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SECUKEY SUHF-2

Secukey SUHF-2 UHF RFID Long Range Reader User Manual

Model: SUHF-2 | Brand: SECUKEY

1. PRODUCT OVERVIEW

The Secukey SUHF-2 is a high-performance UHF RFID long-range reader designed for various applications, including parking control, logistics, warehouse management, and manufacturing. It features a robust IP65-rated enclosure suitable for outdoor use and supports multiple communication interfaces.



Figure 1: Front view of the SUHF-2 reader, showcasing its compact and square design.



Figure 2: Angled view of the SUHF-2 reader, showing the integrated connection cables for various interfaces.

2. KEY FEATURES

- **Operating Frequency:** 902~928MHz UHF card reading.
- **Reading Distance:** 12 to 15 meters, enabling long-range identification.
- **Recognition Speed:** Capable of recognizing tags at speeds exceeding 120 km/h.
- **Supported Protocols:** ISO-18000-6B and ISO-18000-6C (EPC G2).
- **Interfaces:** Wiegand 26, 34, 42 bits, RS232, RS485, and 10/100M Ethernet for versatile connectivity.
- **Environmental Durability:** IP65 protection rating, suitable for outdoor use, with an operating temperature range of -40°C to 65°C and humidity 10% to 90% RH.

3. SETUP AND INSTALLATION

3.1 Mounting the Reader

The SUHF-2 reader is designed for outdoor installation. Ensure a stable mounting surface that allows for optimal line-of-sight to the RFID tags. The device dimensions are 445 x 445 x 40 mm and it weighs 6 kg.



Figure 3: Side view illustrating the mounting points and cable connections.

3.2 Power Connection

The reader requires a 12V DC power supply. Connect the power cable to the designated input port on the device. Ensure the power source meets the required specifications to prevent damage.

3.3 Interface Connections

Connect the reader to your control system using one of the supported interfaces:

- **Wiegand:** For access control systems (26, 34, or 42 bits).
- **RS232/RS485:** For serial communication with controllers or PCs.
- **Ethernet (10/100M):** For network integration and remote management.



Waterproof, Working
temperature: -40°C ~ +65°C



Support Protocol: ISO18000-6B
or ISO18000-6C(EPC GEN2)
communication interface: RS485,
RS232,Wiegand26,Wiegand34,RJ45



Figure 4: Overview of supported communication interfaces (RS485, RS232, Wiegand, RJ45) and the device's waterproof design.

4. OPERATING INSTRUCTIONS

Once properly installed and powered, the SUHF-2 reader operates by continuously scanning for UHF RFID tags within its reading range. When a compatible tag (ISO 18000-6B or ISO 18000-6C) enters the field, the reader captures its unique identifier and transmits the data via the configured interface to the connected system.

4.1 Typical Applications

- **Parking Control:** Automatic vehicle identification for entry/exit.
- **Logistics and Warehouse Management:** Tracking goods and assets.
- **Manufacturing:** Process automation and inventory tracking.



Used for Parking Control,
Logistics, Warehouse,
Manufacturing management, etc.

Stable reading distance: 12~15m



Figure 5: The SUHF-2 reader in various application scenarios, demonstrating its versatility.

4.2 Software Configuration (if applicable)

For advanced configuration and integration, refer to the comprehensive documentation and SDK available for download. This includes details on setting up network parameters, Wiegand formats, and other operational settings.

Download Documentation: [SUHF-2 Manual and SDK](#)

5. MAINTENANCE

The Secukey SUHF-2 reader is designed for minimal maintenance due to its robust IP65 rating. However, regular checks can ensure optimal performance and longevity.

- **Cleaning:** Periodically clean the exterior of the reader with a soft, damp cloth to remove dust and dirt. Do not use abrasive cleaners or solvents.
- **Cable Inspection:** Inspect all connected cables for any signs of wear, damage, or loose connections. Ensure cable glands are securely tightened to maintain IP65 integrity.
- **Environmental Check:** Verify that the operating environment remains within the specified temperature and humidity ranges (-40°C to 65°C, 10% to 90% RH).

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Reader not powering on.	No power supply; incorrect voltage; faulty cable.	Check 12V DC power connection. Verify power adapter functionality. Inspect power cable for damage.
Unable to read tags.	Tag out of range; incompatible tag protocol; interference; faulty tag.	Ensure tag is within 12-15m range. Verify tag protocol (ISO 18000-6B/6C). Check for metallic obstructions. Try a different tag.
Data not transmitting to system.	Incorrect interface configuration; loose cable connection; system software issue.	Verify Wiegand, RS232/485, or Ethernet settings. Check cable integrity. Consult your system's software manual.
Intermittent reading.	Environmental interference; reader orientation; tag orientation.	Minimize sources of electromagnetic interference. Adjust reader and tag orientation for optimal signal.

7. SPECIFICATIONS

Feature	Detail
Brand	SECUKEY
Model Number	SUHF-2
Operating Frequency	902~928MHz
Reading Distance	12 - 15 meters
Recognition Speed	> 120 km/h
Supported Protocols	ISO-18000-6B, ISO-18000-6C (EPC G2)
Interfaces	Wiegand 26/34/42 bits, RS232, RS485, 10/100M Ethernet
Operating Temperature	-40°C ~ 65°C
Operating Humidity	10% ~ 90% RH
Protection Rating	IP65
Dimensions (L x W x H)	445 x 445 x 40 mm
Weight	6 kg
Power Supply	12 V DC

8. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the official Secukey product warranty policy provided at the time of purchase or on the manufacturer's website. For technical support, software updates, and additional documentation, please utilize the resources below:

- **Official Documentation & SDK:** [Download Manual and SDK](#)
- **Manufacturer:** SUHF-2 (as per product specifications)
- **ASIN:** B0CZF8LK1S

Please note that information regarding spare parts availability and guaranteed software updates is not explicitly provided in the product details. For the most current information, it is recommended to contact Secukey customer support directly.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

