

	DOC NO	MODEL	NAME	REV.	PAGE
	PL-VCDM0000-002	VCDM	Product Specification	1.2	1 of 9

Product Specification

MODEL : VCDM
REV. : 1.2
DATE : 2010. 09. 09



PULOON Technology Inc.

	DOC NO	MODEL	NAME	REV.	PAGE
	PL-VCDM0000-002	VCDM	Product Specification	1.2	2 of 9

Revision History

Ver.	DATE	Item		Name
		Title	Details	
0.1	2008.03.18	Released		H.J.KIM
0.2	2008.05.09	Communication specifications	Change Parity (page 8)	H.H. SO
0.3	2008.11.24	Communication Connector	Change Pin Function (page 0)	H.H. SO
1.0	2010.02.12	Setting Dip Switch	Operation Mode (page 9)	Y.H.KIM
1.1	2010.08.11	Lay Out	Lay Out (page 7)	Y.H.KIM
		Setting Dip Switch	Operation Mode (page 9)	
1.2	2010.09.09	Lay Out	Lay Out (page 7)	Y.J.LEE
		Changed	<Page 8. > Nearend(Low Note) 50 notes → 5~15 notes	H.J.KIM

	DOC NO	MODEL	NAME	REV.	PAGE
	PL-VCDM0000-002	VCDM	Product Specification	1.2	3 of 9

Contents

1	PREVIEW AND FEATURES	10
1.1	PREVIEW	10
1.2	FEATURES.....	12
2	SPECIFICATIONS	17
2.1	GENERAL SPECIFICATIONS	17
2.2	ELECTRICAL FEATURES	24
2.3	OPERATION ENVIRONMENT	33
3	LAYOUT	35
4	CONNECTOR SPECIFICATIONS	38
4.1	POWER CONNECTOR	38
4.2	COMMUNICATION CONNECTOR	41
4.3	SERIAL COMMUNICATION SPECIFICATIONS	44
4.4	DIP SWITCH ASSIGNMENT.....	46

	DOC NO	MODEL	NAME	REV.	PAGE
	PL-VCDM0000-002	VCDM	Product Specification	1.2	4 of 9

1 PREVIEW AND FEATURES

1.1 PREVIEW

VCDM is the cash-dispensing unit that can be applied to ATM and notes exchanger for retail market. The main function is to dispense the exact number of banknotes in the cassette by a customer's request and to transfer to the customer automatically.

1.2 FEATURES

- 1) To separate notes by friction roller & plate
- 2) To prevent from double dispensing case by ultrasonic double detect mechanism
- 3) To implement mold guides and paths to minimize jam occurrence
- 4) To maximize convenience in maintenance or clearing by opening guide structure
- 5) To realize compact and slim size so as to be applied to even small space
- 6) To speed at a rate of 3.0 notes/sec
- 7) To have tray for customer easily to take the sprayed notes
- 8) After power failure, bills on the path are rejected to reject tray when power turns on again (Auto Reject Function)

	DOC NO	MODEL	NAME	REV.	PAGE
	PL-VCDM0000-002	VCDM	Product Specification	1.2	5 of 9

2 SPECIFICATIONS

2.1 GENERAL SPECIFICATIONS

2.1.1	Denomination	1 / 2 / 3 / 4 Denominations
2.1.2	Cassette Capacity	60mm
2.1.3	Cassette Security	Key Lock (Option)
2.1.4	Dispensing Speed	3.0 notes/sec
2.1.5	Usable Note Size	Width : 120 ~ 165mm Height: 62 ~ 82mm Thickness: 0.06 ~ 0.2mm
2.1.6	Double Feeding Detection	Ultrasonic Type
2.1.7	Max. Dispensing Notes per Transaction	Max 20 notes
2.1.8	Reject Capacity	About 20 notes
2.1.9	Access Type	Front Access Type
2.1.10	Dimension (unit: mm)	169(W) x 550(H) x 349(D)
2.1.11	Interface	RS 232C
2.1.12	Near-end Detection (Selectable, Refer to Chapter 4.4)	
	1) Near-end Disabled	All notes are dispensed until Bill-end.
	2) Near-end Enabled	About 5~15 notes (Used notes) will be left and it stops.

2.2 ELECTRICAL FEATURES

2.2.1	Rated Voltage	DC24V±10%
2.2.2	Rated Consuming Current	
	(1 Denomination)	
	- Standby Status	0.28 A
	- Average Current, Dispense	1.7 A
	- Peak Current	6.3 A (for 120 msec)

	DOC NO	MODEL	NAME	REV.	PAGE
	PL-VCDM0000-002	VCDM	Product Specification	1.2	6 of 9

(2 Denominations)

- Standby Status 0.28 A
- Average Current, Dispense 2.0 A
- Peak Current 6.4 A (for 120 msec)

(3 Denominations)

- Standby Status 0.28 A
- Average Current, Dispense 2.3 A
- Peak Current 6.5 A (for 120 msec)

(4 Denominations)

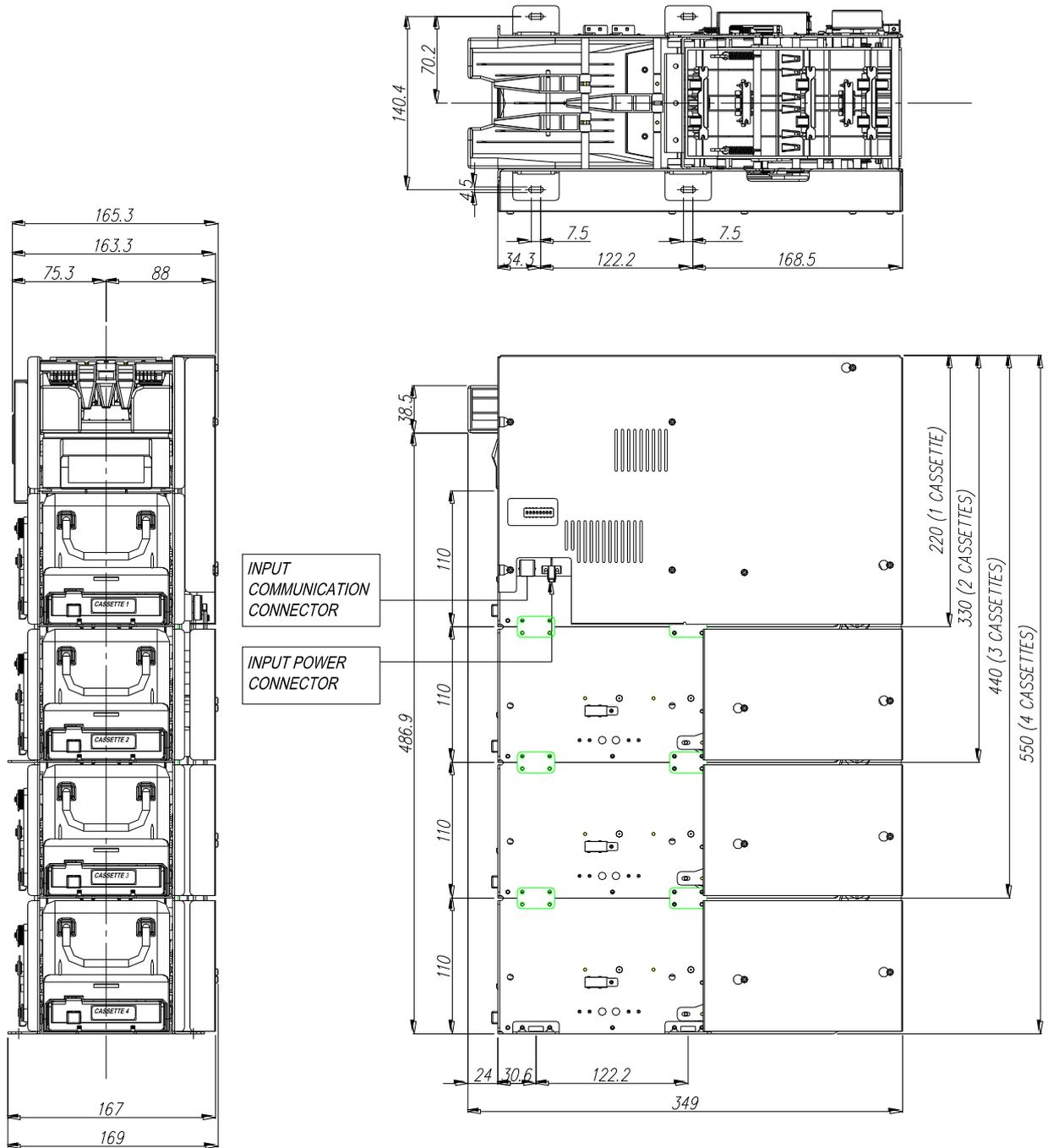
- Standby Status 0.28 A
- Average Current, Dispense 2.6 A
- Peak Current 7.0 A (for 120 msec)

2.3 OPERATION ENVIRONMENT

- 2.3.1 Operation Temperature + 0°C ~ +40°C
- 2.3.2 Storage Temperature -10°C ~ +60°C
- 2.3.3 Operation Humidity 20% ~ 80% RH
- 2.3.4 Storage Humidity 10% ~ 90% RH

	DOC NO	MODEL	NAME	REV.	PAGE
	PL-VCDM0000-002	VCDM	Product Specification	1.2	7 of 9

3 LAYOUT



(unit: mm)

	DOC NO	MODEL	NAME	REV.	PAGE
	PL-VCDM0000-002	VCDM	Product Specification	1.2	8 of 9

4 CONNECTOR SPECIFICATIONS

4.1 POWER CONNECTOR

The power connector is positioned at the bottom of the VCDM main Controller.

Connector on Controller : MOLEX 5566VWO-02

Matching Connector : MOLEX 5557D-02

Pin No	Function
1	+24V
2	GND

4.2 COMMUNICATION CONNECTOR

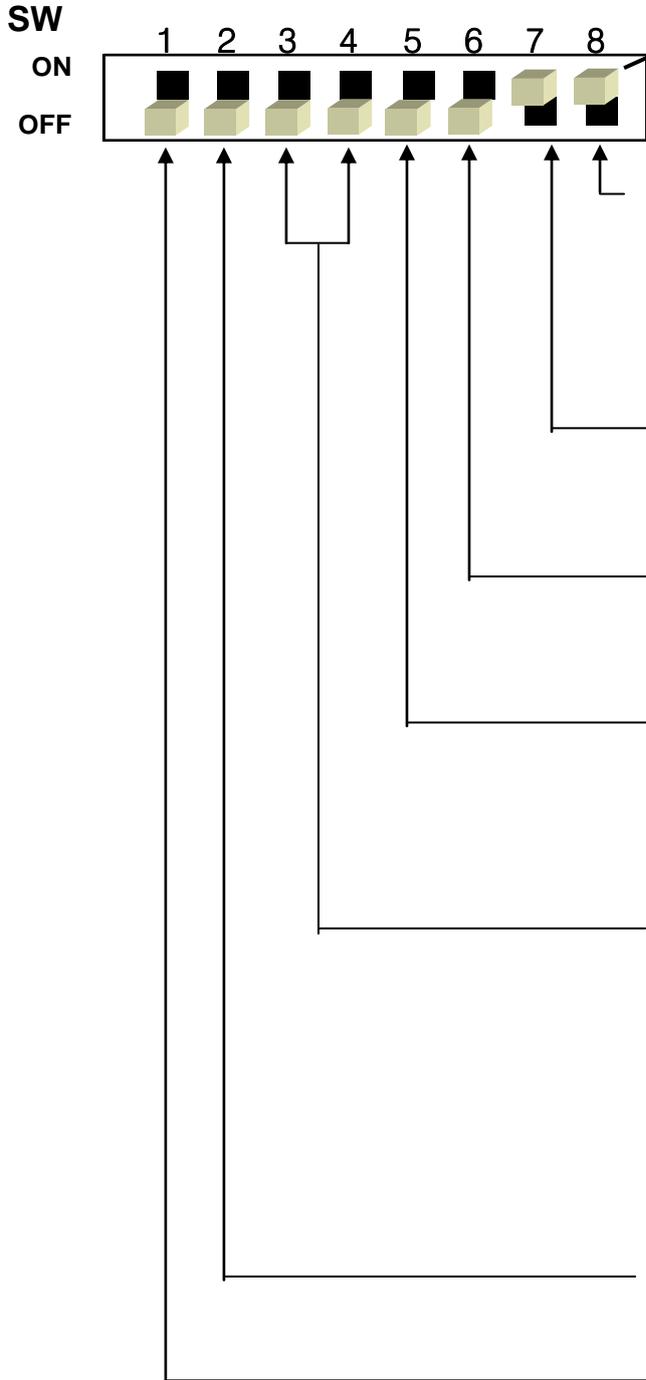
The communication connector is positioned at the bottom of the VCDM MAIN Controller PCB. It is 6-way and RJ-45 type connector (Molex 52018-6616).

Pin No	Name	Function
1		Not used
2	GND	System ground
3		Not used
4	TXD	Transmitted data
5	RXD	Received data
6		Not used

4.3 SERIAL COMMUNICATION SPECIFICATIONS

Baud rate	9600 bps
Data bits	8 bits
Parity	Even
Stop bits	1 stop bit

4.4 DIP SWITCH ASSIGNMENT



This is defined as state "ON"

< Definition of Near-End >

ON : All notes will be dispensed.
 OFF : About 5~15 notes remain. (Used notes)
 (The remaining amount is up to the setting position of the Near-end sensor in the factory.)

< Display of Reject code >

ON : Display
 OFF : Non-Display

< Operation Mode >

ON: Off-Line Mode
 OFF: On-Line Mode

< Cash-out Sensor >

Must keep 'OFF' mode

< Select Cassettes >

S/W 3	S/W 4	Mode
ON	ON	One Cassette
OFF	ON	Two Cassettes
ON	OFF	Three Cassettes
OFF	OFF	Four Cassettes

< Execution of Purge on Initialization >

ON: Disable OFF: Enable

< Sequence of Cassette on Dispense >

ON: Lower Cassette First
 OFF: Upper Cassette First

CAUTION!

Please turn on power again after changing the Dip Switch.