories - *2N Verso*

Part no.	*Description*
101993	**ekey Modul 2N IP Verso SC,** black

Attention: This accessory is only available in combination with *ekey FS OM E*!

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 multicolored 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 50mm 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
102011	**ekey net FS S OM E BL**, black, max. 40 fingerprints
102012	**ekey net FS M OM E BL**, black, max. 200 fingerprints
102013	**ekey net FS L OM E BL**, black, max. 2,000 fingerprints
101153	**ekey net FS S OM E RFID,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101154	**ekey net FS M OM E RFID,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101155	**ekey net FS L OM E RFID,** max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1
102014	**ekey net FS S OM E BL RFID**, black, max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
102015	**ekey net FS M OM E BL RFID**, black, max. 200 fingerprints + 2.000 ekey RFID transponders MIFARE DESFire EV1
102016	**ekey net FS L OM E BL RFID**, black, max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1
101159	**ekey net FS S OM E RFID REL,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101160	**ekey net FS M OM E RFID REL,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101161	**ekey net FS L OM E RFID REL,** max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1

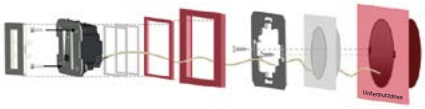
Accessories - RFID

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

Accessories - bezel

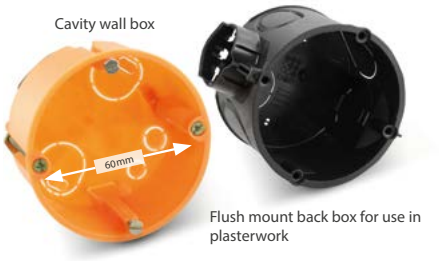
Part no.	*Description*
101166	**ekey bezel FS OM PW 50 x 50,** plastic, pure white
101167	**ekey bezel FS OM AIG 50 x 50,** plastic, aluminum gray
101168	**ekey bezel FS OM AN 50 x 50,** plastic, anthracite

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



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.



Flush mount back box for use in plasterwork

Accessories – 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 IP44 protection for outdoor use on exterior walls rendered with a max. grain size of 1.5 mm 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 IP44 protection for outdoor use on exterior walls rendered with a max. grain size of 1.5 mm 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 IP44 protection for outdoor use on exterior walls rendered with a max. grain size of 1.5 mm around the 503-type electrical outlet.

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

Accessories – mounting frame

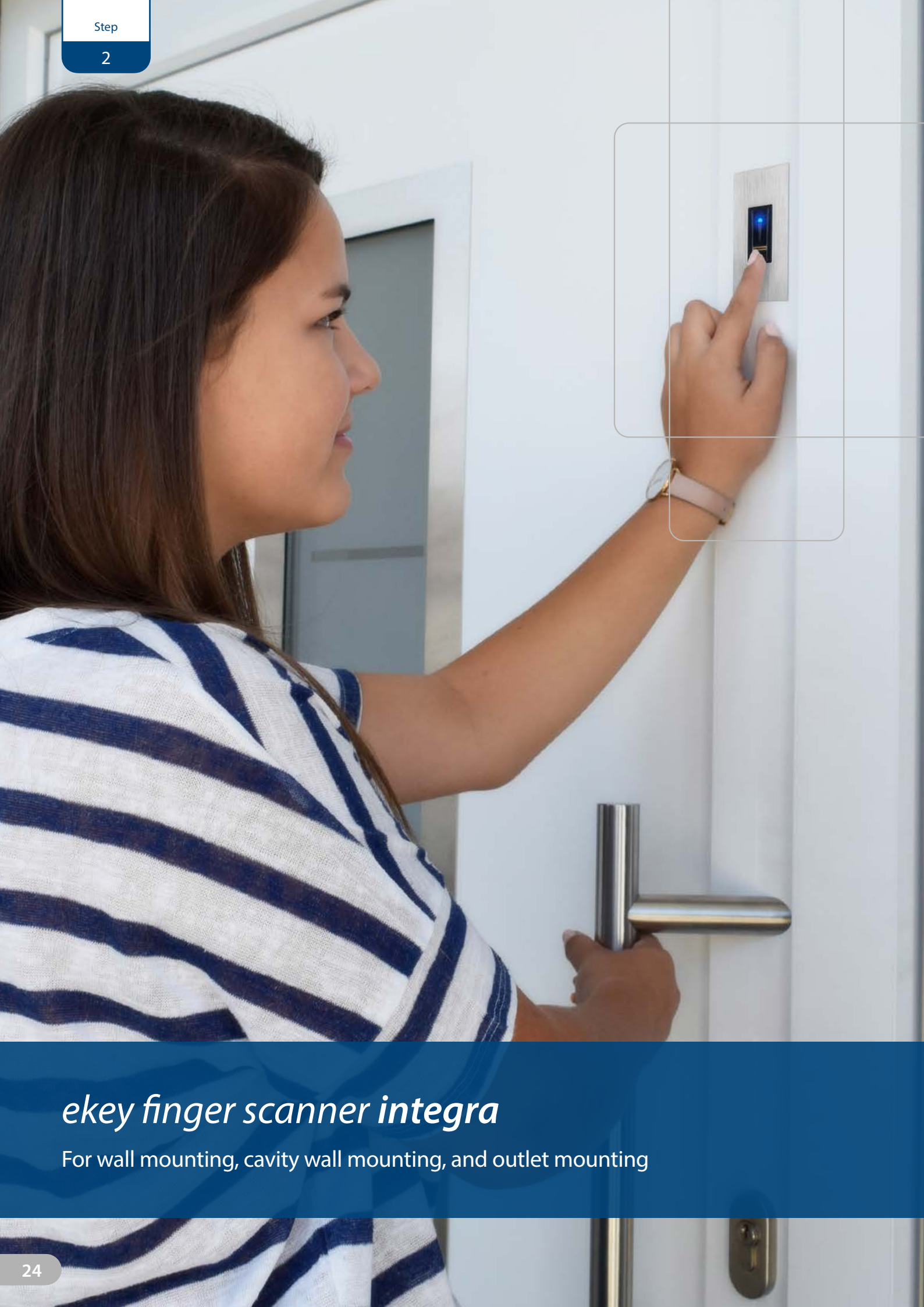
Part no.	*Description*	
101779	**ekey mounting frame FS OM GL WHI,** glass, white	
101780	**ekey mounting frame FS OM GL BL,** glass, black	
101781	**ekey mounting frame FS OM GL MI,** glass, mint	
101785	**ekey mounting frame FS OM GL MI LED,** glass, mint with alarm LEDs	
101786	**ekey mounting frame 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 (mailboxes, 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 affix the *ekey integrationkit FS OM E* for each particular application.

Step
2



ekey finger scanner ***integra***

For wall mounting, cavity wall mounting, and outlet mounting

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: IP54 (only with design element)
- Temperature range: -25 °C to 70 °C
- Display: 3 multicolored 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,** max. 40 fingerprints
101789	**ekey net FS M IN,** max. 200 fingerprints
101790	**ekey net FS L IN,** max. 2,000 fingerprints
101791	**ekey net FS S IN RFID,** max. 40 fingerprints + 40 ekey RFID transponders MIFARE DESFire EV1
101792	**ekey net FS M IN RFID,** max. 200 fingerprints + 200 ekey RFID transponders MIFARE DESFire EV1
101793	**ekey net FS L IN RFID,** max. 2,000 fingerprints + 2,000 ekey RFID transponders MIFARE DESFire EV1

Accessories - RFID

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

Accessories – design element

Part no.	*Description*
	Design element FS IN
101254	**ekey design element FS IN SG,** stainless steel gray
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 SG,** stainless steel gray*
101904	**ekey design element FS IN RFID BL,** black*
101933	**ekey design element FS IN RFID WHI,** white*
	Design element FS IN (RFID) GL
101978	**ekey design element FS IN (RFID) GL SG,** glass, stainless steel gray
101979	**ekey design element FS IN (RFID) GL WHI,** glass, white
101980	**ekey design element FS IN (RFID) GL AN,** glass, anthracite

***Important:** Not available in all countries. Ask your sales partner.

Accessories – mounting frame

Part no.	Description	
101717	**ekey mounting frame FS IN GL WHI,** glass, white	
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

Accessories – mounting frame with bell module

Part no.	Description	
101803	**ekey mounting frame FS IN BeM GL WHI,** glass, white	
101807	**ekey mounting frame FS IN BeM GL WHI LED,** glass, white 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

Accessories – 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 • Outlet-mounted 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 • Outlet-mounted 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: Can only be used in conjunction with ekey design elements.

Perfect match.

ekey integra + keypad.

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: IP54 (with design element)
- Temperature range: -25 °C to 70 °C
- Display: 3 multicolored LEDs

- Up to 2,000 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

Accessories – design element

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

Accessories – 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

Accessories – 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

Accessories – 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 • Outlet-mounted 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 • Outlet-mounted 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: Can only be used in conjunction with ekey design elements.

Step 3: Select the suitable control panel:

Control panel

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: IP20
- Normally open contact (NO/C)

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

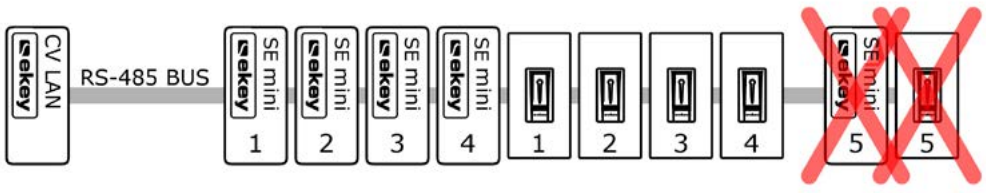
Step 4: Select a suitable number of LAN converters:

ekey net converter LAN RS-485

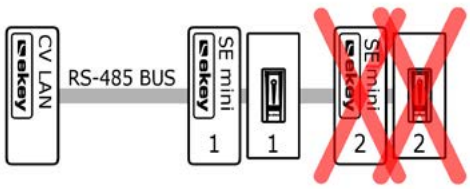
- The finger scanners and control panels – which communicate using the RS-485 protocol – are connected to the network (Ethernet) using the ekey LAN converter.
- A single *ekey net* LAN converter is capable of managing up to 4 "S" type finger scanners (40 fingerprints) or "M" type finger scanners (200 fingerprints) 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.
- For maximum operational reliability when using *ekey net* finger scanners of the types "S" and "M", using a separate *ekey net* LAN converter for each door is recommended.

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: IP20 • UDP transmission • RTC

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



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



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

Power supply

	Part no.	Description	
	**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/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/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/current: 24 VDC/2 A • Temperature range: -5 °C to 50 °C

Uninterruptible power supply

Our recommendation

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/5 A + REBAT 4 Ah,** for DIN-rail mounting	
	• Dimensions W x H x D: UPS: 252 x 68 x 95 mm (6 HP) Battery: 157 x 93 x 66.5 mm (9 HP) • Supply voltage: 195-265 VAC • 2 parts: UPS (switched-mode power supply) and battery • Output voltage/current: 12 VDC/5 A	• Temperature range: -10 °C to 40 °C • Function display: LED • Advantages: Replaces line voltage power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock.
101593	**ekey UPS DRM 230 VAC/24 VDC/3 A + REBAT 4 Ah,** for DIN-rail mounting*	
	• Dimensions W x H x D: UPS: 403.2 x 93 x 66.5 mm (6 HP) Battery: 157 x 93 x 66.5 mm (9 HP) • Supply voltage: 195-265 VAC • 3 parts: UPS (switched-mode power supply) and 2 x batteries • Output voltage/current: 24 VDC/3 A	• Temperature range: -10 °C to 40 °C • Function display: LED • Advantages: Replaces line voltage power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock.

Important: Not available in all countries. Ask your sales partner.

Step 6: Storage station

Storage station

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

Part no.	*Description*	
101929	**ekey net station**	
	For storing fingerprints and RFID transponders (with MIFARE DESFire EV1) or RFID transponders in the *ekey net* system via an 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

System requirements

General minimum requirements to be met by your system

Requirements	*Details*	*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 storage 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 11 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: IP20 • 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
Packet type	User ID	Finger ID	Finger scanner serial number	Action	Event

! 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 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 default 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: IP20

Interface for connecting the equipment to KNX systems

Mfr.	Description	
netyard	**ekey KNX CONNECT**	
	The ekey KNX CONNECT builds on the ISE SMART KNX PROGRAMMABLE, which connects the ekey system to the KNX bus simply and reliably. The IP interface is used for communication with the ekey system. The ekey KNX CONNECT can be used with *ekey home, ekey multi* and *ekey net* products.	• More information: *www.netyard.de*

Step 9: Commissioning and customer service

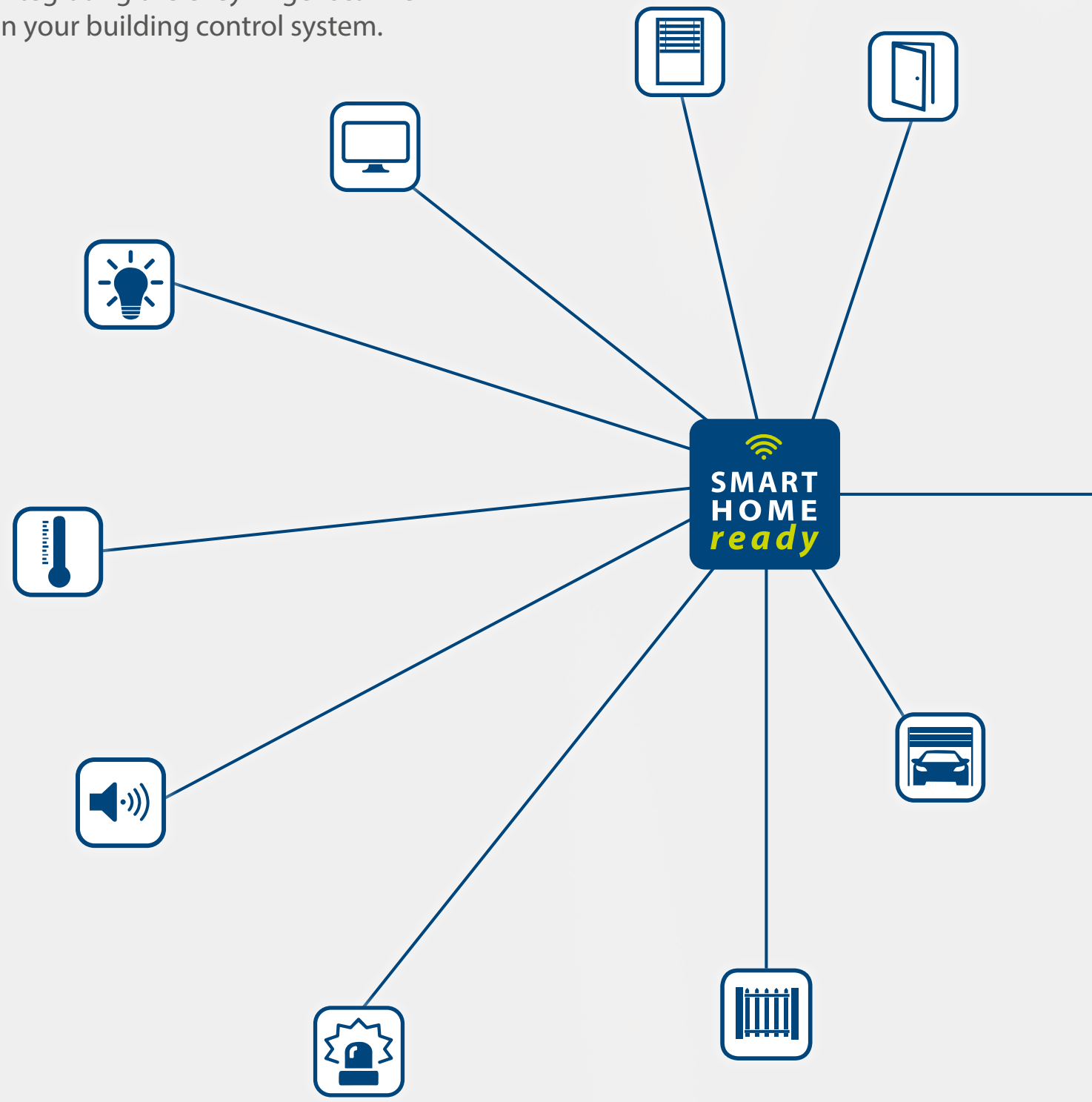
Commissioning and customer service

If needed, we can offer you assistance with commissioning through a remote session.

ekey Support
www.ekey.net/en/contact-support

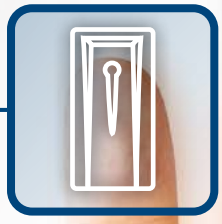
HOME AUTOMATION.

Integrating the ekey finger scanner
in your building control system.



An ekey finger scanner can do more than just open doors.

With the right ekey interface (converter), you can use your fingers to initiate customized actions via your building control system.



INTERFACES FOR INTEGRATION IN BUILDING CONTROL SYSTEMS

KNX

PARTNER KNX

FEELSMART.

FSX

BECKHOFF · myGEKKO · evon Smart Home · CRESTRON · habitron

LAN

BAB TECHNOLOGIE · KSOLUTION · hmiMASTER · LOXONE · SYMCON · GIRA · everHome · iHaus · legrand · U:C · Control4 · CRESTRON · iRidium mobile · SAVANT · RTI

Tips and tricks

Congratulations on purchasing your ekey product!

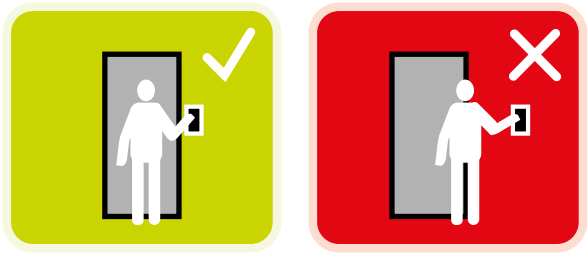
Your finger is now also your key! Our tips and tricks will help you to make the best possible use of your ekey finger scanners.

• 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.

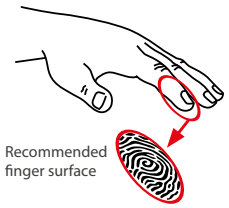


Type	*Recommended mounting height*
WP (wall-mounted)	135 cm
OM (outlet-mounted)	100/155 cm
IN (integra)	155 cm
AR (arte)	155 cm

• 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, 3. ring finger**. Neither the thumb nor the little finger should 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

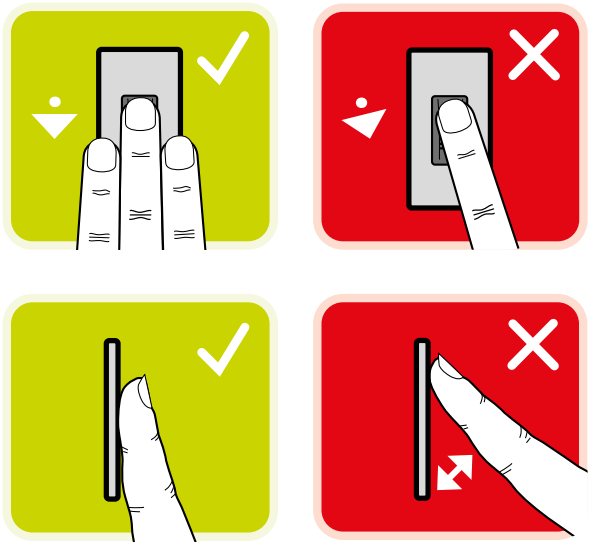
The control panel switches the relay and must, therefore, only be mounted in the protected internal area (tamper-proof). It should, however, be easily accessible for programming purposes.

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. 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.

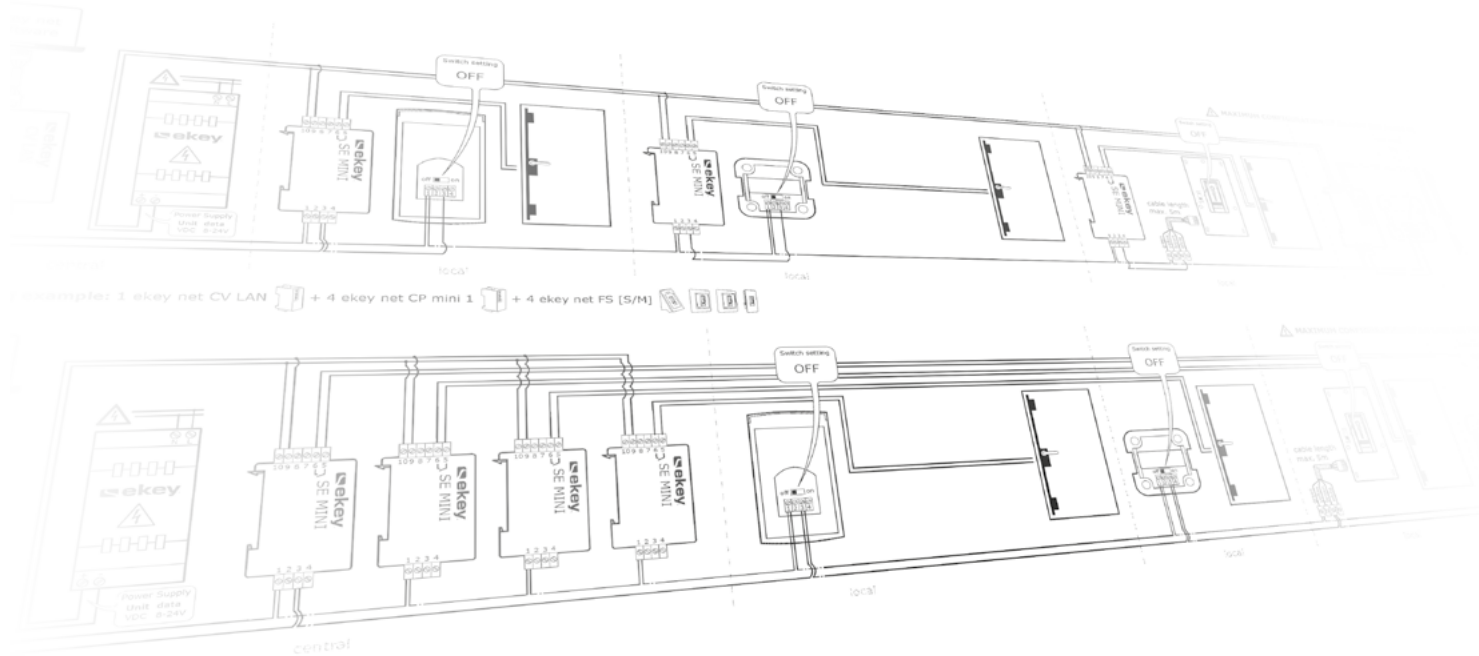
Children's fingers:
Children's fingers generally work from around school age. The specified mounting height must be observed in order to ensure correct operation.

Support

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

www.ekey.net/en/contact-support

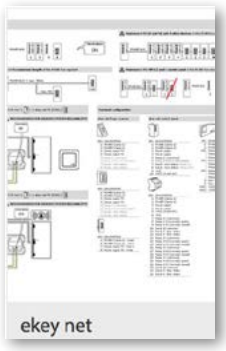
Technical specifications and wiring diagram



ekey downloads

Wiring diagram

ekey DOWNLOAD CENTER
You can find all information on our products on our website at
www.ekey.net/en/download-center



Notes

YOUR FINGER. YOUR KEY.

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ekey biometric systems

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