Hanshow

Hanshow Smart Cart Product Manual

V1.0.1

HS-SC-CT10W0C3

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ABOUT THE DOCUMENT

Thank you for using Hanshow Smart Cart!

This document describes the product information, functions and uses, factory status, usage, maintenance, and common problems of the Hanshow Smart Cart, providing necessary data and guidance for using the cart.

Please read this document carefully before using the product for the first time, understand the items mentioned in it. If the instructions contained in this manual are insufficient to resolve issues that occur during device operation or maintenance, please contact Hanshow Technical Customer Service Center (China: 400-0365-305; Netherlands: 0800-022-5037; Belgium: 0800-71-335; France: 0800-902-530; Thailand: 1800-011-185; Germany: 0800-182-7358; Australia: 0061-1800-953-008) directly, we will provide you with multi-channel technical services.

TARGET USERS

This document is applicable for the following engineers:

● Testing Engineer

● Technical Support Engineer

● Service Engineer

● Installation and Implementation Engineer

SYMBOL DESCRIPTION

Icon	Description
⚠	Information indicated with this icon should be paid special attention and attached great importance by the reader.
📖	Information indicated with this icon is the explanation on the formal text for the readers to comprehend the text better.
[X-X]	It means special noun definition is provided here.

EXPLANATION OF TERMS

Acronym	Expanded form	Description
SC	Smart Cart	The smart cart is a plug-and-play Android™ device, equipped with a scanner, touch screen, NFC, camera, and indicator lights etc. It runs on the Android system and has the capabilities to recognize product and prevent loss, facilitating a complete self-service checkout process. Additionally, integrated with Hanshow's positioning technology, it implements in-store shopping navigation capabilities.

⚠**Notice: Android is a trademark of Google LLC.**

Table of Contents

1 General description

Smart Cart is a plug-and-play Android device, equipped with a scanner, touch screen, NFC, camera, and indicator lights. It runs on the Android system and has the capabilities to recognize product and prevent loss, facilitating a complete self-service checkout process. Additionally, integrated with Hanshow's positioning technology, it implements in-store shopping navigation capabilities.

1.1 Features

- Smart Cart is a plug-and-play Android device that charges on a charging wall when not in use. Customers can unlock it via a member login to place it on their shopping cart for use, and return it to the recycling cart or charging wall after use, completing the shopping process.

- Smart Cart integrates a scanner, touchscreen, NFC, and indicator lights, running on the Android system, and is capable of facilitating a complete self-service checkout process.

- The camera on Smart Cart has product recognition capabilities, providing retailers with loss prevention support.

- Combined with Hanshow's positioning technology, Smart Cart enables in-store shopping navigation to enhance the shopping experience for users.

- Smart Cart requires a matching base and charging wall for use. For documentation related to the base and charging wall, please refer to the accompanying documents.

- Smart Cart offers an SDK for retailers to integrate for controlling the hardware, loss prevention, and other functions. For more information on the SDK, please refer to the accompanying documents.

2 Product view

This section primarily describes the appearance and mechanical dimensions of the Smart Cart product.

2.1 Product Appearance

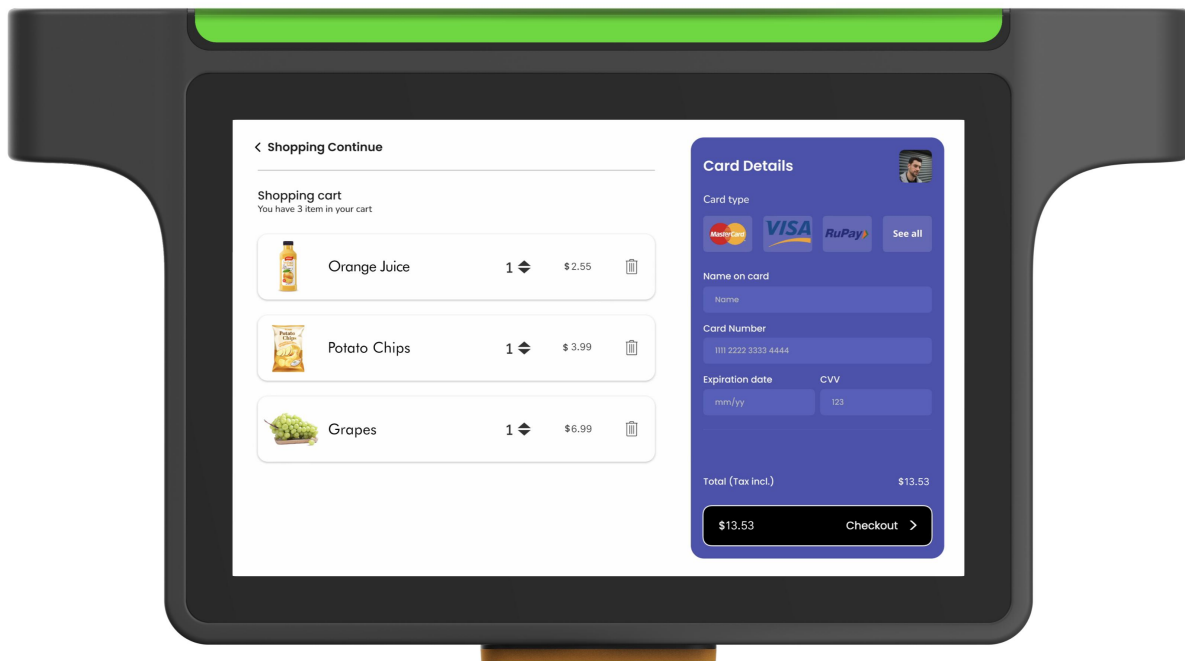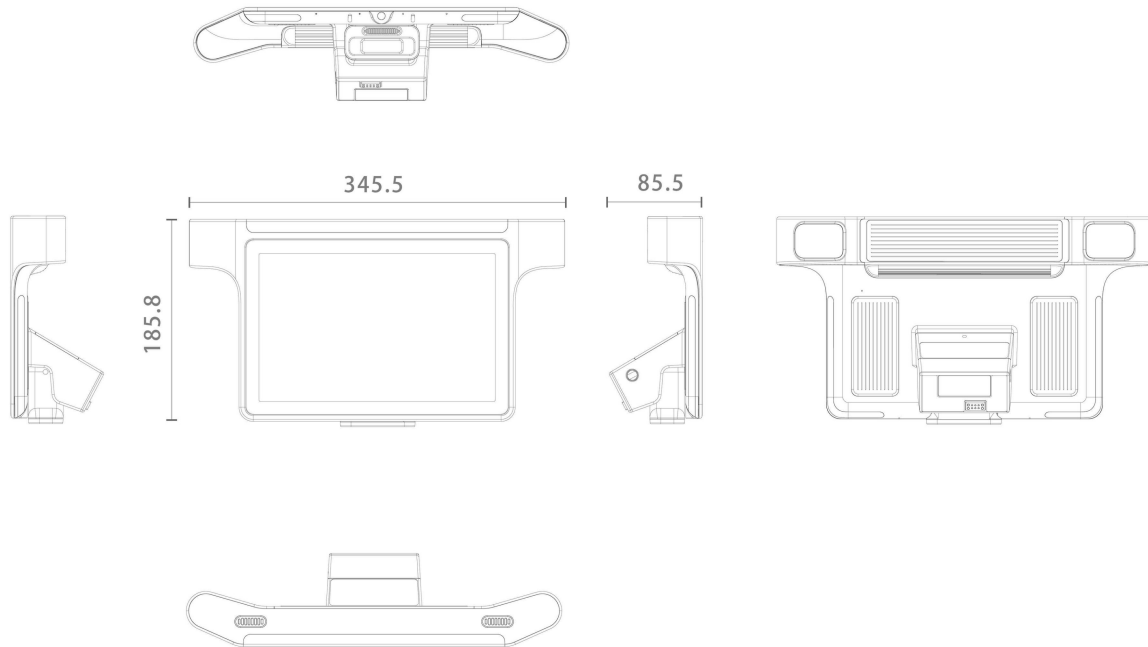The appearance of the Smart Cart is shown in *Figure 2-1* :

Figure 2-1

2.2 Mechanical dimension diagram

The mechanical dimension diagram of the Smart Cart is shown in *Figure 2-2* :

Figure 2-2

3 Hardware specifications

This section primarily introduces the product specifications, naming conventions, and product nameplate of Smart Cart.

3.1 Product Specifications

The specifications for Smart Cart CT10-W0C3 are as shown in *Table 3-1*:

Table 3-1

Name	Description
Dimensions	185.8 mm (width) x 345.5 mm (length) x 85.5 mm (height)
Weight	1.5 kg
Display	10.1-inch LCD screen, 1920*1200 pixels, 16:10 ratio, 60Hz
Touch Panel	Capacitive touch, supports 10-finger multi-touch
Audio	● Speaker x1; ● Microphone x2
USB	OTG USB x1
Operating Temperature	0°C to 45°C
Storage Temperature	-20°C to 60°C
Humidity	Relative humidity 5% to 80% (non-condensing)
Processor	Qualcomm® QCS6490
Operating System	Android 13
Storage	8GB RAM / 128GB ROM
Battery	4,000mAh (typical), 3,850mAh (rated)
Charging	● Fast charging: 1 hour from 0% to 80%, ● fully charged in 2 hours
Wi-Fi	802.11a/b/g/n/ac/ax, supports AP and STA modes

Name	Description
Bluetooth	Bluetooth 5.2 (BR/EDR + BLE)
ESL Narrowband	Supports Hanshow Narrowband System
NFC	Supports NFC reader mode
Scanner	Supports: UPC-A/UPC-E/EAN-8/EAN-13/Code128/Code39/GS1-128/GS1 DataBar-14/GS1 DataBar Limited/GS1 DataBar Expanded/Data Matrix/GS1 Data Matrix/PDF417/Aztec/QR Code/MicroQR
Cameras	● Front cameras x2: 5MP, fixed focus; ● Rear camera x1: 8MP, fixed focus;
Sensors	Electronic compass, accelerometer, gyroscope
Certifications	CE, RCM, GMS

⚠**Notice: Android is a trademark of Google LLC.**

3.2 Product naming conventions

The product naming conventions for Smart Cart is shown in *Figure 3-1* :

CT10-W0C3

C = **C**amera, C3 means 3 cameras

Screen Size:10"

W = **W**eight Sensor,W0 means no weight sensor
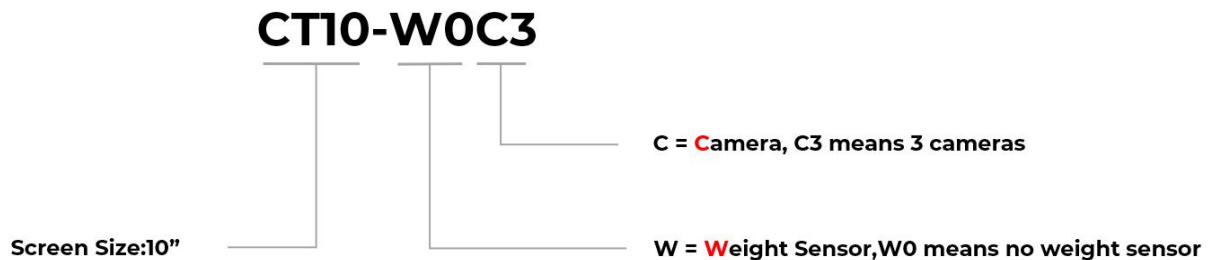
Figure 3-1

3.3 Product nameplate

Hanshow

Hanshow Smart Cart
购物车智能终端
Model / 型号：CT10-W0C3
Input / 输入：23V⎓ 3.5A
CMIIT ID: 24J33779K008
FCC ID: 2AYMH-CT10-W0C3
汉朔科技股份有限公司 Made in China
HANSHOW TECHNOLOGY CO.,LTD.

S/N: XXXXXXXXXXXXXXXXXX

Figure 3-2

The product nameplate should be based on the actual contents of the final product, as shown in *Figure 3-2*.

Smart Cart is an Android device. Hanshow provides an SDK and a Smart Cart management system to help retailers use it more effectively. The accompanying software is listed in *Table 3-2* :

Table 3-2

Type	Name	Description
SDK	CartWise SDK	Provided to retailers in SDK to help them develop their own applications. Capabilities include: ● Device status query; ● Scanner on/off control; ● Scanner settings; ● Device light control; ● Device lock control; ● Loss prevention; ● Scan result notifications.
Backend System	Hanshow All-Star Smart Retail System, Smart Cart Module	Smart Cart module, including capabilities: ● Smart Cart management; ● Operations and maintenance management; ● Loss prevention; ● Navigation; ● Marketing.
Backend System	Hanshow All-Star Smart Retail System	Hanshow All-Star management system, providing a basic "system administration" public platform including access control, data center, organization, and integration etc modules.

4 Packaging and accessories

This chapter describes the packaging and required accessories for Smart Cart.

4.1 Product factory packaging

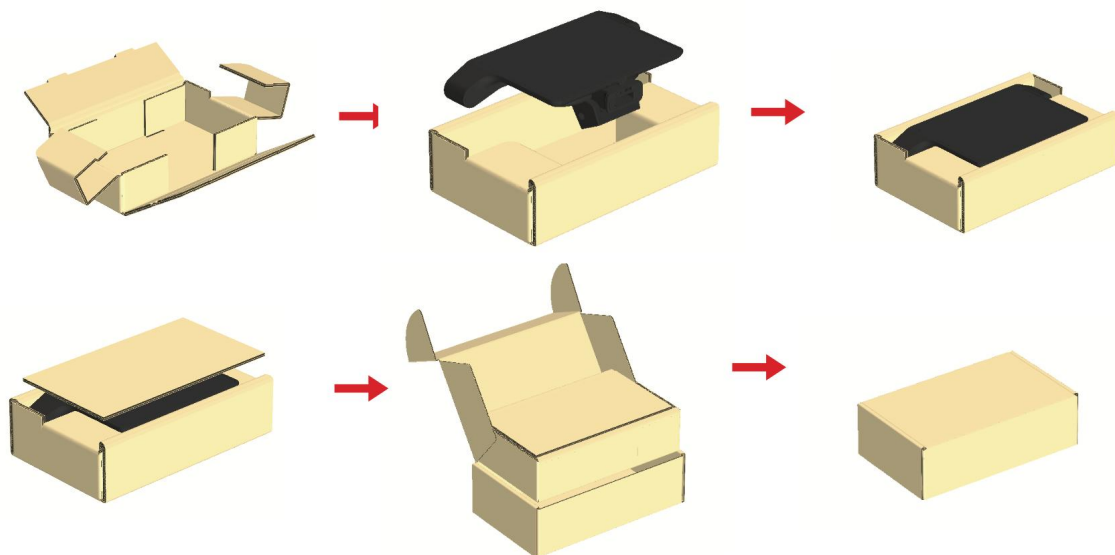| Name	Description
Product	Hanshow Smart Cart
Method of packing	Carton
Quantity	1
Content	Tablet + protective case
Weight	2.5 kg
Size	390mm * 229mm * 115mm

The packaging diagram is shown in *Figure 4-1* :

Figure 4-1

4.2 Product accessories

Requires the use of a base and charging wall. The Smart Cart is mounted on the shopping cart via the base, and the charging wall is used to charge the Smart Cart. For detailed information about the accessories, refer to the accompanying documentation.

5 Application scenarios

Smart Cart can be applied in various retail formats such as supermarkets, convenience stores, and department stores, by mounted onto the shopping carts to achieve installation. Smart Cart enables a self-checkout process and also integrates navigation and marketing functions, enabling more application scenarios to enhance the shopping experience for consumers and increase store sales. Additionally, Smart Cart can also be used by store staff for tasks such as picking and restocking.

6 Instructions

6.1 Hardware operation instructions

Smart Cart Removal and Usage Steps:

1. Smart Cart is charged while locked on the charging wall.

2. After successful member login, the lock is released, and users can remove the Smart Cart from the charging wall.

3. Once removed, insert it into the shopping cart's base as shown in *Figure 6-1* Upon insertion, it automatically locks into the base, and the user can proceed with their shopping process.
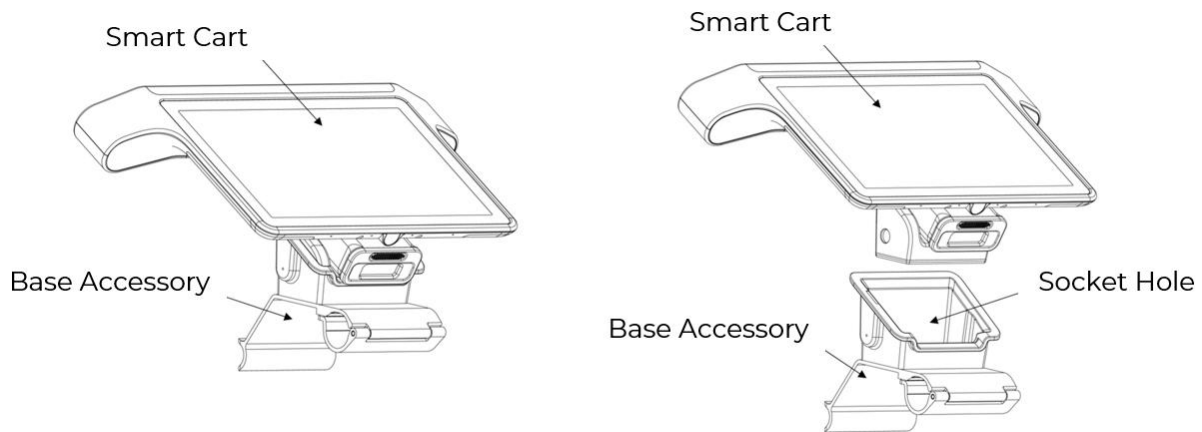
Figure 6-1

Smart Cart Return and Storage Steps:

1. After shopping, press the unlock button to unlock.

2. After unlocking, lift the Smart Cart upwards from the base.

3. After removal, place it back on the charging wall to complete the process.

⚠️**Notice: The above usage steps are provided for reference and can be adjusted according to the customer's business processes.**

6.2 Software operation instructions

6.2.1 Device initialization

● The smart cart runs on the Android system, which can be installed with apps developed by customers, such as POS shopping-related and picking-related apps;

● The device will be integrated with CartWise SDK before it leaves the factory, which will be provided to the Apps for device control and management;

● The device needs to connect to the network via Wi-Fi. You can select the connected Wi-Fi on the Android system's settings page and enter the password to connect to the network. It can also be integrated into the customer's own MDM system for management.

6.2.2 Daily use of the device

Hanshow will provide CartWise SDK for customers to develop applications. The SDK can be used to implement but not limited to the following scenarios:

- Control of the device lock, such as automatically unlocking after member login. After unlocking, the Smart Cart can be removed from the charging wall and placed on the shopping cart;

- Control of the device lights, such as lighting up a red light to alert staff to check for abnormal orders;

- Retrieval of content scanned by the scanner. Implementing the recognition of product information added to the shopping list after scanning product barcodes and QR codes;

- Providing AI anti-loss capabilities, using the camera's AI to assess during the shopping process whether there are missed or incorrect scans by the consumer.

7 Precautions

7.1 Hardware precautions

1. Various liquids may contain minerals that can corrode the housing material. If the device gets wet, clean it up as soon as possible. Prevent the device from being immersed in water or other liquids to avoid corrosion and damage to the internal electronic components or the housing.

2. Do not drop or hit the device. Rough handling of the device can damage the internal circuit boards.

3. Do not use strong chemicals and detergents to clean the device.

4. Even if the product is not used for a long time, it should be charged every two months, charging it to above 80%, to maintain the battery's health and performance.

5. Wipe the device with a dry or damp soft cloth. Do not use a wet cloth or liquid directly to clean the device.

6. Please do not disassemble the device without permission to avoid affecting the waterproof rating.

7. Charge the device using the charger provided with it, and do not use other chargers to charge the device.

7.2 Software precautions

1. Smart Cart relies on Wi-Fi for communication; please ensure there is a stable, comprehensive network environment in the store.

2. The CartWise SDK within Smart Cart has basic device management capabilities; an app is required to implement the complete shopping process.

3. The CartWise SDK within Smart Cart has the ability to recognize device anomalies (such as low battery, scanner malfunctions, etc.); the app should monitor these exceptions and provide notifications, advising consumers to switch to another device.

4. Smart Cart runs on Android 13; please develop apps on this operating system version.

8 maintenance

- Maintenance and cleaning goals

  Maintenance and cleaning are mainly to remove foreign matter and oxide layers attached to the product that do not belong to the product, such as dust, fluff, grease, rust, other dirt, etc.;

- Cleaning Methods

  Use a soft brush or cloth for cleaning. It is not recommended to use alcohol solutions or other acidic or alkaline detergents for routine maintenance.

- Storage Method

  ➢ Clean regularly (recommended once a week).

  ➢ Check the firmness of the installed accessories regularly and replace any damaged accessories in time.

  ➢ Try to ensure the overall environment of the installation area is clean.

  ➢ Avoid wiping with sharp objects to avoid scratching the product surface and screen; avoid rinsing directly with water.

9 Frequently asked questions

9.1 Hardware related questions

Smart Cart won't wake up

- Check if Smart Cart is turned on. If it is not, press the power button with a pin for 3 seconds, or place Smart Cart on the charging dock.

Smart Cart won't turn on

- Connect the Smart Cart to the charging dock. After it turns on, check if the battery is depleted and charge it if necessary;

- Check if the Smart Cart is overheating; if so, wait for it to cool down before using it again.

- If the issue persists, please contact Hanshow technical support for assistance.

Cannot charge after connecting to the charging dock

- Check if it is properly placed and the electronic lock is engaged with the charging dock. If not locked, reposition the Smart Cart onto the charging base;

- Check the charging dock for any foreign objects or water. Clean it thoroughly before attempting to charge again;

- If the issue persists, please contact Hanshow technical support for assistance.

Battery life is noticeably shorter

- Contact Hanshow technical support for assistance.

Fails to unlock and remove Smart Cart from the base

- If the battery is dead or there is a malfunction in the unlocking mechanism, do not attempt to forcibly remove it. Contact Hanshow technical support to unlock it with specialized tools.

9.2 Software related issues

Smart Cart Fails to recognize product

- If you find Smart cart cannot recognize the product when scanning the code in a certain place in the store, and there is no response when clicking checkout, but it can be used normally in other places, please check the Wi-Fi coverage at abnormal locations, usually this is caused by Wi-Fi disconnection.

The AI loss prevention effect is not ideal

If you find the AI loss prevention effect is not ideal and the recognition accuracy does not meet expectations:

- Please contact Hanshow technical support to handle it.

The map navigation function does not work

- Please contact Hanshow technical support to handle it.

10 Product RMA Process

1. Both parties communicate to preliminarily confirm hardware failure. Party A initiates an application in the RMA system. For hardware failures within the warranty period, Party B provides free repair; for failures outside the warranty, Party B will offer repair or replacement for a fee.

2. Failures or issues caused by human factors, third-party reasons, or force majeure, are not covered under warranty. These include:

   a. Faults caused by unauthorized modifications or disassembly;

   b. Damage due to human factors, such as liquid ingress, falls, or input of inappropriate voltage;

   c. Failures or damage caused by not following the instructions for installation, use, maintenance, or storage as specified in the manual;

   d. Failures or damage caused by force majeure events (natural disasters);

   e. Faults or damage during return or exchange caused by transportation or handling;

   f. The product is beyond the warranty period;

   g. The product nameplate, SN barcode, or tamper-proof label has been torn off, damaged, or is illegible.

11   FCC ID warning

11.1 Warning for nameplate

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

11.2 Warning for product manual

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

12 Supporting documentation

Smart Cart requires a base and charging wall for use. Customers can develop their own self-checkout process based on the SDK. The relevant supporting documentation is described as follows:

Type	Name	Description
SDK Integration	*Hanshow CartWise SDK Access Guide*	CartWise SDK access document, allowing customers to develop based on the guide.
Base Installation	*Hanshow Smart Cart Installation Manual*	Describes how to install the Smart Cart onto the base, and how to attach the base to a shopping cart.
Charging Wall Installation	*Hanshow Smart Cart Charging Wall Installation Manual*	Installation manual for the charging wall that accompanies the Smart Cart.

If there are any documents not displayed above, please contact Hanshow technical support to obtain them.