Milesight SCT01 Sensor Configuration Tool User Guide

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- Safety Precautions
  Mile sight will not shoulder responsibility for any loss or damage resulting front followingtheinstructions of this operating guide.
- The device must not be disassembled or remodeled in any way.
- Do not remove the battery of the device.
- Do not place the device and its accessories where the temperature or humidityisbelow/above the operating range.
- Do not place the device close to objects with naked flames, otherwise it will explode.
- The device must never be subjected to drops, shocks or impacts.

Revision History

Date	Doc Version	Description
Oct. 15, 2024	V 1.0	V 1.0 Initial version

Contents

Product Introduction

Overview

Milesight Sensor Configuration Tool is a portable configuration tool device for NFCconfigurations of Milesight sensors. As a professional NFC reading and writing tool, SCT01features a straightforward panel with a large NFC area and clearly stated buttons, makingiteasyfor users without any technical background to operate the configurations smoothly on the spot.
With a built-in battery and Type-C port, it can work for 6 hours and supports chargingviaaType-C power bank, allowing users to easily bring the device everywhere.

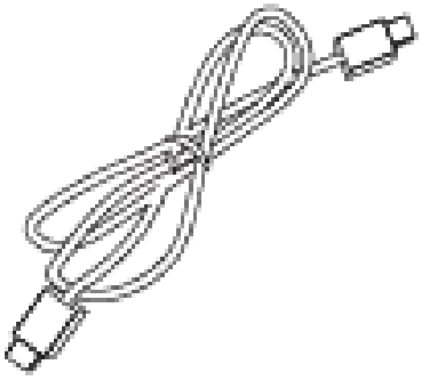
Features

- Compatible with all Mile sight devices with NFC feature
- Easy to read and write to devices with a large NFC area
- Equips with a buzzer and rich indicators to know the device status and configuration resultsvisibly
- Simple operational panel with clear buttons designed for easy configurations even for non-technical users
- Built-in Bluetooth for easy tool configuration and template import, logs export, etc.
- Supports to store up to 50 configuration files and automatically adapt the configurationfilesto different models when assigning the configurations
- Supports to store 1 firmware file to upgrade devices in bulk
- With a built-in rechargeable lithium battery that works for 6 hours
- Support real-time data backup and charge through a USB type-C port

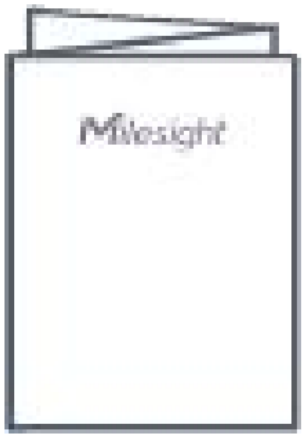
Hardware Introduction

Packing List

1 × SCT01 Device



1 × Type-C Cable

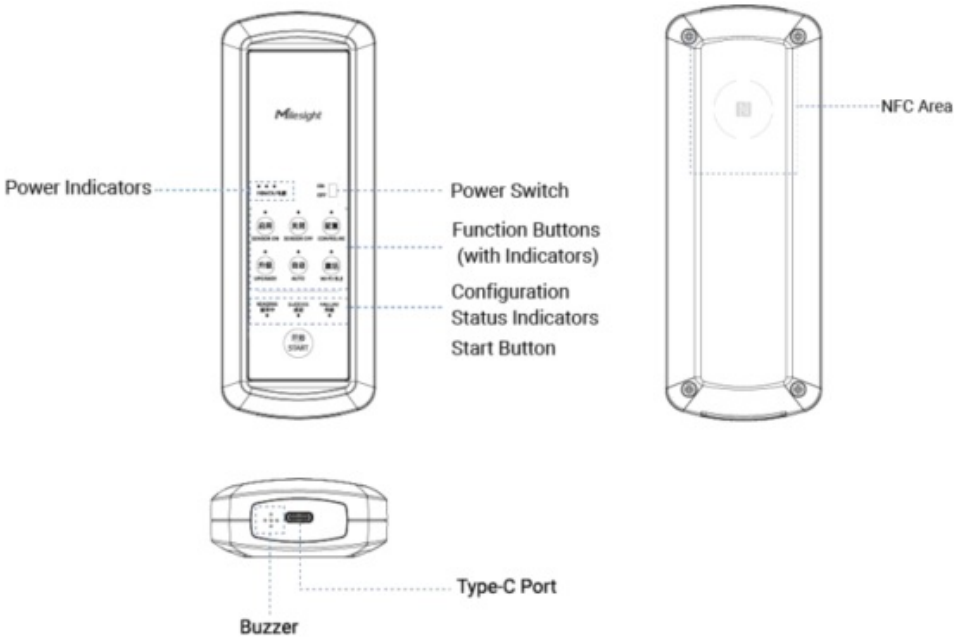


1 × Quick Guide

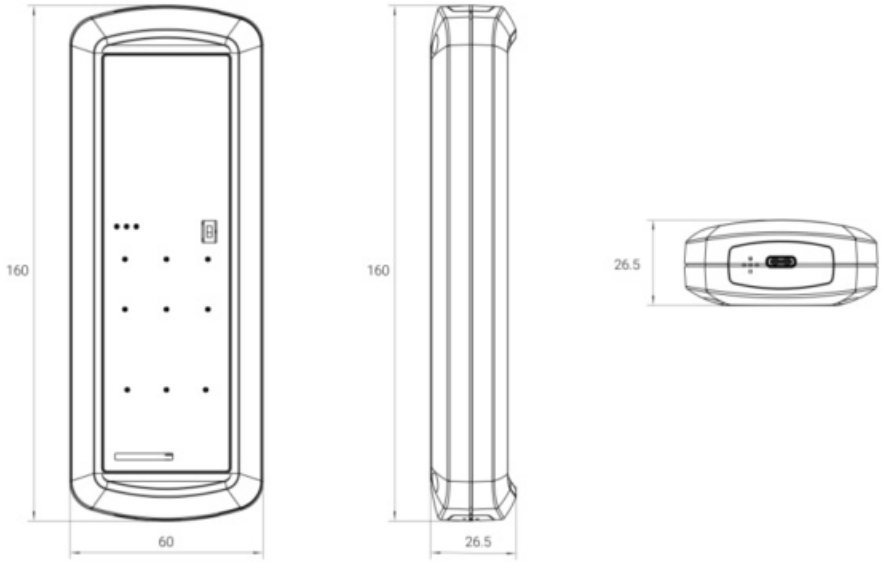
1 × Warranty Card

If any of the above items is missing or damaged, please contact your sales representative.

Hardware Overview



Dimensions (mm)



LED Indicators

LED	Indication	Description	Indication Status
Power	Battery Status	Battery Level: >70%	3 indicators light up for3s afte r Power On

		Battery Level: 30~70%	2 indicators light up for3s afte r Power On
		Battery Level: 20~30%	1 indicator lights up for3s afte r Power On
		Battery Level: 0~20%	3 indicators blink forevery 5s
	Charge	Charging via Type-C port	1 indicator blinks
		End charging	Off
Function	Sensor On/Senso r Off/Configure/U pgrade/Auto	Press the button to select configuration mod e.	Off → On
	Wi-Fi/BLE	Press the button to allow Bluetooth connection.	Blinks ≤ 40s
		Connect device to smartphone successfully.	Blinks → Static On
Configure tin Status	Reading	Press START button	Blinks
		Recognize the NFC area of sensor and start writing	Blinks → Static On
	Success	Write successfully	Light on ≤ 5s
	Failure	Failed to write	Light on ≤ 30s

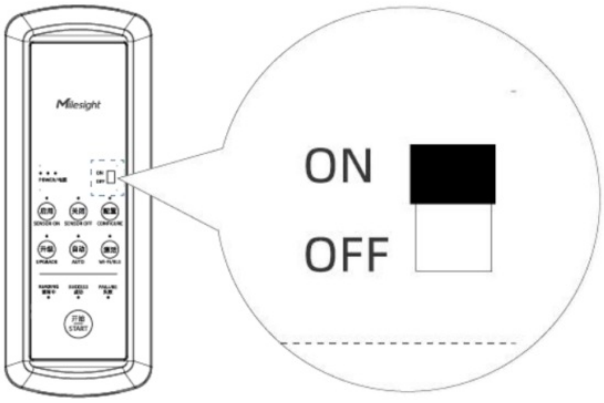
Note: The device will go to sleep mode and light off all indicators if there is not any operationwithin 30s and USB is not connected to any devices or power. Users can press any uttontoexit the sleep mode.

Operation Guide

Sensor Power On/Off

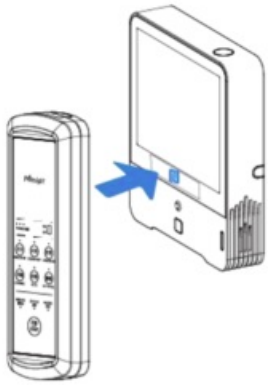
Applicable Models: NFC supported and support to power on/off via Tool Box App. Examples:
AM300 series, EM300 series, EM500 series, etc.

1. Turn on sensor configuration tool.



2. Press SENSOR ON or SENSOR OFF button.

3. Click START button and ensure the READING indicator blinks, attach the NFC area of SCT01device to target sensor to operate the power on/off operation. When the SUCCESS or FAILURE indicator lights up and the buzzer beeps, the operation is complete.



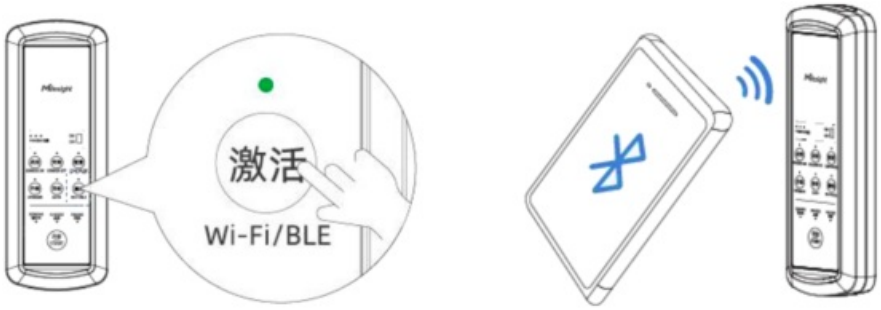
Note:

1. When the READING indicator changes from blinks to static on, it means SCT01 is writingthedevice and please keep both devices still to avoid writing failure.
2. The default configuration password for Mile sight sensor is 123456. If the sensor uses different password, please connect Tool Box App to SCT01 to write the sensor configurationpassword before performing any operation.

Sensor Configuration

Add Templates to SCT01 Device

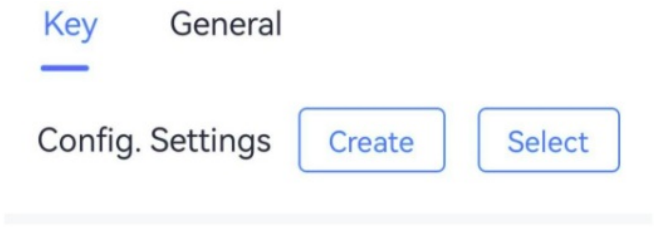
1. Download and install Milesight ToolBox App from Google Play or App Store.
2. Enable Bluetooth and location feature on the smartphone, then open Milesight ToolBox App.
3. Press the Wi-Fi/BLE button of SCT01 device and ensure the indicator blinks.
4. Select the reading mode of ToolBox App as Bluetooth to scan the devices and select the target device to connect. The default Bluetooth name is SCT01-XXXXXX (5th to 11st of device SN), the default Bluetooth pin code is **521125** and the default device password is ***123456.***



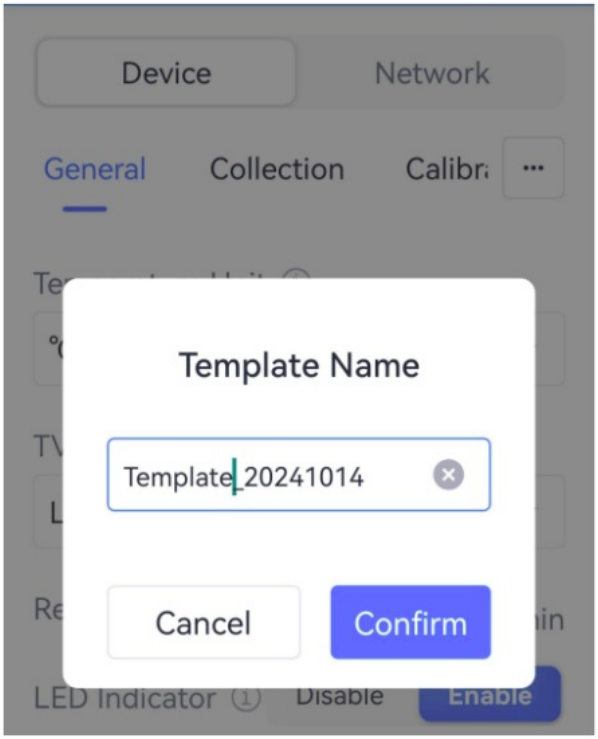
5. Basic information and settings of devices will be shown on Tool Box App if it’s connected successfully. Tool Box App provides two methods to save the templates to SCT01 devices.

Method 1:

1. Go to Settings page to click Create button to create a new template.
2. Select the reading mode as NFC, attach NFC area of smartphone to target sensor to read the configuration.
   Note: Tool Box App also supports to read the configuration via Bluetooth if the sensor supports Bluetooth feature.



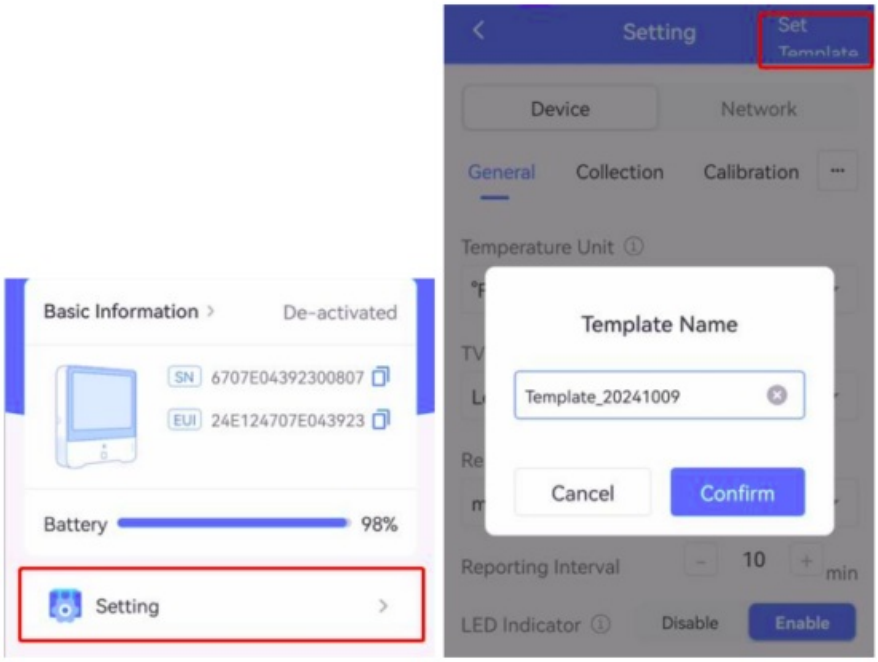
3. Adjust the configuration of sensor and click **Save** to save it as a template.



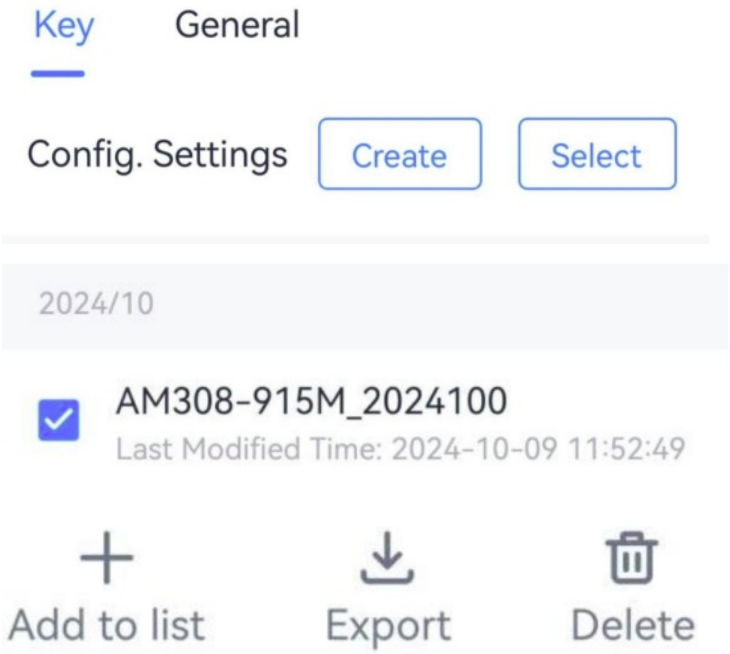
Method 2:

1. Before connecting to SCT01 device, select the reading mode of ToolBox App as NFC, thenattach NFC area of smartphone to target sensor to read the configuration. Note: ToolBox App also supports to read the configuration via Bluetooth if the sensor supportsBluetooth feature.

2. Go to **Settings** page to configure the sensor settings and save the template to ToolBox App.



3. Switch the reading mode of Tool Box App as Bluetooth, connect the Tool Box App toSCT01device.
4. Go to **Settings** page to click **Select** button to select the new template, then click **Add to list.**



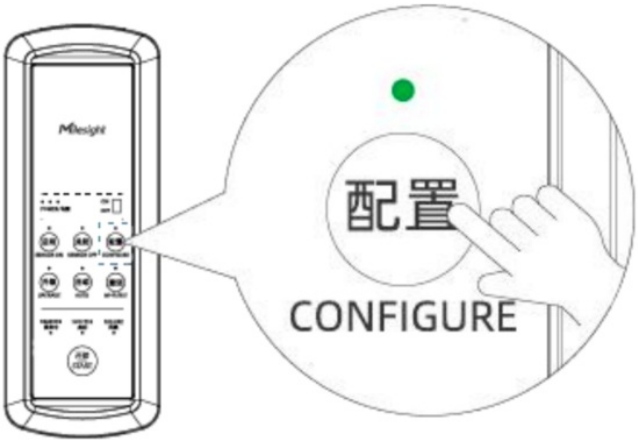
5. Click **Write** to save the template files to SCT01 device.

Note:

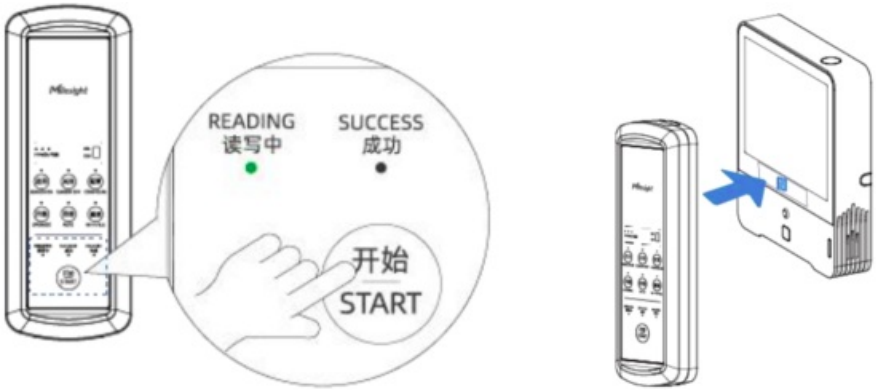
1. The Wi-Fi/BLE indicator will light off if the smartphone does not connect to SCT01 device within 40s. Please press the button twice to make it blinks again.
2. The Bluetooth connection will be terminated if there's no data interaction within 5 minutes.
3. When SCT01 starts writing to sensors, the Bluetooth connection will be terminated.
4. The device can connect to only one phone via Bluetooth. For example, if the device is connected to smart phone A via Bluetooth, the connection will be terminated when it connectstosmartphoneB.

Write Templates to Sensors

1. Press CONFIGURE button.

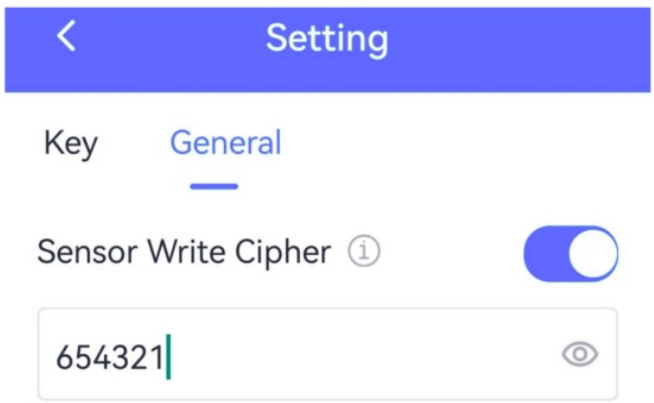


2. Click START button and ensure the READING indicator blinks, attach the NFC area of SCT01device to target sensor to write the configuration. When the SUCCESS or FAILURE indicator lights up and the buzzer beeps, the operation is complete.



Note:

1. The SCT01 device will apply the templates to different models automatically.
2. If SCT01 device saves multiple templates of the same model, it will only write the templatewhich is latest saved.
3. When the READING indicator changes from blinks to static on, it means SCT01 is writingthedevice and please keep both devices still to avoid writing failure.
4. The default configuration password for Milesight sensor is 123456. If the sensor uses adifferent password, please connect ToolBox App to SCT01 to write the sensor configurationpassword before performing any operation.

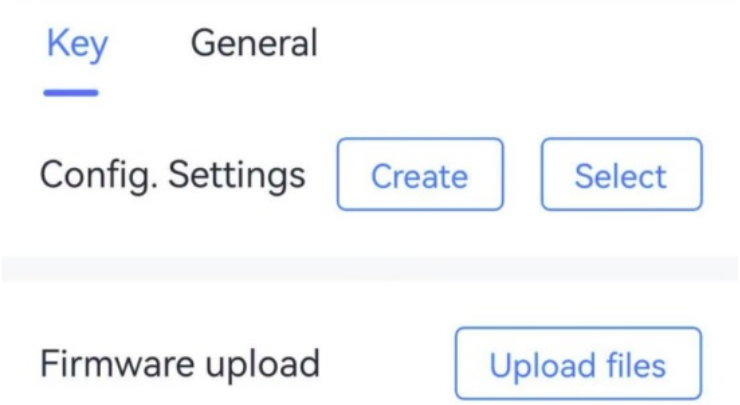


Sensor Upgrade

Add Firmware to SCT01 Device

1. Download and install **Milesight Tool Box** App from Google Play or App Store.
2. Enable Bluetooth and location features on the smartphone, then open Milesight Tool Box App.
3. Press the Wi-Fi/BLE button of SCT01 device and ensure the indicator blinks.
4. Select the reading mode of ToolBox App as Bluetooth to scan the devices and select thetarget device to connect. The default Bluetooth name is SCT01-XXXXXX (5th to 11st of deviceSN), the default Bluetooth pin code is **521125** and the default device password is ***123456.***

5. Basic information and settings of devices will be shown on ToolBox App if it's connectedsuccessfully. Go to Settings page to click Upload files button to select and upload firmwarefrom smartphone. Every SCT01 device can only save one firmware file.



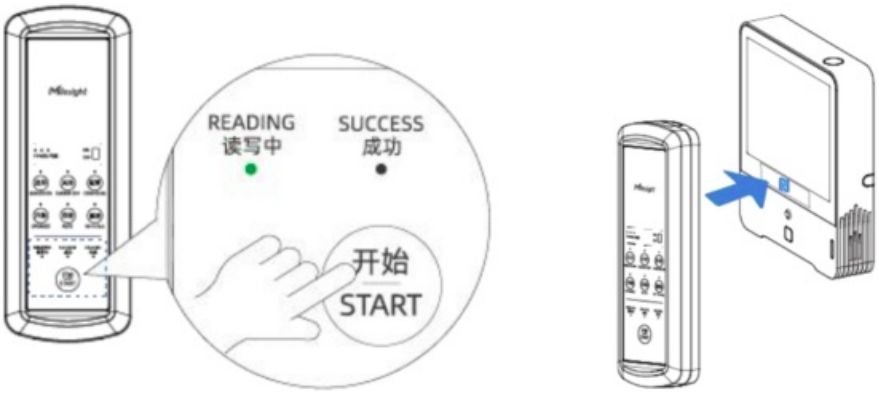
6. Click Write to save the firmware to SCT01 device.

Note:

1. The Wi-Fi/BLE indicator will light off if the smartphone does not connect to SCT01 device within 40s. Please press the button twice to make it blinks again.
2. When SCT01 starts writing to sensors, the Bluetooth connection will be terminated.
3. The Bluetooth connection will be terminated if there's no data interaction within 5 minutes.
4. The device can connect to only one phone via Bluetooth. For example, if the device is connected to smart phone A via Bluetooth, the connection will be terminated when it connectstosmartphoneB B.

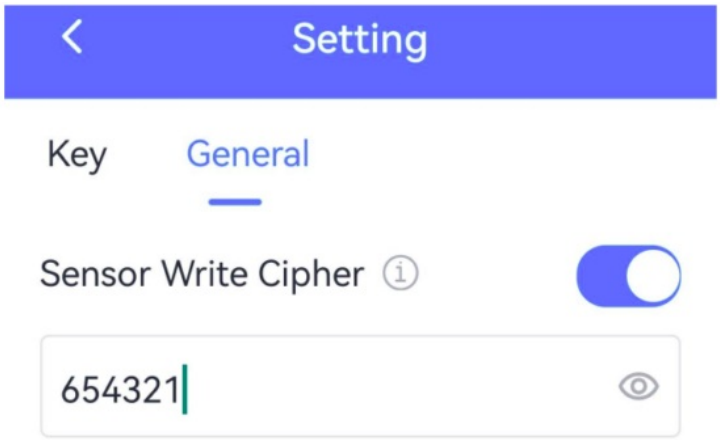
Write Firmware to Sensors

1. Press UPGRADE button.
2. Click START button and ensure the READING indicator blinks, attach the NFC area of SCT01device to target sensor to write the firmware. When the SUCCESS or FAILURE indicator lightsupand the buzzer beeps, the operation is complete.



Note:

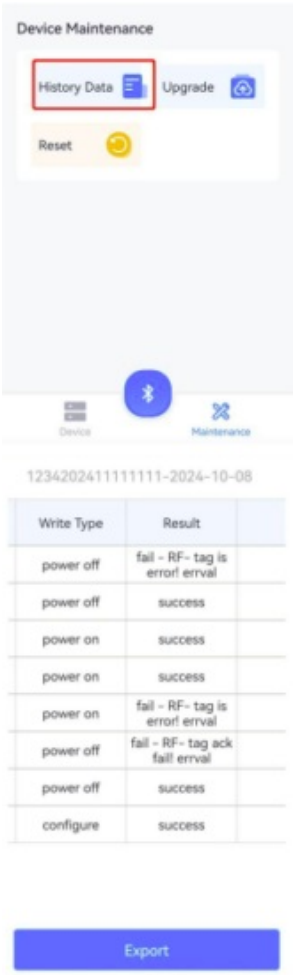
1. The SCT01 device will apply the templates to different models automatically.
2. When the READING indicator changes from blinks to static on, it means SCT01 is upgradingand please keep both devices still to avoid writing failure.
3. The default configuration password for Milesight sensor is 123456. If the sensor usesadifferent password, please connect ToolBox App to SCT01 to write the sensor configurationpassword before performing any operation.



Maintenance

Historical Log

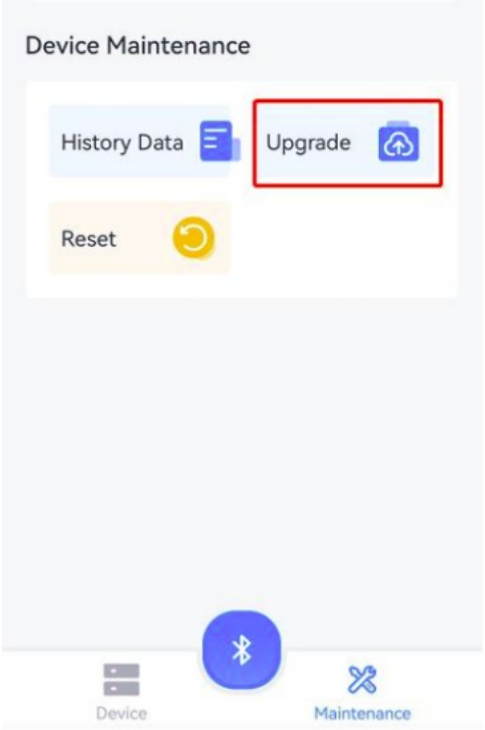
SCT01 supports storing 1000 data records locally and exports data via ToolBox App. GotoMaintenance page of ToolBox App, and tap History Data to export the historical logsof operations.



Upgrade

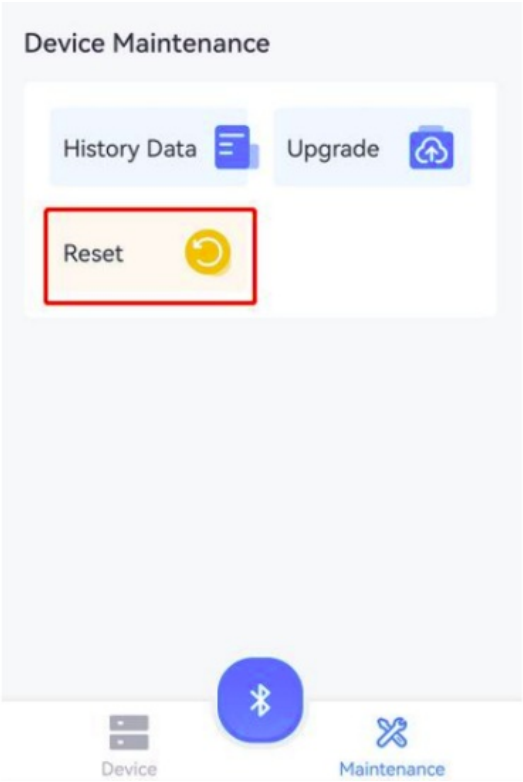
1. Download firmware from the Milesight website to your smartphone.
2. Go to Maintenance page of ToolBox App, and tap Upgrade to upload firmware and upgradethe device.

Note: Operation on ToolBox is not supported during the upgrade.



Reset

Go to **Maintenance** page to tap **Reset** to reset SCT01 device to factory settings.



Troubleshooting

If there is any configuration problem, please refer to below checklist for quick troubleshooting. If not solved, please contact Milesight technical support: iot.support@milesight.com.

1. Ensure the sensor is not the plug and play, this type of sensors do not support SENSOR ON/OFF operation.
2. Ensure the templates saved in SCT01 matches your product model, hardware version, firmware version and LoRaWAN® frequencies.
3. Ensure the firmware matches your product model and hardware version.
4. Ensure the NFC locations of both devices are attached correctly.
5. When READING indicator is static on, do not move both devices.
6. Check if sensor configuration password is default password. If not, enable Sensor Write Cipher of SCT01 device to configure the sensor password.
7. Ensure SCT01 device battery level is over 20%. Otherwise, it may cause the configuration failure.

Documents / Resources

	**Milesight SCT01 Sensor Configuration Tool** [pdf] User Guide SCT01 Sensor Configuration Tool, SCT01, Sensor Configuration Tool, Configuration Tool

References

- **Support : IoT Support**
- **User Manual**