

ekey home FS WM 2.0



Product description

The *ekey home FS WM 2.0* is a 2nd generation biometric sensor terminal which records fingerprints via an RF line sensor manufactured by Authentec. The finger scanner has been conceived specifically for a stationary mounting onto unmovable parts such as walls and may be used outdoors in exposed areas.

Features

- 99 fingers can be recorded
- 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 IP44

Description	Application field	Fingers	Item #
ekey home FS WM 2.0	Electrical retailers	99	101 405

Standards

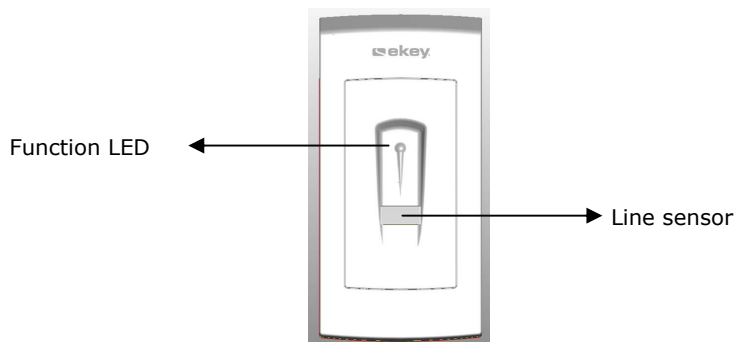
The *ekey home FS WM 2.0* is compliant with the 2004/108/EG (CE) and 2002/95/EC (RoHs) guidelines.

Applied standards	harmonized
EN 60529	
EN 61000-6-2	
EN 61000-6-3	



Item number

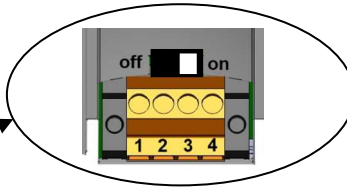
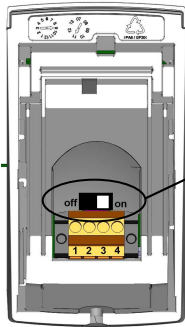
Controls and visual indications



Display	Function LED	Signification
	Blue	Normal operation, the finger scanner is ready to read a finger.
	Blinking orange	The analysis and identification of an enrolled finger image is currently being done.

Display	Function LED	Signification
	Red	The finger has been denied access.
	Green	The finger has been identified and has been granted access.

Bus termination

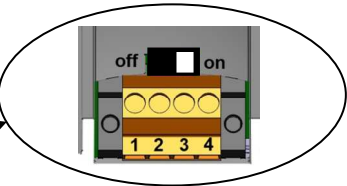
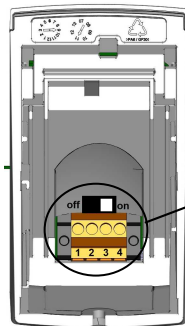


Switch setting left: Bus termination = **off**

Switch setting right: Bus termination = **on**
(factory setting)

Pin assignment

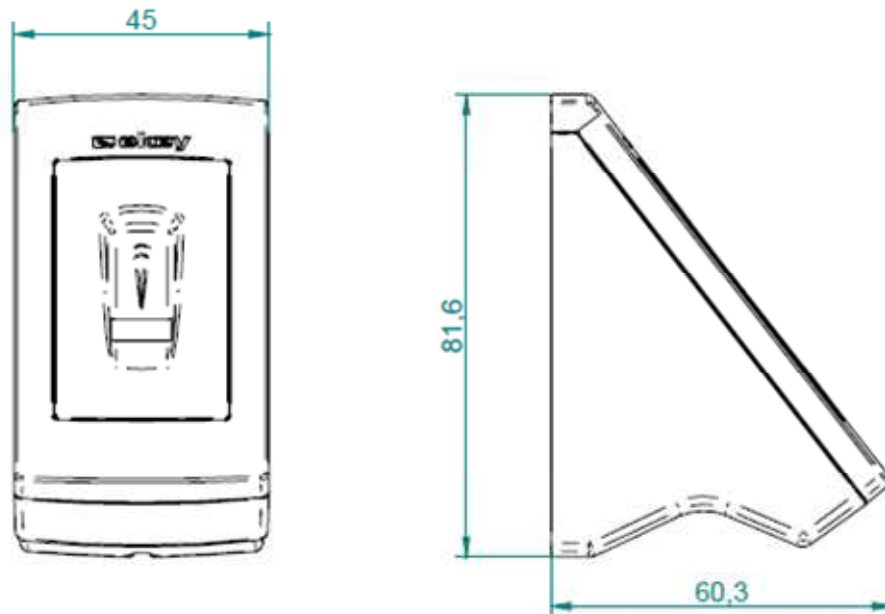
Finger scanner electrical connection via 4-pole push terminal RM 3.5.



Clamp #	Signal description	Recommended cable color (ekey standard)
1	RS485	Green
2	RS485	Yellow
3	Power supply -	Brown
4	Power supply +	White

Dimensions

Dimensions in mm



Cable recommendation

We recommend using the cable type below in your system:

J-Y(ST)Y 4 x 2 x 0.8

Cable assignment 4 x 2-core

1 wire pair for RS485 bus (green/white) + 1 spare pair (yellow/white) if there is a star-shaped basic wiring = via a back and forth wiring it is possible to achieve a daisy chain wiring.

1 wire pair (red/blue) for power supply + 1 spare pair (brown/white) for a larger cross-section for cable lengths over 50m.

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	0-24
Temperature range	Storage	°C	-25 up to +75
	Operation	°C	-25 up to +75

Electrical characteristics

Technical data		Unit	Values
Operating voltage	AC	V	8-24
	DC	V	8-24
Current draw [8 VAC] ¹	Idle mode	mA	100
	Matching	mA	130
	Heating ⁴	mA	470
Power input ²	Idle mode	W	~ 1
	Matching	W	~ 1
Temperature range	Storage	°C	-25 up to +70
	Operation	°C	-25 up to +70
Memory	Finger		99
Security	FAR		1x 10 ⁻⁶
	FRR		1,4x 10 ⁻²
Protection class	IP		44
Recognition speed	s		1-4
Life time cycle	Finger scans		~ 10 million
Max. cable length RS485 bus (CLAMP 1,2) ³	m		500
Max. length of the power supply cable (CLAMP 3,4) when operated in an industrial area	m		30
Dimensions WxHxD	mm		45 x 81,6 x 60,3
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) The heating only switches on if the internal temperature of the finger scanner drops below 0°C

Accessories

Item description	Color	Picture	Item number
ekey PS DRM 230VAC/12VDC/2A	white		100 205
ekey PS DRM 230VAC /12VAC/1.5A	white		100 203
ekey PS OM 230VAC/12VDC /1.5A	black		100 204
ekey PS OM 230VAC/12VDC/1A	black		100 202
ekey PS DRM 230VAC/24VDC/2A	white		100 891

Compatible control panels

Item description	Picture	Item number
ekey home CP WM 1		100 478
ekey home CP WM 3		100 479
ekey home CP DRM 1		101 162
ekey home CP DRM 2		101 312
ekey multi CP DRM 4		101 163

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