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# ekey net finger scanner WM 2.0

### **Product description**

The <u>ekey net FS WM 2.0</u> is a 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 wall mounted.

# C.S. E.M. E.S.

### **Features**

- 40 / 200 / 2000 fingers can be recorded
- May be used outdoors
- AC /DC power supply
- Operates only within the networked <u>ekey net</u> access system
- The bus termination can be activated directly on the device
- High FAR
- Protection class IP44

# Pin assignment

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



Clamp #:	Signal description	Recommended cable color (ekey standard)			
1	RS485 (Clamp 1)	green			
2	RS485 (Clamp 2)	yellow			
3	3 Power supply (Clamp 3)				
4	Power supply (Clamp 4)	white			
Optionally only for model <b>ekey net FS REL</b>					
5	REL NO potential free	-			
6 REL NO potential free		=			
7	7 Input				
8	Input	-			

# Description and item numbers

Description	Number of fingers	Item #
ekey net S FS WM 2.0	40	101390
ekey net M FS WM 2.0	200	101391
ekey net L FS WM 2.0	2000	101392

A SOFTWARE LICENSE is compulsory in order to be able to operate the <u>ekey net FS WM 2.0</u>! This license must be ordered separately.

### **Standards**

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

Applied standards		ha	irmo	onized
EN 61000-6-	2:20	005		
EN 61000-6-	3:20	007		





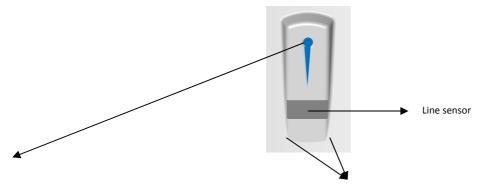
### **Dimensions**

Dimensions in mm



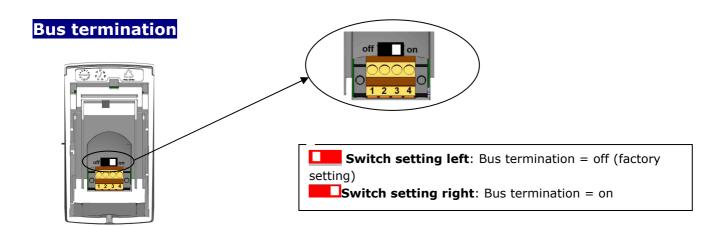


# **Controls and visual indications**



Display	Function LED	Signification of the indication		
T	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 access rights.		
	Red	The finger 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		
1	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 (normal status).		
	Left: on 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.		





# **Cable recommendation**

We recommend using the cable types below in your system:

J-Y(ST)Y 4 x 2 x 0,8

### Wire configuration:

2x RS485 bus (green/white) + 2x RS485 (yellow/white) as a reserve

2x power supply (red/blue) + 2x as a reserve (brown/white) for cross-section increase for cable lengths > 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	±24
Temperature range	Storage	°C	-20 up to +75
	Operation	°C	-20 up to +75

### **Electrical characteristics**

Technical data		Unit	Values
Operating voltage	AC	V	8-24
	DC	V	8-24
Current draw [12VDC] 1	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	S(40), M(200), L(2000)
Security		FAR	1:10.000.000
		FRR	1:100
Protection class			IP44
Speed		S	1-4
Life time cycle		Finger scans	~ 10 million
Max. cable length RS485 bus (CLAM	m	500	
Max. length of the power supply cable (CLAMP 3,4)		m	30
when operated in an industrial area			
Dimensions LxWxD		mm	81,55 x 45 x 60,2 mm
Mounting height		cm	135

<sup>1)</sup> The power input varies according to the operating voltage (the power input remains constant with variations of  $\pm 10\%$ )

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

<sup>2)</sup> The power input varies  $\pm 10\%$  within the whole operating voltage area

<sup>3)</sup> When using the recommended cables