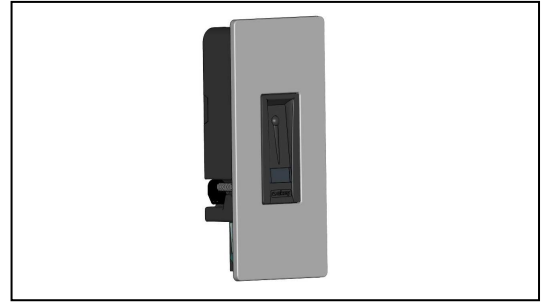


# ekey home FS IN 2.0

## Product description

The *ekey home FS IN 2.0* is a 2<sup>nd</sup> generation biometric sensor terminal which records fingerprints via a RF line sensor manufactured by Authentec.

The finger scanner is to be operated together with the corresponding *ekey home CP* and has been conceived specifically to be mounted in doors and door leaves (*ekey home FS IN 2.0 D*). It is also possible to wall-mount it with adequate accessories (*ekey home FS IN 2.0 E*).



## Features

- 99 fingers can be recorded
- Bezel: stainless steel, white, gold and anthracite
- For door and door leaf mount
- May be used outdoors
- AC /DC power supply
- Operates only in combination with the corresponding *ekey home CP* (see „compatible control panels“)
- The bus termination can be deactivated directly on the device
- low FAR – high security
- Protection class IP54

## Item number

Description	Application field	Fingers	Item #
ekey home FS IN 2.0 <b>D</b>	Door industry	99	101247
ekey home FS IN 2.0 <b>E</b>	Electrical retailers	99	101326

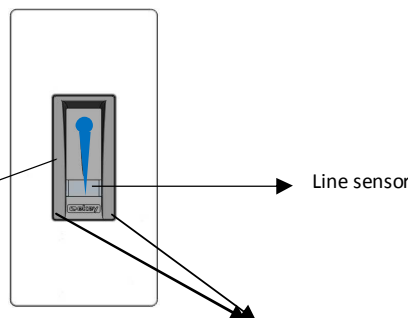
## Standards

The *ekey home FS IN 2.0* is compliant with the 2004/108/EG (CE) and 2002/95/EC (RoHS) guidelines. It also is compliant with the vibration and shock test according to EN60068 for slamming doors.

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



## Controls and visual indications

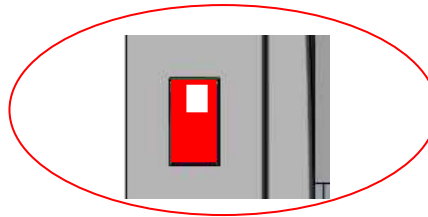
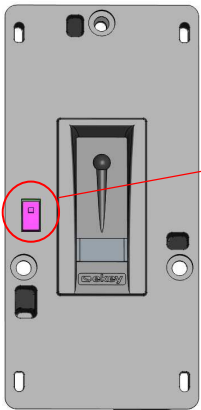


Display	Function LED	Signification of the indication
	Blue	The device is ready to read a finger. A finger may be swiped over the sensor.
	Blinking orange	The analysis and identification of an enrolled finger image is currently being done.
	Green	The finger has been identified and has been granted access. The door opens.

Display	Status LED	Signification of the indication
	Right off: Left off:	Normal operation: there is an active data connection between finger scanner and control panel.
	Right: blinking blue Left: blinking blue	The data connection between finger scanner and control panel has been interrupted.
	Right / left blinking red and green alternatively	A software update is being done.

	Red	The finger has been denied access (reason: unknown finger)
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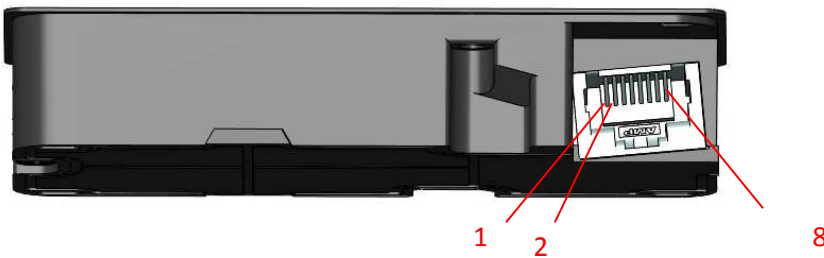
### Bus termination



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

### Pin assignment

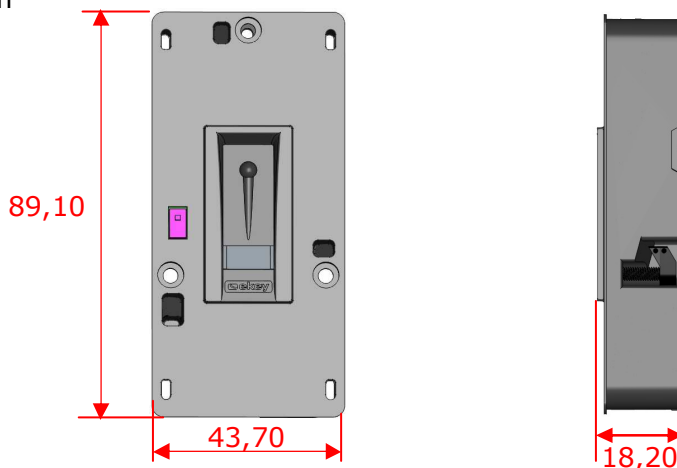
Finger scanner electrical connection via 8-pole RJ45 connector



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!

Description		Unit	Values
Supply	AC	V	0-24
	DC	V	±30
Temperature range	Storage	°C	-25 up to +75
	Operation	°C	-25 up to +75

### Electrical characteristics

Description		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
	heating mode <sup>5)</sup>	mA	~ 300
Power input <sup>2</sup>	Idle mode	W	~ 1
	Matching	W	~ 1
	heating mode <sup>5)</sup>	W	~ 3
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	1x 10 <sup>-6</sup>
		FRR	1,4x 10 <sup>-2</sup>
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 (without Bezel)		mm	89,10 x 43,70 x 18,20
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


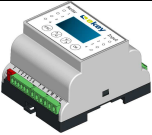

4) Tested on the X, Y and Z axes

5) heating mode is active, if temperature inside case is below 0°C

## Accessories

Item description	Color	Picture	Item number
ekey design element IN 2.0 ST	Stainless steel		101254
ekey PS power supply 12VDC / 2A DRM 4HP	White		100201
ekey PS power supply 12VAC / 1.5A DRM 4HP	White		100203
ekey PS power supply 12VDC / 1.5A OM	Black		100204
ekey PS power supply 12VDC / 1A OM	Black		100202
ekey PS power supply 24VDC / 2A DRM 4HP	White		100891

## Compatible control panels

Item description	Picture	Item number
ekey home CP WM 1		100478
ekey home CP WM 3		100479
ekey home CP DRM 1		101162
ekey multi CP DRM 4		101163
ekey home CP IN 1		18e
		18r
		20e
		20r
		24e
		24r
ekey home CP IN 2		18e
		18r
		20e
		20r
		24e
		24r

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