

Banknote Acceptor

BA-15-00S

Technical Manual

1 Overview

The banknote Accepting module BA-15-00S is a core module that can realize single banknote recognition and deposit functions, and has high reliability, ease of use and easy maintenance.

Main application scenarios: rail transit automatic ticketing system, parking lot automatic payment equipment, retail system automatic charging equipment, public transportation automatic ticket vending machine, etc.

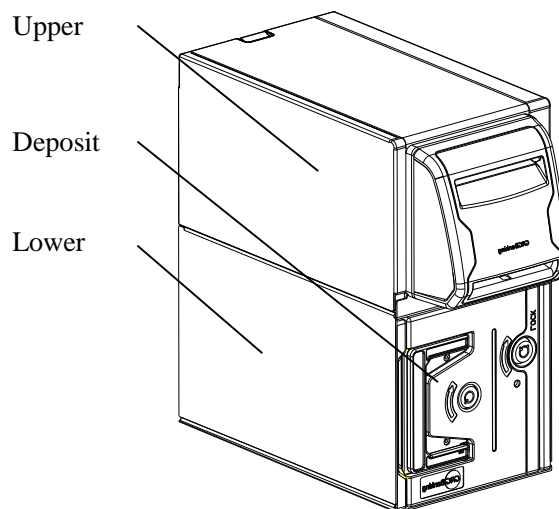
2 Model and meaning

BA-15-00S: Banknote Accepting module, equipped with 0 circulation drums, 0 banknote replenishment boxes

3 Size

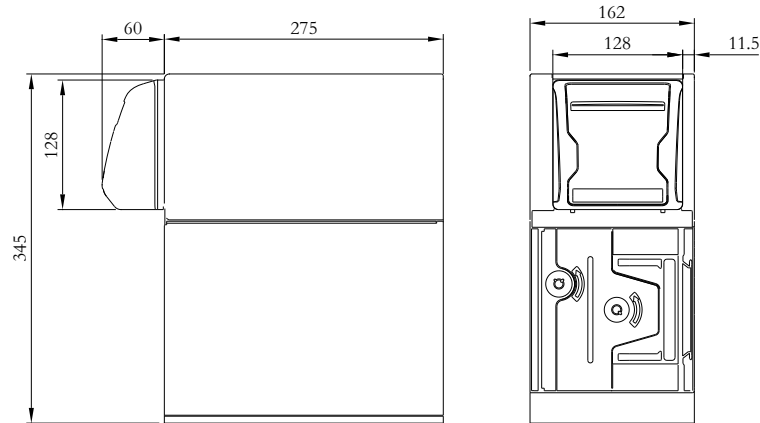
3.1 Module composition

The BA-15-00S banknote Accepting Module consists of three parts: the upper module, the deposit box, and the lower frame, as shown in the following figure:



3.2 Dimensions

BA-15-00S banknote Accepting Module dimensions: length 275 × width 162 × height 345 (unit: mm)



4 Features

- Single banknote insertion, supports 4 orientations, fast deposit
- Experienced banknote recognition and anti-counterfeiting technology
- Compact, secure international multi-currency banknote acceptance and recognition system
- Cash box comes with electronic ID for automatic identification and management
- Easy maintenance, no tools are needed to quickly troubleshoot card and banknote failures on site
- Effectively identify the serial number of banknotes regardless of the orientation, and realize the banknote serial number tracking function
- With suspected counterfeit currency recovery function

5 .Features of each module

Upper module:

- Universal entry indicator lights for user convenience
- Fast banknote reception, average processing time is less than 1.5 seconds per note
- The banknote receiving and correcting device ensures smooth banknote operation
- Equipped with entrance and exit gates, high security; banknote insertion design is ergonomic
- Industrial-grade electronic components, adaptable to various harsh environments such as high and low temperatures, high humidity, etc.
- Three-line anti-counterfeiting technology, up to 100,000 identification scanning points
- Multi-spectral full-width image scanning (CIS technology) and full-width magnetic signal detection, high-security banknote recognition

- Specially designed for the domestic banknote usage environment and characteristics (many counterfeit banknotes, poor banknote quality)
- Record and save the banknote serial number to realize the banknote serial number tracking function

Deposit cash box:

- Sturdy and durable, double lock design (changing the cash drawer and opening the cash drawer) and interlocking mechanism for secure cash drawer
- Electronic identification tag with unique ID
- Independent removable cash box, no electrical connection, high reliability

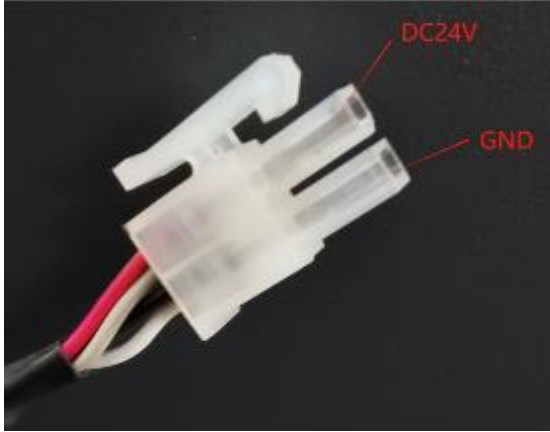
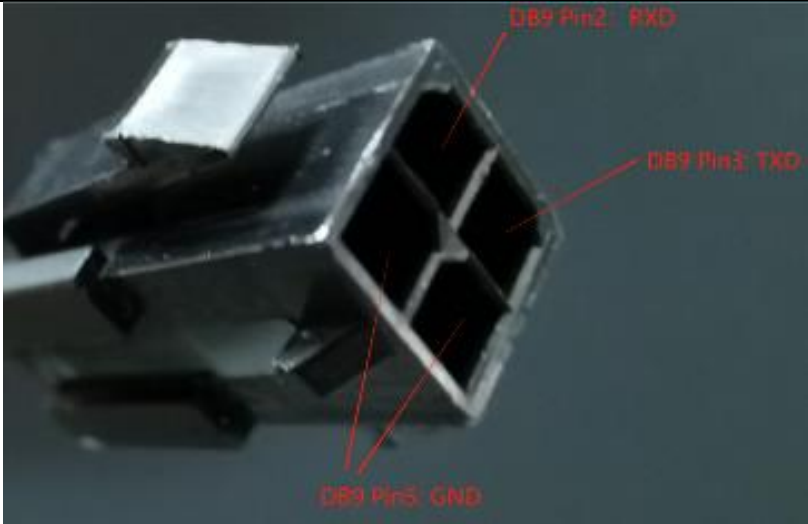
6 .Technical parameters

6.1 Performance Parameters

Items		Performance Specifications
Feed Banknotes	Cash feed direction	Vertical banknote feeding
	Specific orientation	No restrictions
Identification	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%
	Banknote size	Length range: 120~180 mm; width range: 60~85 mm.
Detection means	Optics	Full-frame image sensor (CIS technology), no less than 100,000 measurement points per banknote
	magnetic	Full-width magnetic sensor detection
Speed	Receiving speed	About 1.5 seconds/note
Capacity	Escrow	20 notes
	Deposit Box	1000 notes ± 50 notes (length 231mm, width 137mm, height 161mm)

Environment	Operating temperature	0°C~50°C
	Storage temperature	-20°C~60°C
	humidity	20%RH~90%RH (non-condensing)
Upgrade	Upgrade method	With online download and upgrade function
Weight	Deposit cash box (empty box)	2kg
	Complete Machine	14.6kg
Electromagnetic compatibility		Comply with relevant national standards GB/T 17626

6.2 Electrical Specifications

Items		Specifications
Electricity interface	Power supply	+24VDC±10%,+10A
	Power	Standby 15W Average 80W
	plug	2-pin power plug 2-pin power pin
	Wiring relationship	
Communication interface	Communication Protocol	RS232 (USB optional)
	Baud rate	19200 bps
	Inspection method	No verification
	Communication parameters	Data bit: 8 bits, Start bit: 1 bit, Stop bit: 1 bit
	Wiring relationship	

6.3 Reliability specifications

(Working environment: room temperature 20°C, humidity 50%RH)

Items	Technical indicators	Remark
Note jamming rate	Less than 3/100000	More than 70% new, no damage, no stain, no wrinkles
Mean cycles Between Failures (MCBF)	300,000 times	Work in a standard working environment and according to standard specifications(See Note 1)
Working life	10 years	Work in a standard working environment and according to standard specifications

Note 1: Does not include coin jams or self-recoverable failures