

FE-MF-TWR & FE-MF-WR

WIEGAND / OSDP 13.56 MHz 8HR10D READER

FE-MF-WR and FE-MF-TWR readers support 8HR10D Card read Standard meaning they read bytes from left to right (reverse). Also, there is support for 4-byte and 7-byte cards. When reading 7-byte card, reader deletes first 3 MSB (Most Significant Bits) and reads it like 4-byte card.





FE-MF-WR

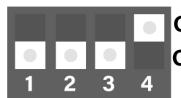
FE-MF-TWR

MODEL	FE-MF-WR	FE-MF-TWR
RFID Card Type	Mifare/NFC	Mifare/NFC
Verification time	100ms	100ms
Power Consumption	60 mA at 12V (up to 0.72W)	80 mA at 12V (up to 1W)
Communication	Wiegand 34 & OSDP	Wiegand 34 & OSDP
LED	RGB	RGB
Transmitting distance	100 meters	100 meters
ESD Protection	+2.5 KV	+2.5 KV
Built-in Watch Dog	Yes	Yes
IP 65 Rating	Yes	Yes
Card collision diagram	Yes	Yes
Self-Diagnostic	Yes	Yes
Surge Protection	Yes	Yes
Buzzer	Yes	Yes
Power Requirement	DC 0 to 24V	DC 0 to 24V
Operating Temperature	-20°C to 70°C	-20°C to 70°C
Operating Humidity	5% to 80%	5% to 80%
Dimensions	84.2 x 93.7 x 20 mm	84.2 x 93.7 x 20 mm
Mifare and Desfire Support	Yes	Yes
8HR10D Format Support	Yes	Yes

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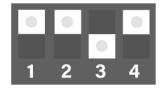
OSDP Configuration



0	Ν		
0	F	F	

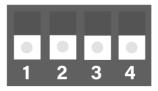
DIP 4	Reader Mode
ON	OSDP
OFF	Wiegand 34

DIP 1	DIP 2	DIP 3	OSDP Address	Door in system
OFF	OFF	OFF	0	Door 1 – Reader A
ON	OFF	OFF	1	Door 1 – Reader B
OFF	ON	OFF	2	Door 2 – Reader A
ON	ON	OFF	3	Door 2 – Reader B
OFF	OFF	ON	4	Door 3 – Reader A
ON	OFF	ON	5	Door 3 – Reader B
OFF	ON	ON	6	Door 4 – Reader A
ON	ON	ON	7	Door 4 – Reader B



Example:

DIP Switch OSDP setting for Door 2 - Reader B Address 3



Example:

DIP Switch Wiegand setting DIP Switches 1-3 do not have a function

Reader Wires Description:

Wire Colour	Name	Function	
Red	DC 9-24V	Power supply (+)	
Black	GND	Power supply (-)	
Green	WD0	Weigand Data 0	
White	WD1	Wiegand Data 1	
Blue	LED	LED indicators on reader	
Yellow	BUZZER	Buzzer on reader	
Brown	RS485	OSDP Data A	
Orange	RS485	OSDP Data B	

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Freund Elektronik A/S, in cooperation with our sister company Freund Elektronika D.O.O. Sarajevo, is developing an IP-Based Intercoms, Audio Systems, Access Control and Smart Home solutions.

As a developer, manufacturer, and reseller, we have been self-improving and perfecting ourselves for over 30 years.

In the industry, we negotiate the most advanced and innovative solutions regarding the building communication. Our daily focus is on the development and user friendliness of our high quality and pleasantly designed products.

As a developer and manufacturer of our own IP-INTEGRA system, we have made a top-of-the-line products for Door Telephony, Public Audio, and Access Control solution.

Our development department, together with our partners, has created elegant and robust door phones, SIP-Centrals, Terminals, IP-Speakers, ACC Controllers, and applications with intelligent features using the most advanced technologies when available, and creating new technologies when they are not while keeping it simple for our customers.