

# ekey net finger scanner integra 2.0

## Product description

The *ekey net finger scanner integra* is a 2nd generation biometric sensor terminal which records fingerprints via a RF line sensor manufactured by Authentec. The finger scanner is to be operated in the networked access system ekey net, and has been conceived specifically to be mounted in doors and door leafs (ekey net FS S/M/L IN D). It can also be wall-mounted by using specific accessories (ekey net FS S/M/L IN E).



## Features

- 40 / 200 / 2.000 fingers can be recorded
- Design element: stainless steel, white, gold and anthracite
- To be mounted into doors and door leafs
- May be used outdoors
- AC /DC power supply
- Operates only within the networked *ekey net* access system
- The bus termination can be activated directly on the device
- High FAR
- Protection class IP54

## Description and item numbers

Description	Field of application	Fingers	Item #
ekey net FS S IN E	Electrical appliance industry	40	101248
ekey net FS M IN E	Electrical appliance industry	200	101249

ekey net FS L IN E	Electrical appliance industry	2.000	101250
ekey net FS S IN D	Door industry	40	101258
ekey net FS M IN D	Door industry	200	101259
ekey net FS L IN D	Door industry	2.000	101260

Electrical appliance industry = set w/ stainless steel design element and 24cm cable

Door industry = w/o design element, w/o cable

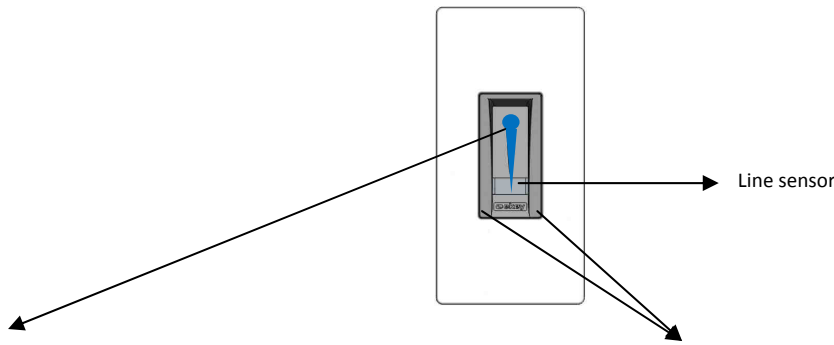
## Standards

The *ekey net finger scanner integra* is compliant with the 2004/108/EG (CE) and 2002/95/EC (RoHs) guidelines. It is also compliant with the vibrations and shock test according to EN60068 for slamming doors.

Applied standards	harmonized
EN 61000-6-2:2005	
EN 61000-6-3:2007	
EN 68000-2-6:2008	
EN 60068-2-27:2010-02	



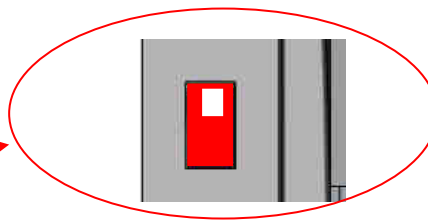
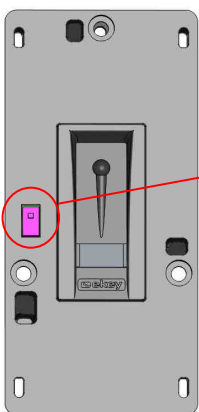
## Controls and visual indications



Display	Function LED	Signification of the indication
	Blue	The device is ready to read a finger. A finger may be swiped over the sensor.
	Blinking orange	The analysis and identification of an enrolled finger image is currently being done.
	Green	The finger/RFID card has been identified and has access rights.
	Red	The finger/RFID card has been denied access (reason: unknown finger or for instance due to a time-restricted access).
	Blinking red	Finger scanner data is currently being updated (finger templates, rights).

Display	Status LED	Signification of the indication
	Right off: Left off:	The finger scanner is ONLINE: there is an active data connection to the ekey converter LAN and to the ekey net terminal server (standard state)
	Left: blue Right: off	The finger scanner is HALF-OFFLINE: there is <b>no</b> data connection to the ekey net terminal server.
	Right: on Left: on	The finger scanner is OFFLINE: there is no connection neither to the ekey CV LAN nor to the ekey net terminal server.
	Right left blinking alternately	A software update is being done on the finger scanner.

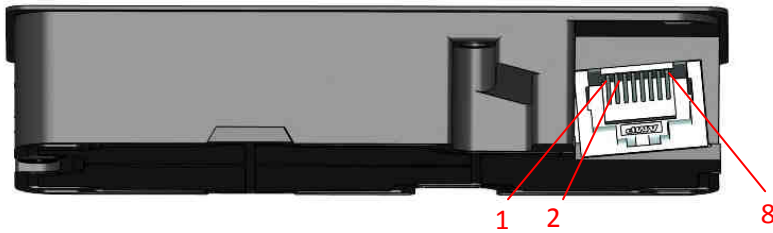
## Bus termination



- Switch setting bottom:** Bus termination = **off**
- Switch setting top:** Bus termination = **on**  
(factory setting)

## Pin assignment

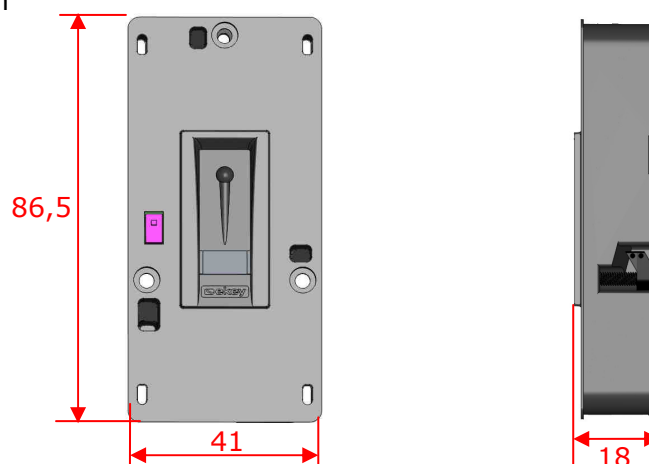
Finger scanner electrical connection via 8-pole RJ45 connector



Clamp #	Signal description	Recommended cable color (ekey standard)
4	RS485 (Clamp 1)	green
5	RS485 (Clamp 2)	yellow
7	Power supply (Clamp 3)	brown
8	Power supply (Clamp 4)	white

## Dimensions

Dimensions in mm



## Cable recommendation

We recommend using the cable type below in your system:

### ekey cable type A

Contact your ekey partner to order the adequate cable.

## Technical data

### Absolute maximum threshold value

Operating the device beyond these values will destroy it!

Technical data		Unit	Values
Supply	AC	V	0-24
	DC	V	±30
Temperature range	Storage	°C	-25 up to +70
	Operation	°C	-25 up to +70

### Electrical characteristics

Technical data		Unit	Values
Operating voltage	AC	V	8-24
	DC	V	8-24
Current draw [12VDC] <sup>1</sup>	Idle mode	mA	85
	Matching	mA	90
Power input <sup>2</sup>	Idle mode	W	~ 1
	Matching	W	~ 1
Temperature range	Storage	°C	-25 up to +70
	Operation	°C	-25 up to +70
Memory		Finger	99
Shock resistance according to EN 60068-2-27:2010-02 Slamming doors <sup>4</sup>		m/s <sup>2</sup>	100 (~10g)
Vibration resistance according to EN 60068-2-6 Sinus vibration <sup>4</sup> 5Hz -200 Hz		m/s <sup>2</sup>	10 (~1g)
Security		FAR	1:10.000.000
		FRR	1:100
Protection class			IP54 frontally (mounted correctly)
Speed		s	1-4
Life time cycle		Finger scans	~ 10 million
Max. cable length RS485 Bus (CLAMP 1,2) <sup>3</sup>		m	500
Max. cable length RS485 (CLAMP 1,2) when operated in an industrial area <sup>3</sup>			30
Max. length of the power supply cable (CLAMP 3,4) when operated in an industrial area <sup>3</sup>		m	30
Dimensions HxWxD		mm	86,50 x 42 x 18
Mounting height		cm	155

1) The power input varies according to the operating voltage (the power input remains constant with variations of ±10%)

2) The power input varies ±10% within the whole operating voltage area

3) When using the recommended cables

4) Tested on the X, Y and Z axes

**Subject to optical and technical modifications, any liability for misprints excluded!**