

Uink



**VE133/VB133 E-paper Display
User Manual**

 2026 V1.1

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1. Product Overview

1.1 Product Introduction

The VE133/VB133 is an electronic ink display device developed by uink, suitable for applications such as meeting room signboards, hospital bedside cards, and office signage. The device manages and distributes content through uink's RMS cloud rendering platform, supporting two content modes: template rendering and direct image rendering.

1.2 Model Comparison

The VE133/VB133 series comprises six models, categorized by communication method and battery type combination:

model	Display Color	communication mode	Near-field configuration	Battery Type	Network Gateway
VE133A	Full color	Wi-Fi + BLE + NFC	BLE / NFC	rechargeable battery	✗
VE133B	Full color	Wi-Fi + LoRa + BLE + NFC	BLE / NFC	rechargeable battery	☑
VE133C	Full color	Wi-Fi + Cat.1 + BLE + NFC	BLE / NFC	rechargeable battery	✗
VE133D	Full color	Wi-Fi + BLE + NFC	BLE / NFC	Disposable battery	✗
VE133E	Full color	Wi-Fi + LoRa + BLE + NFC	BLE / NFC	Disposable battery	☑
VE133F	Full color	Wi-Fi + Cat.1 + BLE + NFC	BLE / NFC	Disposable battery	✗
VB133A	Monochrome	Wi-Fi + BLE + NFC	BLE / NFC	rechargeable battery	✗
VB133B	Monochrome	Wi-Fi + LoRa + BLE + NFC	BLE / NFC	rechargeable battery	☑

VB133C	Monochrome	Wi-Fi + Cat.1 + BLE + NFC	BLE / NFC	rechargeable battery	✗
VB133D	Monochrome	Wi-Fi + BLE + NFC	BLE / NFC	Disposable battery	✗
VB133E	Monochrome	Wi-Fi + LoRa + BLE + NFC	BLE / NFC	Disposable battery	☑
VB133F	Monochrome	Wi-Fi + Cat.1 + BLE + NFC	BLE / NFC	Disposable battery	✗

- Rechargeable battery model (A/B/C): Supports Type-C charging, suitable for scenarios with power supply or requiring long-term repeated use
- Disposable battery model (D/E/F): The battery needs to be replaced when depleted, suitable for remote locations without power supply.
- LoRa model (B/E): Requires a LoRa gateway and is suitable for large-scale deployments or scenarios requiring high signal coverage.
- Cat.1 model (C/F): Communicates via cellular networks, suitable for outdoor or mobile scenarios without Wi-Fi coverage

1.3 Main Features

- The e-paper display retains content after power loss.
- Ultra-low power consumption, supports rechargeable or disposable batteries for power supply
- The entire series comes standard with BLE + NFC near-field communication capabilities.
- Manage content remotely via the uink RMS platform or API
- Support OTA remote firmware updates

2. Packaging List

After opening the box, please confirm that the following accessories are complete:

order number	Accessory Name	quantity	explain
1	Electronic ink display host	1	Comes with a built-in battery (rechargeable or disposable, depending on the model)
2	Type-C cable	1	For power supply or charging (rechargeable models A/B/C)
3	Install the backplate	1	For installation on walls/front facades
4	Screw installation kit	1 set	Including expansion screws, self-tapping screws, and anti-theft screws
5	3M Double-Sided Adhesive	2 pieces	Non-drilling safety equipment options
6	Quality Assurance Card	1	Paper Card
7	Glass installation bracket and adhesive backing	1 set	Alternative for glass/metal surface installation

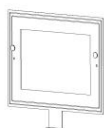
If there are any missing or damaged parts, please contact the supplier for replacement.

For the complete accessory list, please refer to: Accessories List

PackingList



1 × VE133(A) Series Device



1 × Mounting Bracket



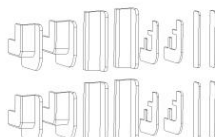
2 × 3M Double-Sided Tape



4 × Wall Mounting Kits



4 × Theft-Detering Screw
and Locking device screw



2X Glass mounting bracket and 3M tape



1 × Warranty Card

VE133A/B/C Only



1 × Type-C Cable

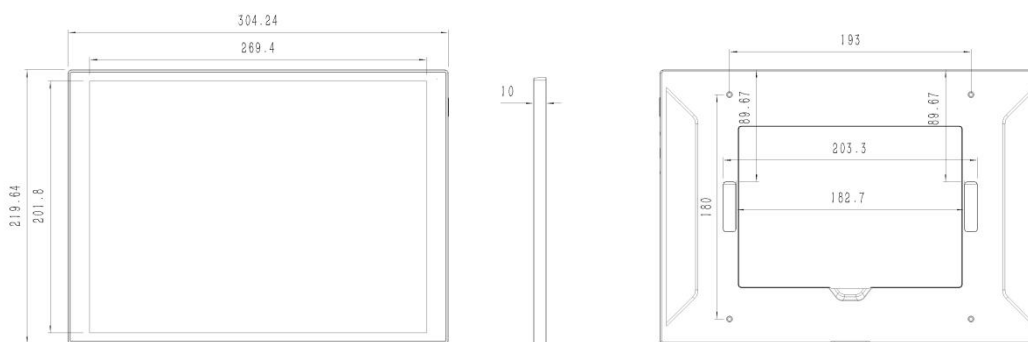
3. Product Appearance and Dimensions

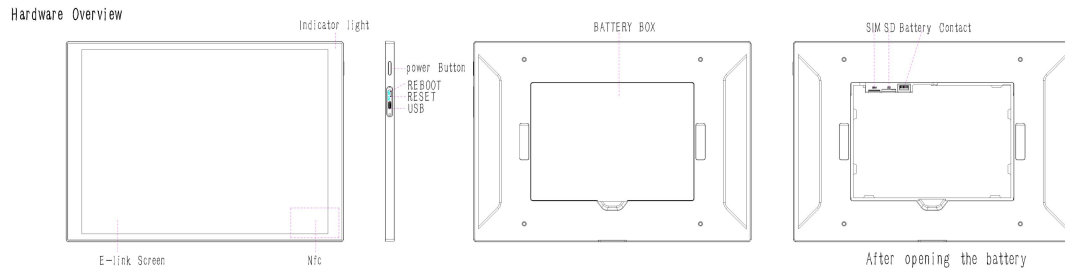
3.1 Appearance Description

- Front: Electronic ink display area
- Back: Install the back panel buckle and battery compartment
- Side: Power on/off button, Type-C charging power port, restart button, reset button

Kirby: For detailed dimension drawings, please refer to: VE133 Dimension-related

Kirby: For details on the hardware structure, please refer to: VE133 Hardware Specifications





4. Indicator Light and Button Instructions

The VE133 features one three-color LED indicator (red/yellow/green) and one power button for displaying the device status and performing basic operations.

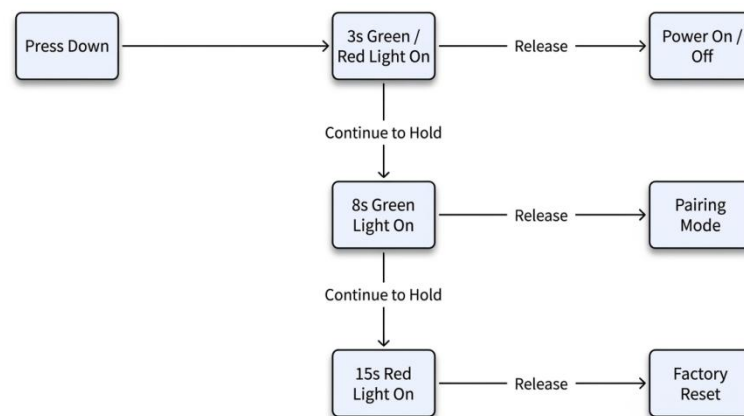
4.1 Key Operations

The device has only one physical button (power button), which triggers different functions depending on the pressing method:

operate	way	function	Light Effect Feedback
Short press	Release the button within 1 second after pressing	Check device status	The Green light on for 1 second = Connected, communication normal
			The yellow light is on for 1 second = Not connected to the network
			The Red light on for 1 second = Fault
double click	Press twice in a row	Manually refresh the screen content	The green light flashes once
Hold down for 3 seconds	Hold down until the green or red light turns on, then release.	starting up	The green light stays on for 3 seconds before turning off
		shut down	The red light flashes twice before turning off
Hold down for 8 seconds	Hold down until the green light turns on, then release.	Enter Bluetooth pairing mode	The green light starts flashing slowly (Bluetooth broadcasting)

Hold down for 15 seconds	Hold down until the red light comes on, then release.	factory data reset	The lights flash alternately in red and green; they turn off after resetting
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During prolonged pressing, the indicator light will light up in stages to guide the user to release at the right moment.



4.2 Indicator Light Description

Color and Flash Parameters

parameter	explain
Available colors	Red, Yellow, Green
quick flashing	On: 500 ms, Off: 500 ms
Slow Flash	Turn on: 2000 ms; Turn off: 2000 ms

Color Semantic

pigment	meaning
green	Normal/Successful/Normal Communication
yellow	Transition state / System operation in progress
red	Power-related / Alert / Fault

Light Effect Overview Table

Power Supply Category

Light Effect	meaning	duration
]Green light on for 3 seconds	Start successful	Extinguished after 3 seconds
Red light flashing 2 times	Shut down successful	Vanishes immediately after flashing
The red light is always on	Charging in progress	During charging, it continues.
The green light is always on	full of electricity	Turn off the power supply to extinguish it.

Distribution Network Category

Light Effect	meaning	duration
The green light is flashing slowly	In Bluetooth broadcasting, wait for the APP to connect	Auto-exit after 5 minutes

Status query (triggered by short press)

Light Effect	meaning	duration
Green light on for 1 second	The device is connected with normal communication.	Turn off after 1 second
Yellow light on for 1 second	Unpaired network (not activated)	Turn off after 1 second
Red light on for 1 second	Device abnormal/offline	Turn off after 1 second

System Operation Category

Light Effect	meaning	duration
Red and green alternating flashes	Restoring factory settings	The light turns off after the reset is complete.

Communication Category

Light Effect	meaning	duration
The green light flashes once	Communication successful	Vanishes immediately after flashing

5. Power Supply and Batteries

5.1 Power Supply Method

power supply mode	Applicable Model	explain
Type-C continuous power supply	Full Series	Recommended for long-term use: the rechargeable model also charges the battery.
rechargeable battery	VE133A / VE133B / VE133C	Built-in lithium battery, supports Type-C charging, and is reusable
Disposable battery	VE133D / VE133E / VE133F	The battery needs to be replaced when depleted; it cannot be recharged.

5.2 Battery Replacement (Rechargeable Battery Models D/E/F)

1. Remove the device from the mounting backplate
2. Remove the battery case
3. Insert the new battery case, confirm the buckle is in place, and the device will turn on automatically.

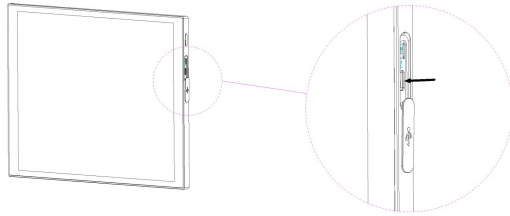
Kirby: For a schematic diagram of power supply and battery replacement, please refer to: Power Supply and Battery Replacement

Power Supply And Battery Replacement

All machines are powered by batteries, which are divided into rechargeable and non-rechargeable types. When the machine's battery runs out of power:

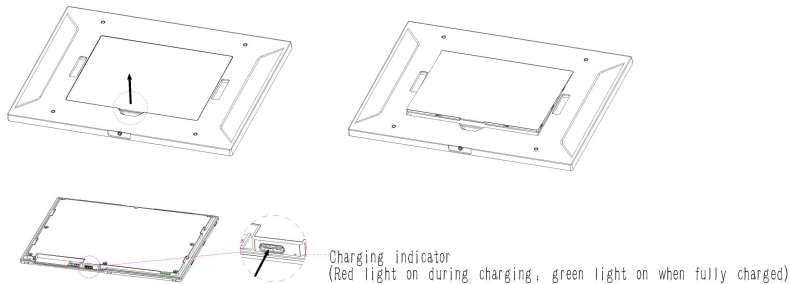
1. Powered by rechargeable battery (VE133A/B/C)

Method 1: Unscrew the silicone plug and charge directly through the USB port on the device



Method2: Open the battery box and charge it directly through the USB port on the battery box.

1) Insert finger into the grip notch and lift upward to remove the battery box.



5.3 Charging Instructions (Rechargeable Battery Models A/B/C)

1. Connect the device using the included Type-C cable / Remove the battery and charge it separately. The green light will turn on when the battery is fully charged.
2. The device operates normally during charging without affecting display or communication.
3. It is recommended to charge the device promptly after receiving a low battery warning to prevent complete battery depletion.

The device will experience a brief power outage when the battery is replaced or charging is disconnected, but the screen content remains intact (due to the e-ink display's characteristics).

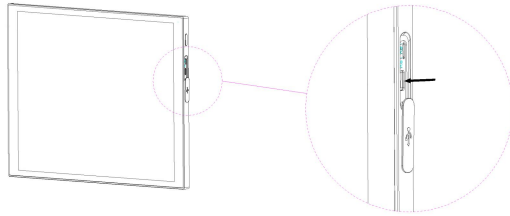
The device will automatically reconnect to the platform upon power restoration.

Power Supply And Battery Replacement

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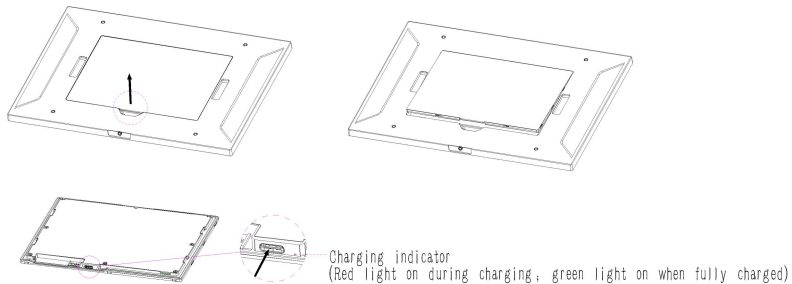
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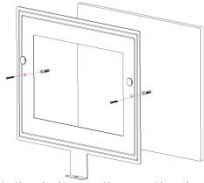


6. Equipment Installation

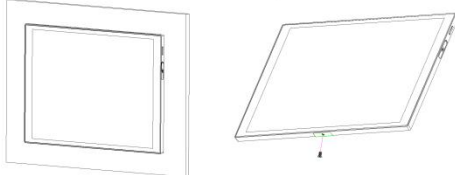
6.1 Installation Method 1: Screw fixation (Recommended)

For the installation diagram, please refer to: Device Installation Instructions 1

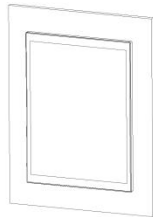
Installation
 1. Installed By Mounting Bracket
 1) Mounting Bracket fixed By screws
 ①: Fix the wall plugs into the wall, then fix the mounting bracket to the wall plugs with screws



②: Put the device on the mounting bracket, then fix the bottom of the device to the bracket with a fixing screw



We can change the display orientation of the device by reversing the mounting direction of the wall bracket.



1. Select the installation location and mark the screw holes for the back panel with a pencil
2. Use a power drill to drill a hole and insert the expansion screw.
3. Use screws to secure the back panel to the wall/front facade.
4. Align the VE133 host with the back panel latch, slide it downward to secure, and use the anti-theft screws inside the mounting screws to lock the device's bottom (or side) to the mounting back panel.
5. For external power supply, connect the Type-C cable and secure it with wiring.

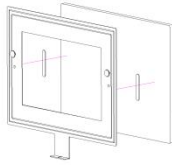
6.2 Installation Method Two: Application of 3M double-sided adhesive tape

For the installation diagram, please refer to: Device Installation Instructions 2

2) Mounting Bracket fixed By 3M tape

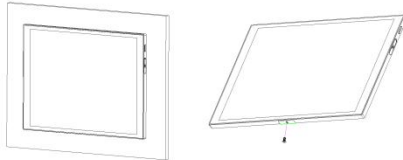
NOTE: The bonding surface must be free from oil, grease and dust.

① Paste 3M tape to the back of the mounting bracket, then tear the other side and place it on a flat surface.

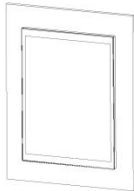


② Press firmly on the adhesive backing for more than 10 seconds, then let it sit undisturbed for 24 hours to fully activate the adhesive properties.

③ Put the device on the mounting bracket, then fix the bottom of the device to the bracket with a fixing screw



We can change the display orientation of the device by reversing the mounting direction of the wall bracket.



1. Clean the surface thoroughly to ensure it is free from interference, dust, and oil stains.
2. Apply 3M double-sided tape to the back of the back panel.
3. Remove the adhesive protective film, press the back panel into the installation position, and maintain firm pressure for 10 seconds to activate the adhesive.
4. After leaving it undisturbed for 24 hours, align the gourd-shaped hole on the machine's back with the mounting backplate buckle, then slide it downward. Use the anti-theft screw inside the mounting screw to secure the device's bottom (or side) to the mounting backplate.
5. For external power supply, connect the Type-C cable.

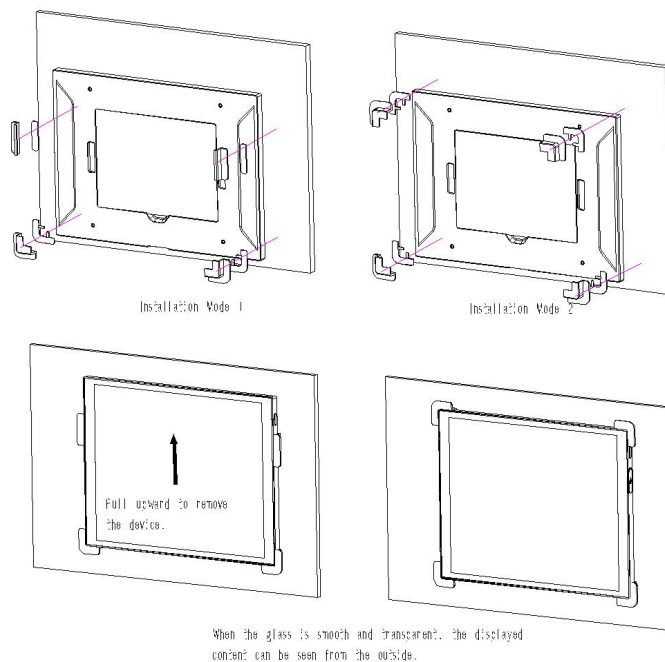
6.3 Installation Method Three: Smooth Surface Installation

For the installation diagram, please refer to: Device Installation Instructions 3

2. Installed By Glass mounting bracket) Attach the glass mounting bracket to the 3V face.

1) Slide the device onto the mounting bracket.

2) Press firmly on the adhesive backing for more than 10 seconds, then let it sit undisturbed for 24 hours to fully activate the adhesive properties.



3. Other installation

Suitable for metal or glass facades:

1. Clean the surface and ensure it is dry, dust-free, and free of oil stains.
2. Glue the double-sided tape to the mounting bracket (or first attach one bracket to the metal or glass door, then position the remaining brackets accordingly).
2. Fit the device and the two bottom mounting brackets tightly onto the smooth surface, then press the brackets firmly (for at least 10 seconds) to fully activate the adhesive bond.
3. Remove the device, allow the bottom hanger to rest for 24 hours, then reinsert the device into the hanger and complete the remaining hangers.

7. Equipment Distribution Network and Activation

7.1 Preparation Work

- Download and install the uink App (iOS/Android)
- Ensure Bluetooth is enabled on your phone
- Ensure the Wi-Fi network is available (all models support Wi-Fi)
- If LoRa communication (VE133B/VE133E) is used, the gateway must be registered on the platform in advance.

- When using Cat.1 cellular communication (VE133C/VE133F), ensure the SIM card is installed and activated.

7.2 App Account Registration and Login

7.2.1 Select a server

After opening the app for the first time, select the server based on your usage scenario:

Server type	applicable scene	Configuration Method
Public cloud server	general user	Directly select a region (e.g., Europe, Asia-Pacific)
Private deployment server	Enterprise Privatization Deployment User	Click and manually enter the platform URL

7.2.2 Registration and Login

1. Email Registration: Use your email as the unique identifier. Enter your email and click "Get Verification Code".
2. Verification code: The system will send a 6-digit verification code to your email. Enter the code to complete registration.
3. Set password: After successful verification, you can set a login password and log in directly using "email + password" later.
4. Compliance Confirmation: Before logging in, read and check the User Agreement.

7.3 Add devices through the App (Core Process)

⚠ Keep your phone's Bluetooth enabled throughout the distribution network process and maintain a distance of within 5 meters between your phone and the device. Do not close the app or switch to background mode during the process, as this may cause the distribution network to fail.

Step 1: Enable device network mode

1. Power on: Press and hold the power button on the side of the device for 3 seconds. The green indicator light will turn on, the screen will flash, and the logo will appear.
2. Status confirmation: The green indicator light in the upper-right corner of the device flashes, indicating Bluetooth is ready (default: automatically enters Bluetooth pairing mode upon first startup).
3. If the app does not detect the device, hold the power button for 8 seconds until the green indicator light flashes to reactivate Bluetooth.

Step 2: Bluetooth Scan and Connection

1. On the app homepage, click "Add Device." The Bluetooth status guide appears at the top, and a list of scanned devices is displayed in real time below.
2. Click the target device to enter the "Device Details Page" and verify the following information:
 - device name
 - Device model (VE133A / VE133B / VE133C / VE133D / VE133E / VE133F)
 - serial number (SN)
 - Hardware Version
 - Current firmware version
3. After confirming everything is correct, click the "Connect" button to establish a Bluetooth connection.

Step 3: Network Configuration and Progress Visualization

1. Select Wi-Fi: Choose a 2.4 GHz Wi-Fi network and enter the password
 - LoRa device (VE133B / VE133E): Additional option for a gateway network
 - Cat.1 device (VE133C / VE133F): Check the SIM card status
2. Connection progress tracking: The page navigates to the connection progress page, displaying the completion status for three stages:

stage	explain
① Wi-Fi linkage	Whether the device successfully connected to the router
② Configuration Write	Whether the distribution network information was successfully delivered to the device
③ Server connection	Whether the device was successfully deployed to the cloud platform

3. Exception handling: If a step fails (e.g., incorrect password or server timeout), the page provides a "Retry" button, allowing you to resume configuration without starting over.

Step 4: Naming and Completion

1. After all three connection stages are successful, the system automatically redirects to the naming page.
2. Enter device information:
 - Device nickname (e.g., "Meeting Room A1," "3F-Ward 201")

3. Click "Confirm" to complete the device addition and start using it immediately

After completion of the addition, the device is connected to the network and server, with the platform status set to "Connected," allowing immediate operations such as content distribution.

7.4 Add in batches through the platform

Ideal for large-scale deployment:

1. Log in to the uink RMS platform
2. Go to the Device Management page
3. Click "Batch Import" and upload the CSV file (containing device SN, name, model, etc.)
4. LoRa devices must specify the gateway SN in the CSV file.
5. After import, the device status is Inactive, awaiting on-site installation and power-on activation.

7.5 Redistribution of the Power Network

If the Wi-Fi in the device's operating environment changes, you can quickly reconfigure the network via the app without deleting the device:

1. On the App device details page, click "Network Configuration".
2. Ensure Bluetooth is enabled on your phone and the device is within Bluetooth range
3. Hold the button for 8 seconds; the green light flashes, and the device enters Bluetooth pairing mode.
4. Connect to the device via Bluetooth
5. Select a new Wi-Fi network and enter the password
6. Wait for the device to reconnect to the network and server

7.6 Equipment Management

7.6.1 List of Card-Based Devices

The app homepage displays bound devices in card format, with each card containing:

item of information	explain
Screen Preview	The thumbnail of the current device display content
device name	A user-defined nickname for quick identification

real-time status	Signal strength (RSSI), online/offline status, last synchronization time
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7.6.2 App Content Distribution

1. Click the device card to enter the details page
2. Click "Select Template":
 - My Template: Saved Common Template Styles
 - Template Library: If "My Templates" is empty, you can add templates from the "Public Template Library" or create one on the web platform.
3. After selecting the template and confirming, the device receives the instruction and refreshes the screen.

7.6.3 App-based Device Operations and Maintenance

In the App device list, click the device card → "Details" in the upper-right corner to perform the following actions:

operate	explain
View basic information	Device model, SN, hardware version, firmware version, and support for modifying the device name
line configuration	You can quickly reconfigure the network when Wi-Fi changes without deleting the device.
renovate	Force the device to refresh the current display content via Bluetooth
restart	Trigger a device hardware restart via Bluetooth

8. Platform Operation Guide

8.1 Log in to the platform

Access the uink RMS platform, register an account, and log in (the same process as on the APP).

region	Platform Address
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EMEA (Europe)	https://eu.rms.uink.com
China (China)	https://cn.rms.uink.com

8.2 Equipment Management

8.2.1 Equipment Status Description

state	Color Label	meaning	Allow operation
Inactive (not activated)	gray	The device is entered but never activated.	View, edit, delete
Connected	green	The device is online with normal heartbeat.	All Operations
Offline	red	The device was online but cannot communicate currently.	View, edit, delete, and issue (add to queue)
Updating (updating)	blue	The device is performing a download or OTA update.	View, edit, delete, and issue (add to queue)
Error (exception)	orange	An anomaly occurred in the device and requires manual intervention.	View, edit, delete, and issue (add to queue)
Revoke (invalid)	Gray translucent	The device has been forcibly taken over by another user.	Bind lại, Xóa

8.2.2 Equipment Details

Click a device in the device list; the right drawer displays:

- Basic information: SN, name, model, installation direction, firmware version
- Device status: Battery level, Signal, Status

- Recent recommendations: Thumb preview
- Recent task history: Tasks pending assignment

8.3 Template Management

8.3.1 Create Template

1. Go to "Template Management" → "My Templates"
2. Click "+ New Template"
3. Select the target device model (e.g., VE133; canvas automatically adapts to a 1600×1200 resolution)
4. Edit templates using the Visual Designer, which supports the following components:
 - Text: Custom font, size, color, alignment
 - Image: Upload
 - QR Code: The content is generated automatically upon input
 - Rectangular: Background color block
5. Save Template

8.3.2 Public Template Library

The platform provides Pre-configured official templates that can be added directly to "My Templates" for use:

- Office Door Sign-Basic (Office Door Plate)
- Hospital Bed Card (Hospital Bed Head Card)
- Meeting Room Door Sign

8.3.3 Binding and Issuance

1. Click "Push" on the template card
2. Select target device (multiple selections supported)
4. Confirm Release

9. Frequently Asked Questions and Troubleshooting

9.1 Device cannot be activated (always shows Inactive)

- Check that the device is powered on

- Check whether the Wi-Fi network configuration is correct (SSID and password)
- LoRa devices check whether the gateway is online and whether the device is on the whitelist (VE133B / VE133E)
- Category 1 Device Check: Verify whether the SIM card is functioning properly (VE133C / VE133F)
- Try reconfiguring the network via App Bluetooth

9.2 The device frequently goes offline

- Check the Wi-Fi signal strength and ensure the device is in a location with good signal coverage
- LoRa devices check the distance to the gateway and detect obstacles

9.3 The screen does not update after content is released

- Check if the device status is Connected
- Try a forced refresh to clear the residual image and resend

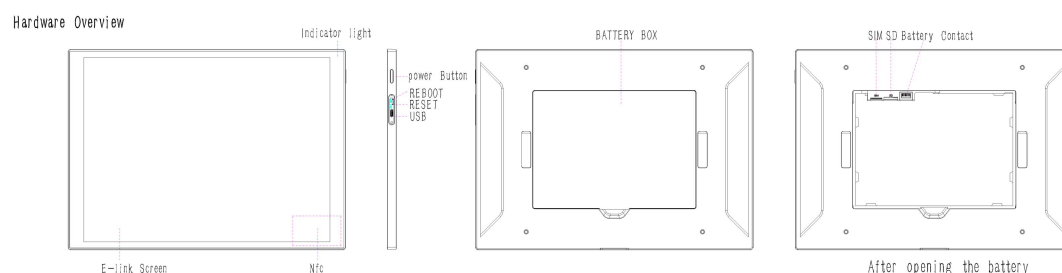
9.4 The device is displayed as "Revoked" (invalid).

- The device has been forcibly taken over by another user.
- process mode :
 - Rebind: Connect via Bluetooth on-site using the App to forcibly take over
 - Delete device: Confirm deletion of all historical data

9.5 Device Reset

- Soft reset: Restore device to factory settings
- Hard reset/Power-off reboot: The device automatically connects to the platform after power-on

After a soft reset, the device will erase all data and requires reconfiguration of the network and re-registration with the platform via the app.



10. Technical Specifications

parameter	specifications
Screen Type	E-paper screen
screen resolution	1600 × 1200 pixels
Display color	E6
communication mode	Wi-Fi / LoRa / Cat.1 (depending on the model)
Near-field configuration	BLE + NFC (standard on all models)
power supply mode	Type-C power supply / Rechargeable battery (A/B/C) / Disposable battery (D/E/F)
Installation Direction	0° / 90° / 180° / 270°
working temperature	0°C ~ 50°C
way to install	Screw fixation / Hanger installation / Support bracket installation

11. Contact and Support

For technical support, please contact:

- Platform address: <https://cn.rms.uink.com>
- RMS App:
 - iOS: Search for uink RMS in the App Store
 - <https://apps.apple.com/us/app/uink-rms/id6756906628>
 - Android: Search for uink RMS on Google Play
 - <https://play.google.com/store/apps/details?id=com.uink.rms>
- Official website address: <https://www.uink.com/>
- Contact to technical support: support@uink.com