

# User Manual

## ST902-MEK

Date: December 2025

Doc Version: 1.0

Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.



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## About the Manual

This manual introduces the operations of **ST902-MEK**.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

Features and parameters with ★ are not available in all devices.



## Document Conventions




Conventions used in this manual are listed below:

### GUI Conventions

For Device	
Convention	Description
< >	Button or key names for devices. For example, press <OK>.
[ ]	Window names, menu items, data table, and field names are inside square brackets. For example, pop up the [New User] window.
/	Multi-level menus are separated by forwarding slashes. For example, [File/Create/Folder].

### Symbols

Convention	Description
	This represents a note that needs to pay more attention to.
	The general information which helps in performing the operations faster.

	The information which is significant.
	Care taken to avoid danger or mistakes.
	The statement or event that warns of something or that serves as a cautionary example.

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# 1 Overview

ST902-MEK is a high-security RFID reader, that supports 125kHz and 13.56MHz cards. This features tamper-proof alarm functionality and offer one communication mode: Wiegand.

Wiegand communication protocols enable integration with third-party access control devices.

ST902-MEK offers physical keypads and flexible authentication methods. It supports ID cards at 125kHz and IC cards at 13.56MHz, with a verification speed under 0.3 seconds and recognition distance of up to 4cm. It also features a tamper switch, indicators, and an audio buzzer.

## **The ST902-MEK installation is compatible with:**

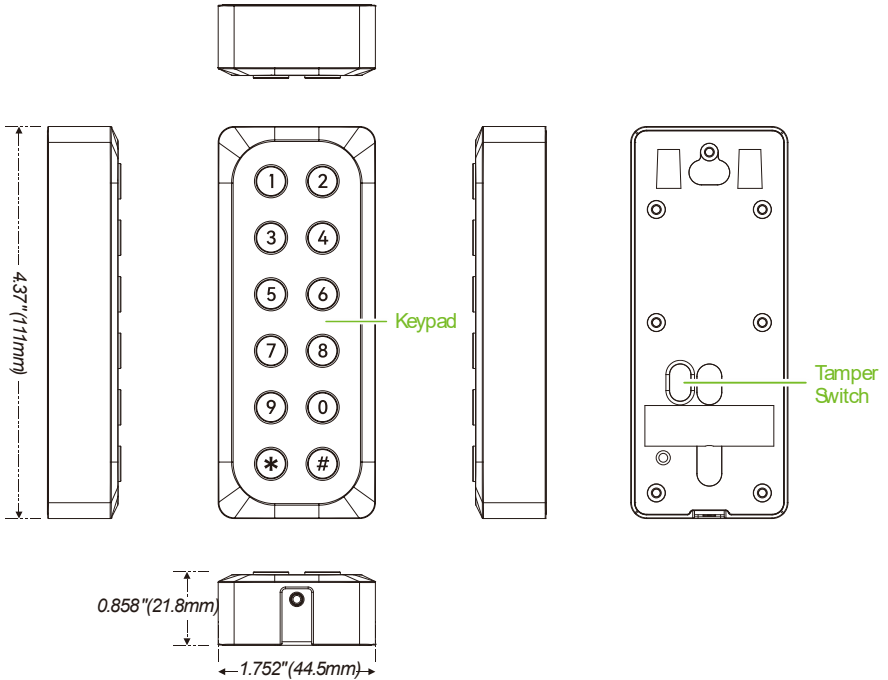
- Mullion mount
- Flat surface mount

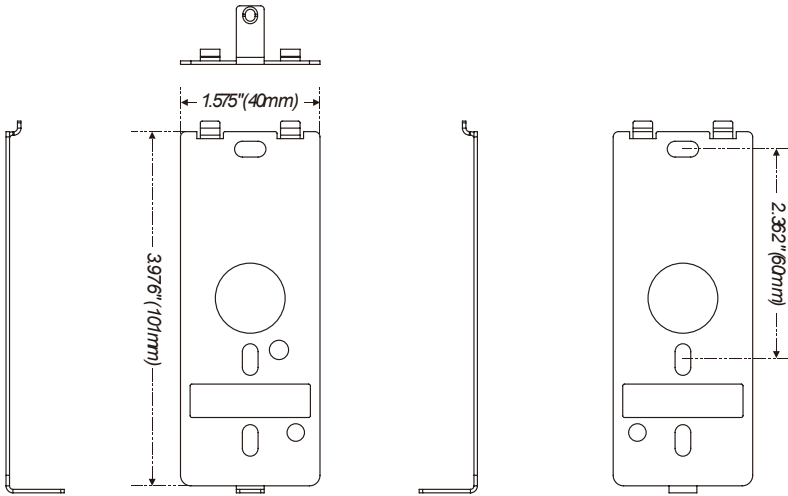
## 1.1 Features

- Support multi-frequency 125kHz ID card and 13.56MHz IC card, including DESFire EV1 / EV2 / EV3 and NTAG.
- Communication: Wiegand  
Tamper detection and alarm.
- Multiple authentication methods: card or card with PIN code.
- Achieved IP65 protection rating with dustproof and waterproof.

## 1.2 Appearance

### ST902-MEK



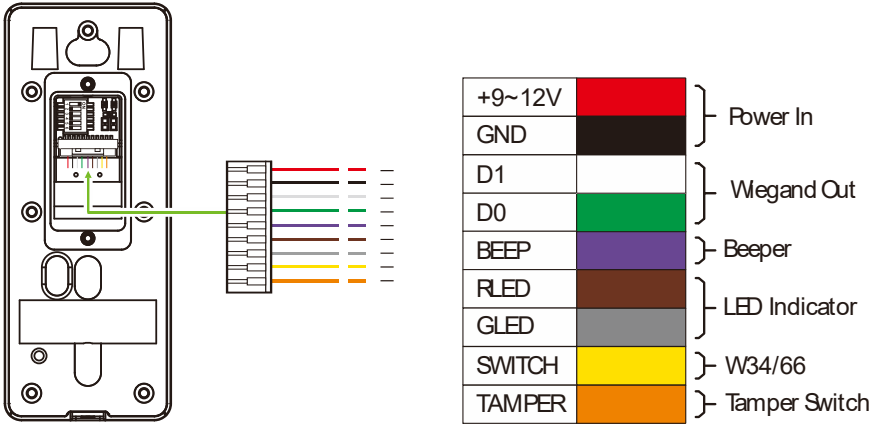


### 1.3 Technical Specifications

Model	ST902-MEK
<b>Hardware</b>	Physical Keypad: 12keys RFID Module: ID & IC Tamper Switch: Support
<b>Authentication Method</b>	Card / Password
<b>Card Type</b>	ID Card@125kHz & IC Card@13.56MHz (Standard)
<b>Verification Speed</b>	<0.3s @ Card
<b>Recognition Distance</b>	<4cm @ Card

<b>Communication</b>	Wiegand output (W34 / 66) Note: Support Wiegand format switching (Default: W34)
<b>Visual Indicator</b>	LED Indicators Power On:Blue = Standby Status: Green = Verification successful Red = Verification failed
<b>Audio Indicator</b>	Buzzer
<b>Tamper Switch</b>	Support
<b>Operating Environment</b>	Indoor/Outdoor
<b>Power Supply</b>	9V~12V DC
<b>Operating Temperature</b>	-20°C to 60°C
<b>Operating Humidity</b>	10%-90% RH (Non-condensing)
<b>Dimensions (L*W*H)</b>	111*44.5*21.8mm
<b>Gross Weight</b>	0.16Kg
<b>Net Weight</b>	0.13Kg
<b>Installation</b>	Compatible with mullion mount or any flat surface mounting
<b>Housing Material</b>	ABS Plastic
<b>Ingress Protection Rating</b>	IP65 (water & dust proof)
<b>Certifications</b>	ISO9001,ISO14001,CE,FCC,RoHS

## 2 Terminal Description



Name	Interface	Color	Description
<b>Power In</b>	+9~12V	Red	+9~12V DC Input <b>Note:</b> <i>Minimum AC adapter:12V, 0.5A, Recommended AC adapter:12V, 1A.</i>
	GND	Black	
<b>Wiegand Out</b>	D1	White	Wiegand Output1
	D0	Green	Wiegand Output0
<b>Beeper</b>	BEEP	Purple	Beep Input

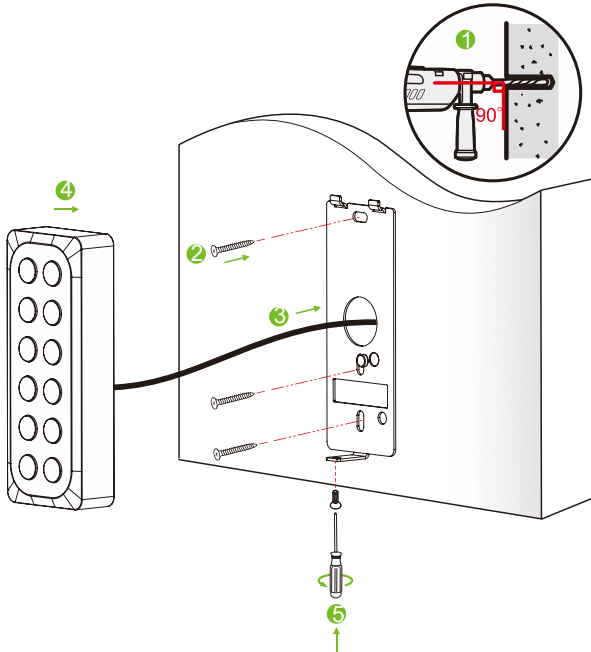
Name	Interface	Color	Description
<b>LED Indicator</b>	RLED	Brown	Red LED Input
	GLED	Grey	Green LED Input
<b>W34/66</b>	SWITCH	Yellow	Used to switch the Wiegand format. The default ungrounded is W34. Grounded to W66.
<b>TAMPER</b>	TAMPER	Orange	Used for the tampering alarm function.  <b>Cancel Alarm:</b> <i>The tamper alarm is deactivated after a magnet is placed for 5 seconds.</i>

## 3 Installation Set-up

The device supports a variety of installation methods, the user can be freely selected according to the actual needs.

### 3.1 Install On The Wall Via The Backplate

1. Drill holes in the wall at suitable locations according to the holes in the backplate.
2. Fix the backplate on the wall with the wall mounting screws.
3. Pass the cable through the wiring hole and then snap the device onto the backplate from top to bottom.
4. Fasten the device to the backplate with a security screw.



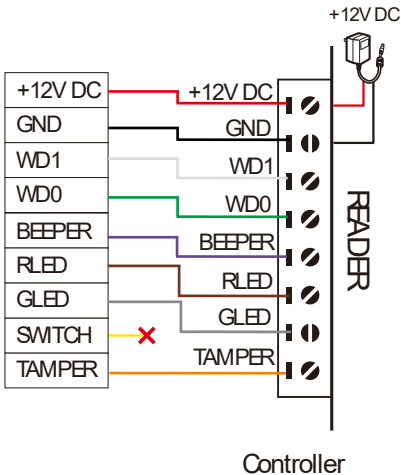
## 4 Communication Methods

The ST902-MEK can communicate with the control panel via Wiegand.

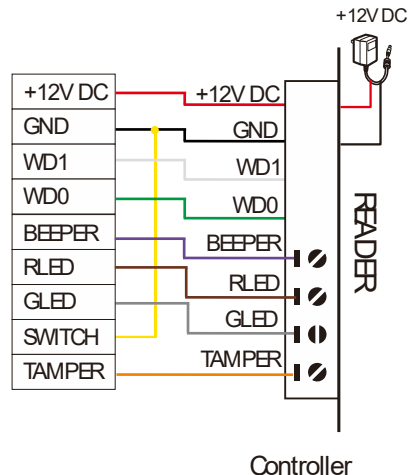
### 4.1 Wiegand Mode

Connect the reader to the controller via Wiegand as follows and then connect the +12V power supply. The controller shown in the diagram is only partially wired. The Wiegand wiring reference is shown below:

1. Wiegand format is W34 (default):



2. Wiegand format is W66:



#### **Notes:**

- The default Wiegand format is W34. It can be switched to W66 when supporting IC cards.
- The format can be switched via the terminal SWITCH. By default, it is W34 when SWITCH is not grounded, and it becomes W66 when SWITCH is grounded.

## 5 Verification Methods

### 5.1 Password Verification

The \* key is the delete key. The # key is the confirmation key.  
The reader supports 1~8-digit password verification.

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