

Sonew IP65

Sonew IP65 RFID Reader Outdoor Wiegand Door Access Control Panel User Manual

Model: IP65

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the Sonew IP65 RFID Reader Outdoor Wiegand Door Access Control Panel. This device is designed for non-contact induction card access management, offering high user capacity, ease of operation, and stable performance, making it suitable for various access control applications in intelligent communities, offices, and industrial settings.

2. SAFETY INFORMATION

- Ensure all wiring is performed by qualified personnel and complies with local electrical codes.
- Disconnect power before performing any installation, wiring, or maintenance procedures.
- Do not expose the device to extreme temperatures or corrosive environments beyond its specified operating range.
- Use only the specified power supply (DC 12V).
- Keep the device away from strong electromagnetic interference.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x Sonew IP65 Access Control Panel
- 10 x Access Cards (Blue Key Fobs)
- 1 x Access Management Card (Orange Key Fob)
- 1 x User Manual



Image: The Sonew IP65 RFID Reader shown alongside ten blue key fobs for user access and one orange key fob designated as the management card.

4. SPECIFICATIONS

Item	Specification
Model	IP65 metal access controller
Verification Method	RFID card / Password / RFID card + Password
User Capacity	1000 users
Card Type	Mifare one or EM card
Working Voltage	DC 12V
Working Current	<100mA (Access Control Unit Only)
Environmental Temperature	-20°C to 60°C

Item	Specification
Card Reading Distance	3-15 CM
Door Opening Time	0-99 seconds (Adjustable)
Wiegand Interface	Wiegand 26 output/input
Access Control Interfaces	Electronic Lock, Door Sensor, Exit Button, Alarm, Doorbell
Material	Metal shell, Zinc alloy
Dimensions (L x W x H)	Approximately 0.39 x 0.39 x 0.39 inches
Weight	Approximately 13.4 ounces (0.84 lbs)



Image: The IP65-rated access control panel is shown installed outdoors, demonstrating its waterproof capabilities in rainy conditions.

5. SETUP AND INSTALLATION

5.1. Mounting the Device

1. Securely fix the mounting bracket to the desired installation surface.
2. Hang the access control unit onto the fixed bracket.

5.2. Wiring Diagram

The access control machine's output signal is a relay signal, capable of driving electric locks, automatic doors, turnstiles, and other equipment. Refer to the diagram below for typical wiring connections. For specific wiring methods or complex setups, please consult a qualified technician or supplier.



Image: Detailed wiring diagram illustrating connections for DC 12V power (Red/Black), electric lock (Brown/Blue/Grey), exit button (Yellow/Push), and Wiegand 26 interface (Green/White).



Image: The rear panel of the access control unit, displaying the terminal block for wiring connections and the cable entry point. The label D8L01833 is visible.

5.3. Setting Unlock Time

The unlock time can be adjusted using the S2 jumper cap on the circuit board:

- Insert the S2 jumper cap into the '1S' terminal for a 1-second relay activation (factory default).
- Insert the S2 jumper cap into the '5S' terminal for a 5-second relay activation.

6. OPERATING INSTRUCTIONS

6.1. Audio-Visual Indicators

Operation Status	Indicator Light	Buzzer
Standby	Red light slow flash	None
Add Card Mode	Green light fast flash	None
Read Invalid Card	Red light slow flash	Beep-beep-beep
Delete Card Mode	Red light fast flash	None

6.2. User Management with Management Card

Each machine is pre-configured with a unique management card at the factory. This card is specific to its machine and not interchangeable.



Image: A user presenting a blue RFID key fob to the Sonew IP65 RFID Reader for access.

6.2.1. Adding User Cards

1. Ensure the device is in standby mode.
2. Swipe the **Management Card**. The green indicator light will flash rapidly.

3. Swipe the **User Card(s)** you wish to add. The device will emit a 'beep' sound after each successful card addition. You can swipe multiple user cards consecutively.
4. Swipe the **Management Card** again to exit the add card mode.

6.2.2. Deleting User Cards

1. Ensure the device is in standby mode.
2. Swipe the **Management Card**. The red indicator light will flash rapidly.
3. Swipe the **User Card(s)** you wish to delete. The device will emit a 'beep' sound after each successful card deletion. You can swipe multiple user cards consecutively.
4. Swipe the **Management Card** again to exit the delete card mode.

6.2.3. Deleting All Users

1. **Power off** the device.
2. Remove the metal back cover. Locate the DEL jumper cap on the circuit board and set it to the '2S' terminal.
3. **Power on** the machine again. It will continuously beep.
4. Place the **Management Card** on the card reading area for approximately 5 seconds. After a long beep, the machine will continuously beep again, indicating that all user data has been cleared.
5. **Power off** the device. Reset the DEL jumper cap back to the '1S' terminal.
6. **Power on** the device. The operation to delete all users is complete.

6.3. Setting/Resetting Management Card

If the management card is lost or needs to be reset, follow these steps:

1. **Power off** the device.
2. Short-circuit the **OPEN** wire (brown) of the 8P terminal block with the **GND** wire (black).
3. **Power on** the device. After three long beeps, the green light will flash rapidly.
4. Swipe any **blank card**. This blank card will now be set as the new Management Card. The machine's red light will flash and the buzzer will continuously beep.
5. **Power off** the device. Disconnect the OPEN and GND wires.
6. **Power on** the device again. The machine will enter normal working state, and the management card setup is complete.

7. ADVANCED FUNCTIONS

7.1. MOD Function

- **MOD Status '1' (Factory Default):** If no operation is performed within 3 minutes while in card adding state, the system automatically exits this state.
- **MOD Status '2':** The system will not automatically exit the card adding state. It must be exited by swiping the Management Card or by powering off and restarting the device.
- When in card adding state (MOD Status '2'), swiping any card (except the management card) will output an unlock signal, and the card will be automatically saved. This function is useful for temporary machine replacements or other special scenarios.

7.2. Data Copy Function

This function allows user data to be exported from one access control machine (Machine A) to another

(Machine B) using the PROG pin (4P). Data on Machine A will not be deleted.

1. Connect the PROG pins of Machine A and Machine B using a data cable.
2. Short-circuit the D0 (green) and GND (black) wires of Machine B.
3. **Power on Machine B** (Machine A does not need to be powered on). At this point, the red lights of both A and B will flash slowly.
4. Place Machine B's **Management Card** on Machine B's card reading area for approximately 5 seconds. Both A and B will emit three long beeps, A's red light will flash rapidly, and B's green light will flash rapidly.
5. After approximately 30 seconds, A will emit one long beep, and B will continuously beep, indicating successful data copy.
6. Disconnect the data cable and the D0 and GND wires from Machine B. The data copy operation is complete.

8. MAINTENANCE

- Regularly clean the surface of the access control panel with a soft, dry cloth. Avoid abrasive cleaners or solvents.
- Inspect wiring connections periodically to ensure they are secure and free from corrosion.
- Ensure the device is protected from direct impact or physical damage.

9. TROUBLESHOOTING

- **Device not powering on:** Check the DC 12V power supply connection and ensure it is providing adequate power.
- **Cards not being read:** Ensure the card type (Mifare one or EM) is compatible. Verify the card reading distance. Clean the card reading area.
- **Door not unlocking:** Check the electric lock wiring. Verify the unlock time setting. Ensure the correct user card or password is being used.
- **Management card lost/not working:** Follow the steps in Section 6.3 to reset or set a new management card.
- **All users deleted accidentally:** User data cannot be recovered once deleted. Re-add users as necessary.

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the product's purchase documentation or contact your vendor. Keep your purchase receipt for warranty claims.