

Compact Cash Recycling System CCS-30 Technical Manual



1 Overview

Compact cash recycling system CCS-30 can realize the functions of banknote and coin recognition, counting, depositing, and circulating change. It has high reliability, ease of use and maintainability. It realizes self-recycling through the change of banknotes and coins, reducing the time spent on replenishment, counting, and replacement of cash boxes, reducing the time for daily maintenance, reducing dormant cash in automatic equipment, cash exposure risks, statistical cost losses, reducing downtime for checkout, cash transportation, etc., and improving overall operational efficiency.

The main application scenarios:

Self-service equipment in the retail industry, municipal and hospital self-service equipment, transportation self-service equipment, scenic spots and cinema self-service equipment, and other automatic devices that require cash acceptance and change dispensing functions.

2 Model

Compact Cash Recycling System CCS-30

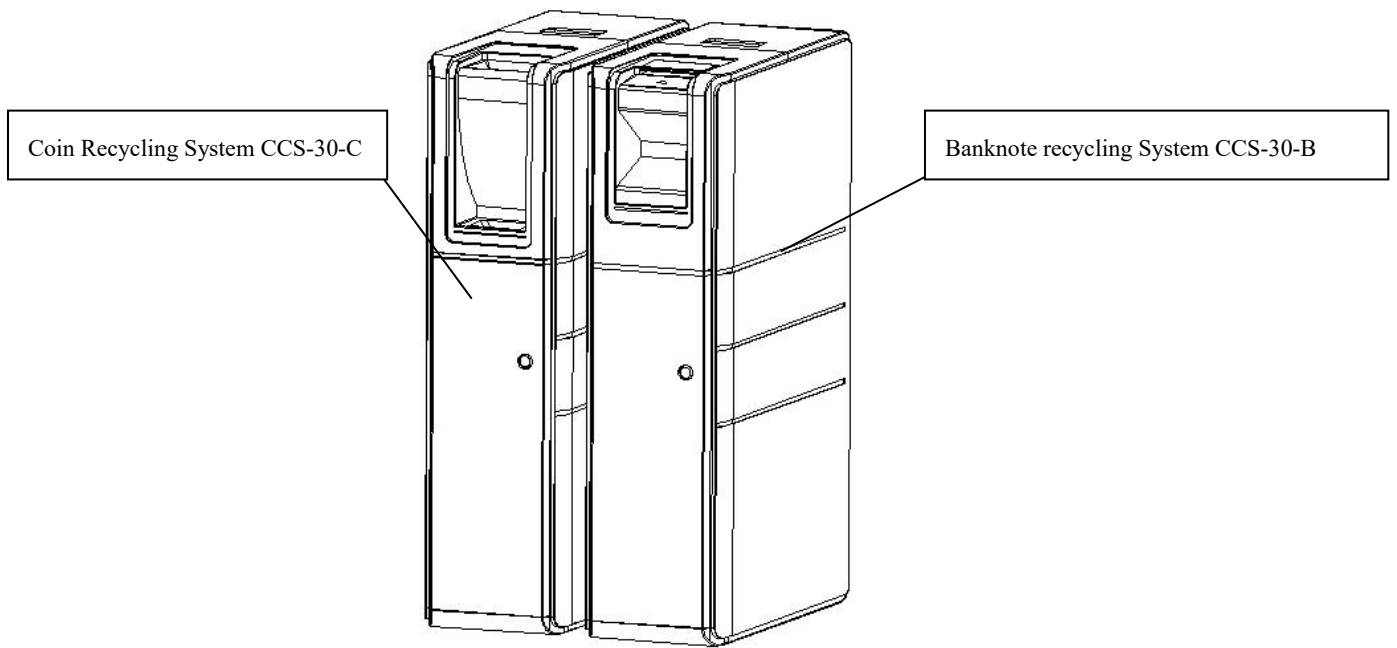
--Banknote recycling System CCS-30B-40

--Coin Recycling System CCS-30C-80

3 Size

3.1 System composition

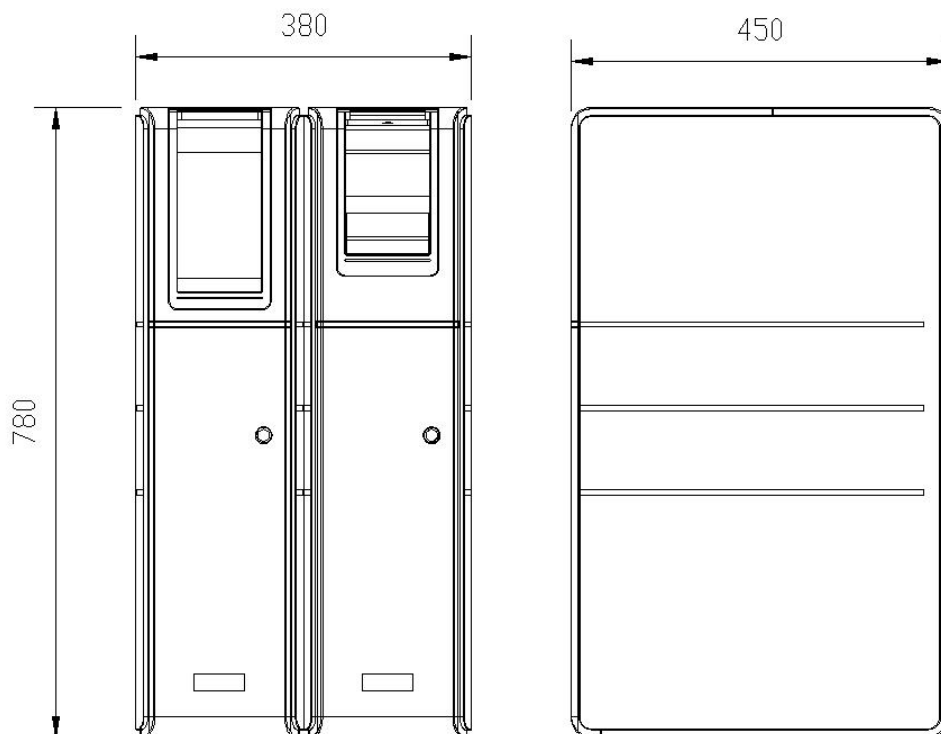
The Compact Cash Recycling System CCS-30 consists of the Banknote Recycling System CCS-30B-40 and the Coin Recycling System CCS-30C-80.



3.2 External dimensions (in mm)

CCS-30 Compact Cash Recycling System: Width 380 mm × Depth 450 mm × Height 780 mm.

- Banknote Recycling System CCS-30-40: Width 190 mm × Depth 450 mm × Height 780 mm;
- Coin Recycling System CCS-30C-80: Width 190 mm × Depth 450 mm × Height 780 mm;



4 Features

Banknotes:

- Based on experienced banknote recognition and counterfeit detection technology, multi-spectral full-width image scanning (CIS technology) and full-width magnetic signal detection, high-security banknote recognition;
- The banknote receiving and correcting device ensures the smooth operation of banknotes;
- High-speed banknote processing speed, receiving speed 3.5notes/second, change speed 3.5notes/second;
- Supports 30-bundle banknote input and 30-bundle banknote change;
- Large recycling capacity, supports up to 4 different denominations, each denomination has a recycling capacity of 100 notes, and can flexibly configure the change denomination;
- Intelligent banknote sorting, banknotes that are not suitable for circulating change are directly deposited into the cash box to reduce the rate of banknote jams;

Coins:

- Based on the experienced coin recognition and counterfeit detection technology, multi-frequency and multi-coil comprehensive detection methods are adopted to identify and detect coins in multiple dimensions such as coin material, diameter, thickness, etc.;
- High-speed coin processing speed, receiving speed 5 coins/second, coin output speed 5 coins/second;
- Supports a one-time investment of 50 coins and a coin output of 50 coins;
- Large recycling capacity, supporting up to 8 coins of different denominations, with a recycling capacity of up to 600 coins of a single denomination (based on the RMB 50 cents specification);
- It has the function of foreign body discharge, which can automatically discharge foreign body after each transaction;
- With forgotten coins recycling function, the coins forgotten by customers can be automatically recycled to avoid cash loss;
- Automatic coin clearing function: after the recycling hopper is full, the coins are automatically cleared into the recycling bin;

5 Technical parameters

5.1 Banknote Performance Parameters

Item		Performance Specifications
Cash in	Cash input capacity	30 notes
	Cash input method	Whole stack, vertical banknote feeding, no restriction on direction
Identify	Currency	Support 100 different denominations of banknotes (one or more countries) at the same time
	Material	Paper, plastic-based (polymer)
	Real banknote acceptance rate	≥99%
	Counterfeit currency recognition rate	≥99.9%
	Banknote size	Length range: 120~180 mm; Width range: 60~85 mm
Detection Methods	Optical	Full-frame image sensor (CIS technology), no less than 100,000 measurement points per banknote
	Magnetic	Full-width magnetic sensor detection
Speed	Receiving speed	3.5 notes/second
	Change speed	3.5 notes/second
Capacity	Temporary Storage	100 notes (using one of the recycling boxes)
	Number of recycling boxes	4 pcs
	recycling box capacity	The capacity of a single recycling box is 100 notes (4 recycling boxes have a total of 400 notes)
	Deposit box capacity	1000 notes
	Cash replenishment box capacity (optional)	500 notes
Cash out	Cash outlet capacity	30 notes
	Cash Outlet	Bundle
	Cash outlet protection	With cash outlet baffle
Upgrade	Upgrade method	With online download and upgrade function

5.2 Coin performance parameters

Item		Performance Specifications
Coin-operated	Coin-operated mode	Multiple notes at one time
	Coin slot capacity	50 coins (any denomination)
Identify	Currency	Supports 250 coins of different denominations (one or more countries) at the same time
	Material	Metal material
	Real currency acceptance rate	≥99%
Detection Methods	Electromagnetic testing	Multi-coil and multi-frequency detection of the coin surface and core material, as well as the coin size, etc.
Speed	Receiving speed	5 coins/second
	Change speed	5 coins/second
	Number of cyclic hoppers	8 hoppers
	Cycle Hopper Capacity	The capacity of a single HOPPER is 600 coins (calculated at RMB 50 cents)
	Coin Box	2500 coins (calculated based on RMB 50 cents)
Foreign body removal	Coin slot	Supports foreign body removal
Cash out	Coin outlet capacity	50 coins
	Forgotten Recycling	With coin outlet recovery function
Upgrade	Upgrade method	With online download and upgrade function

5.3 Environment

Environment	Operating temperature	0°C~50°C
	Storage temperature	-20°C~60°C
	Humidity	20%RH~90%RH (Non-condensing)

5.4 Electrical technical parameters

Item	Specifications
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Electrical Interface	Power supply	AC110V-240V
	Rated frequency	50-60Hz
Communication interface	Communication Protocol	RS232
	Baud rate	19200 bps
	Inspection method	No verification
	Communication parameters	Data bit: 8 bits Start bit: 1 bit Stop bit: 1 bit
Electromagnetic compatibility	Comply with relevant national standards GB/T 17626	