Cash Dispense Module

CDM8240N
Module Technical Manual

Document History

No. and name	Version	Date	Revision description	Personnel involved
CDM8240N Technical Manual	V1.0	2015-8-1	This document is created.	Prepared by: Gong Yuan Approved by: Weng Qiuhua
	V1.1	2016-5-18	1. Add power supply requirement working in low temperature state （P7）. 2. Corrected some description.	Prepared by: Chengfan Approved by: Weng Qiuhua
	V1.2	2016-07	1、Add the model of CDM8240NV	Prepared by: Yuyong Approved by: Weng Qiuhua

Contents

1 Overview

The CDM8240N is the next-generation dispenser with proprietary IPR and worldwide advanced technologies. It is developed by GRGBanking on the basis of the former dispenser CDM8240 through large-scale renewal and advanced process and technologies. It has tracking functions, such as OCR identification, recording, image storage, and future reference. It consists of the note cassette, frame, independent reject Bin, note feeder, high-precision note thickness detection module, OCR identification module, note stacker, presenter channel, and note presenter, supporting 1-6 levels cassette extension. It can feed specified notes from a specified cassette as required to a user, automatically identify and record OCR of notes, and automatically reject possibly-unqualified notes to the reject Bin and retract the notes left by customers at the note presenter exit. It also features high reliability, usability and maintainability.

2 Statement

All rights reserved by GRGBanking. Without its permission, any third party shall not copy or publish this document. Without prior notification of the user, GRGBanking shall have the right to modify and supplement this document at any time. Therefore, the information contained by this document may not be latest. If you want to get more precise information, please contact your supplier.

3 Model

Model: CDM8240N、CDM8240NV

Notes：The difference between CDM8240N and CDM8240NV is that CDM8240NV has OCR function CDM8240N not，others function are identical.
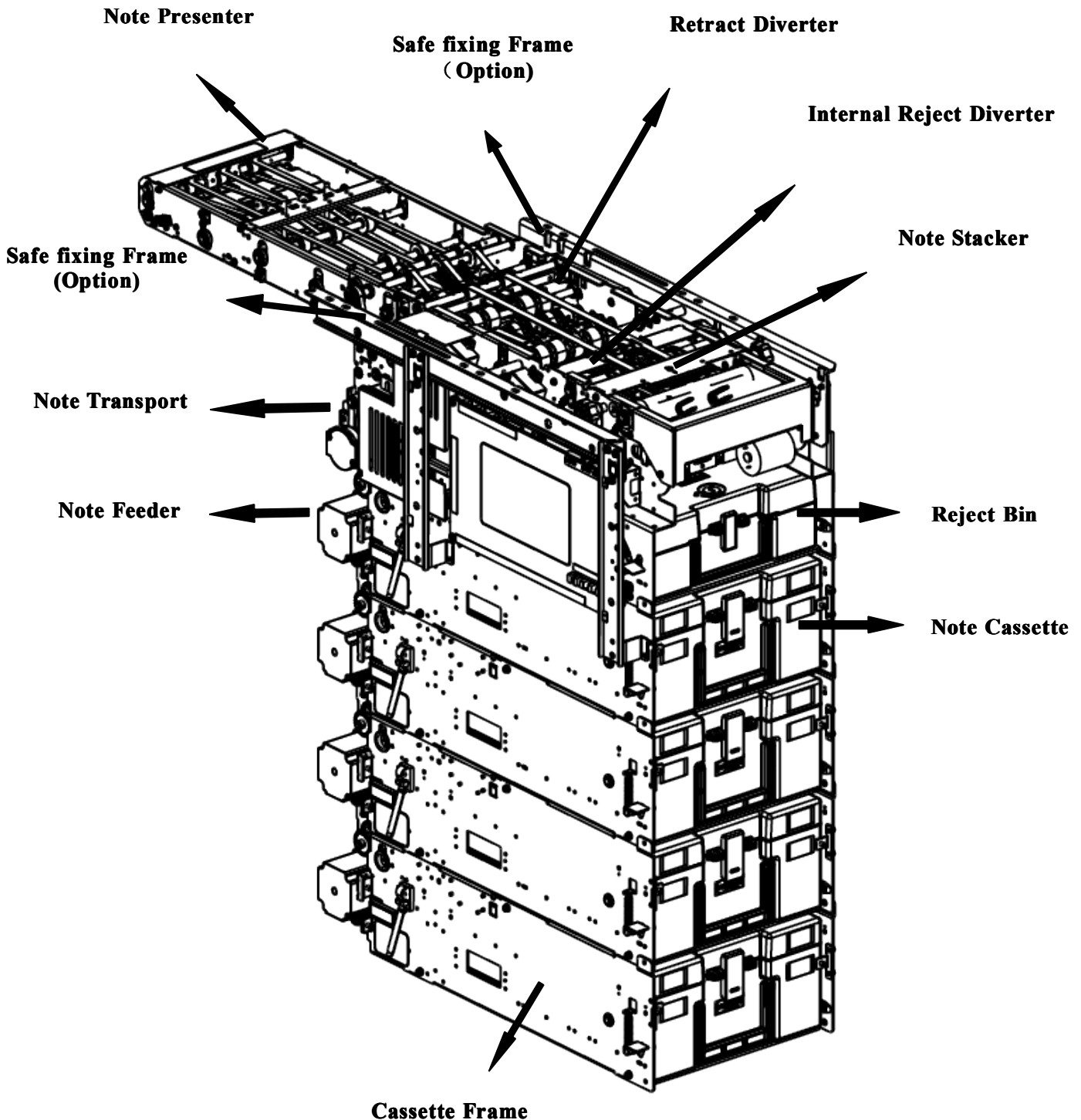
4 Term

CDM —— Cash Dispense Module

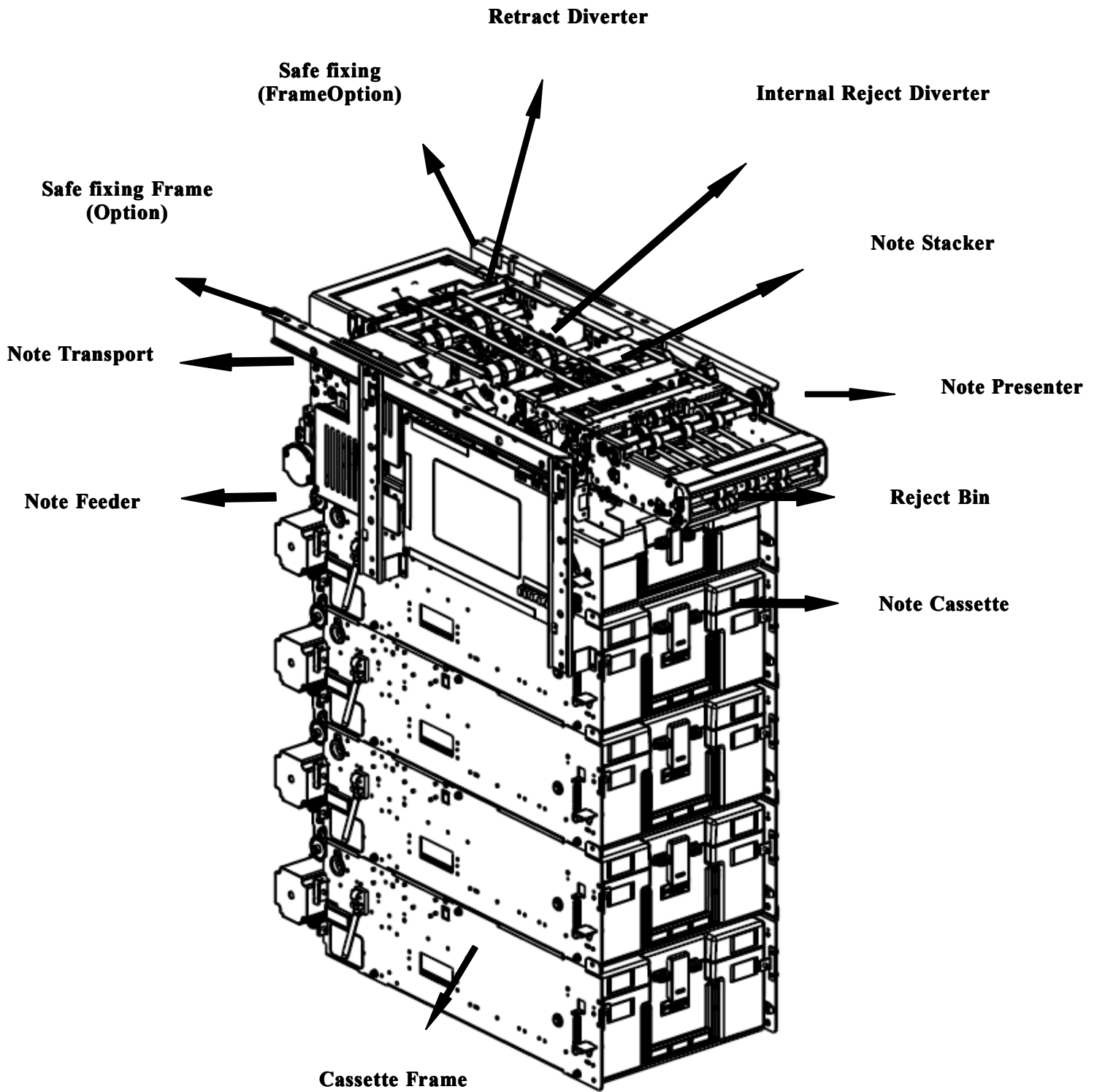# 5 Appearance
5.1 Overall appearance
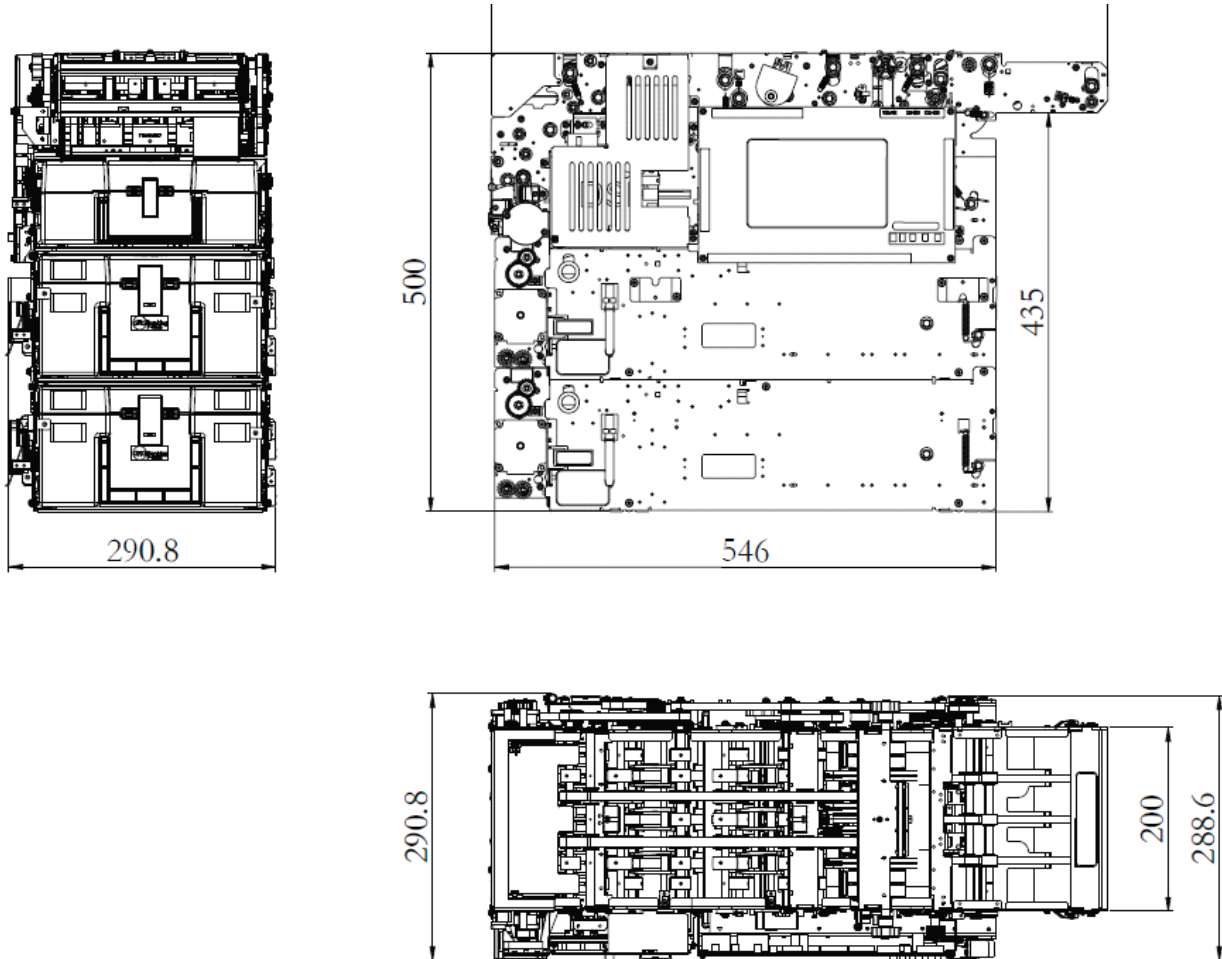
CDM8240N Rear access presenter

Note Presenter

Safe fixing Frame
（Option)

Retract Diverter

Internal Reject Diverter

Safe fixing Frame
(Option)

Note Stacker

Note Transport

Note Feeder

Reject Bin

Note Cassette

Cassette Frame

CDM8240N Front access presenter

Retract Diverter

Safe fixing (FrameOption)

Internal Reject Diverter

Safe fixing Frame (Option)

Note Stacker

Note Transport

Note Presenter

Note Feeder

Reject Bin

Note Cassette

Cassette Frame

Extra-long presenter: 918; long: 868; moderate-long：722; short presenter: 672

290.8

500

435

546

290.8

200

288.6

Overall dimensions of the four presenters of the CDM8240N rear service (for the overall dimensions of note cassette 2; if one level of note cassette is added, the height increases by 142.5 mm).

Extra-long presenter: 918; long: 868; moderate-long：722; short presenter: 672

435

500

546

290.8

290.8

200

288.6
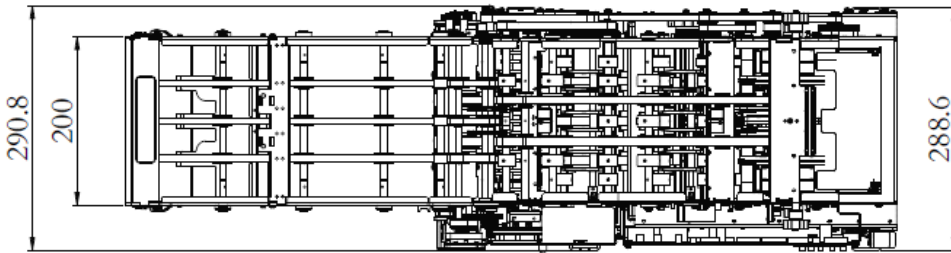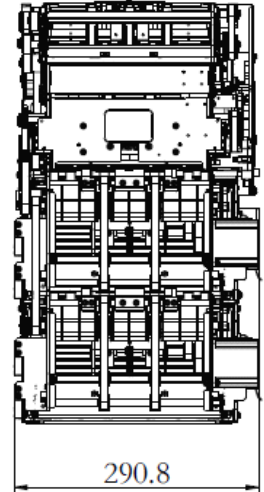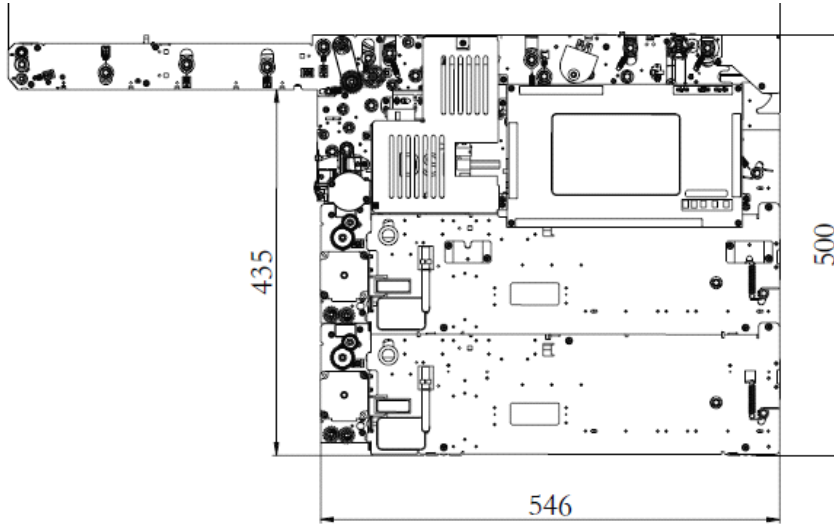
6 Functional Characteristics

- With the friction cash-out mode, the module is highly adaptive to support any kind of paper note.

- With the high-capacity cassette, the module can expand to six cassettes, and each cassette has a capacity for 3000-3500 notes.

- The large-capacity reject Bin has a capacity for 250-300 notes. It can reject notes one by one or in bulk.

- The module enjoys the fastest speed of dispensing 7-8 notes per second in the industry.

- A maximum of 100 notes is allowed for one cash-out transaction.

- Correct thickness detection set free of adjustment and maintenance.

- The module has functions such as stacking overlapped notes, pre-delivering notes, delivering notes, and rejecting left notes at the exit.

- The module can detect the decrease of note cassette.

- The note cassette has a lock and a separate reject cassette.

- With self-calibration function, can effectively eliminate certain deviations from assembly.

- The module can record information of bill serial number (optional).

- The module has RFID cassette management function (optional).

7 Features

- Unique optional high-security cassette with a lock, a lead seal and an independent reject Bin.

- Double-channel diverter design: The left reject area separates from the internal reject inside the reject Bin.

- The note presenter has four optional presenters to adapt to more application circumstances.

- The flexible front and rear access interchange design without additional parts is simple and usable.

- The unique log record and enquiry function can record and query all transaction logs.

- The unique module off-line self-diagnostic function is convenient for debugging.

- The module design can conduct on-site fast replacement and is easy to maintain.

- The module can be equipped with an easily-installed safe fixing frame (optional) for OEM marketing channels.

8 Technical Specifications

8.1 Electrical specifications

Table 1

Item		Specification
Power supply	Input voltage （For 4 cassettes）	DC 24V, 200W(in normal temperature; when in -10 ℃ temperature, the power consumption is 340W)
	Power consumption （For 4 cassettes）	Static power consumption: 30W; dynamic power consumption: 140W(in normal temperature; when in -10 ℃ temperature, the dynamic power consumption is 312W).
Environmental requirement	Working temperature and humidity	$0\,^{0}$C ~ $50\,^{0}$C, 20% ~ 90% RH (without condensation).
Communication interface		RS-232 / USB2.0
Weight (See attached schedule 1 for details)		**CDM8240N** short presenter: 32kg (for the total weight of the 2-level standard note cassette; if one level is added, the weight increases by 8.8 kg).
		CDM8240N long presenter: 33kg (for the total weight of the 2-level standard note cassette; if one level is added, the weight increases by 8.8 kg).
Overall dimensions		**CDM8240N short** presenter: 290.8 (W) x 672 (D) x500 (H) mm (for the 2-level standard note cassette; if one level is added, the height increases by 142.5 mm).
		CDM8240N long presenter: 290.8 (W) x 868 (D) x500 (H) mm (for the 2-level standard note cassette; if one level is added, the height increases by 142.5 mm).

Schedule 1

Module	Weight (Kg)
Note transport (excluding the note delivery module)	12
Cassette frame	3
Note cassette (excluding medium)	3.3
Reject Bin	1.2
Note delivery module	Short presenter (D = 672 mm)	1.6
	Moderate-long presenter (D = 722 mm)	1.75
	Long presenter (D = 868 mm)	2.3
	Extra-long presenter (D = 918 mm)	2.5

8.2 Performance specifications

Table 2

Item		Specification
Cassette	Expansion method	Maximum level: level 6.
	Cassette capacity	3000-3500 notes （According to the bill status）
	Reject Bin capacity	250-300 (left/single)+250-300(internal/bulk)
	Safety performance	With mechanical lock and lead seal.
Note adaptability (supporting all major currencies in the world)	Note length	110 mm~182 mm
	Note width	55 mm~85 mm
	Note thickness	0.06 mm~0.18 mm

Note feeding mode	Friction
Note dispensing mode	Bulk dispensing
Dispensing speed	7-8 notes/s (1200-1400 mm/s)
Single maximum number of notes dispensed	100 notes
Note decrease detection	50-250 notes (adjustable).
Reject mode	Internal/left reject (single/bulk)
Maintenance mode	Front service/rear service (four kinds of presenters)
OCR function	recording, storage and future reference
OCR identification speed	420 notes/min.
RFID management function	Optional

8.3 Material specifications

All parts of the CDM8240N comply with the *Technical Standards for Restricted Substances Used for ATM Products* issued by GRG Banking.