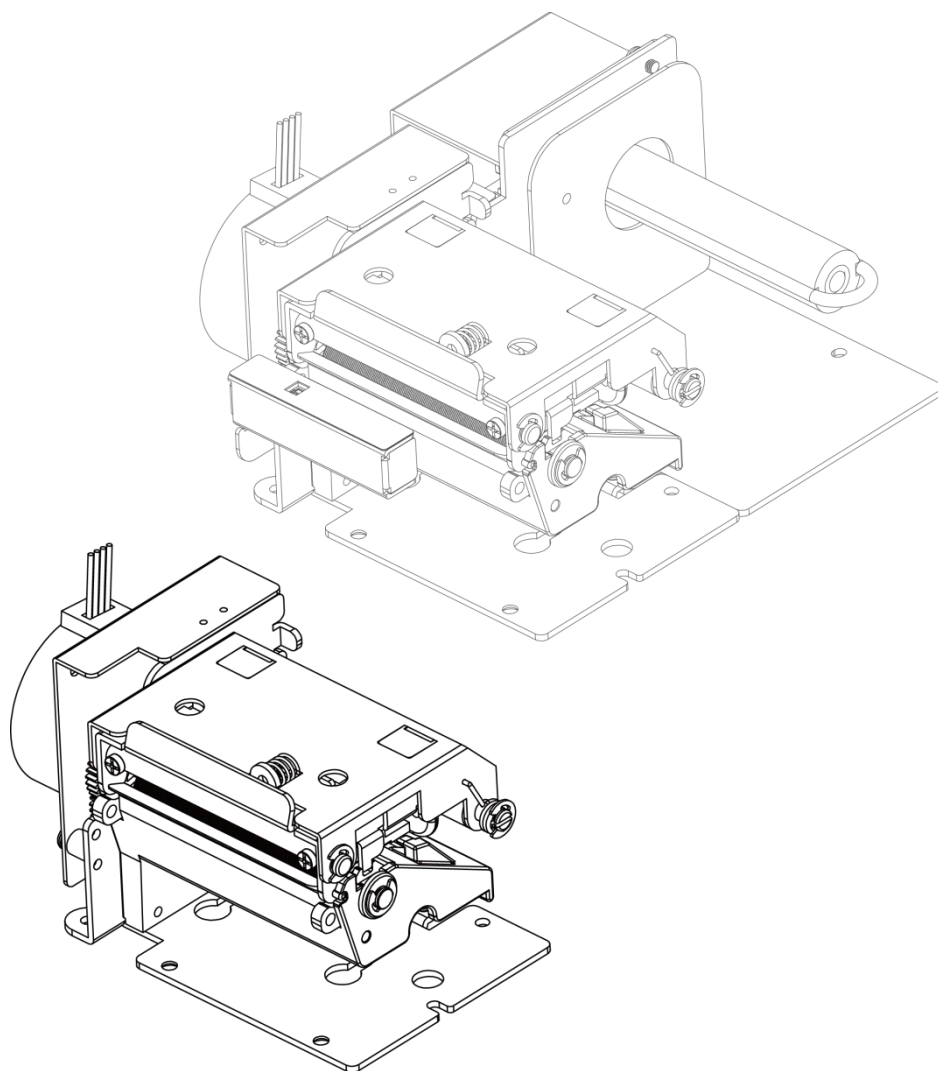




PE200/PE300 Series

Printing Mechanism

User Manual

Version : B
Issue Date :2020.07.29
P/N :920-028111-00

Declaration

As the printer module and PCB control board are shipped without enclosure, it may not comply with related FCC, EMC and EMI standards.

Safety Instructions

Please follow the instructions carefully:

1. Keep the module away from humidity.
2. Before connecting to power outlet, please check the voltage of the power source is within the required specifications.
3. Make sure the module is switch off before plug to the power source.
4. To prevent possible transient power damage, it is recommended connecting the module to a surge protector.
5. Get rid of any liquid on or inside the module to prevent electric shock or short circuit.
6. Unplug the power before any kind of repair or adjustment.
7. Residual heat may accumulate on step motor and print head, please don't touch them.
8. Print head is ESD sensitive device, please don't touch it and its peripherals with bare hand.
9. For safety and warranty reasons, ONLY qualified personnel are allowed to maintain the module.

Caution:

Replace parts only with the equivalent type recommended by the manufacturer.

Only use with power supply adapter model:

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

Specifications are subjected to change without notice.

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1. Introduction

The GoDEX PE200/PE300 series is a rugged label printer module designed to be easily integrated into automatic labeling functions, such as applicator, ticket kiosk and other self-service labeling systems. With options and accessories including cutter, rewinder, label taken sensor, PCB control boards and linerless designed features, PE200/PE300 series printer module is both flexible and fully prepared for any kind of label printing system with reachable price.

As PE200/PE300 is modularized, it can be easily and quickly removed from the automatic labeling system for off-line servicing or for complete module replacement.

2. Technical Data

2.1 Specifications

PE200 / PE300

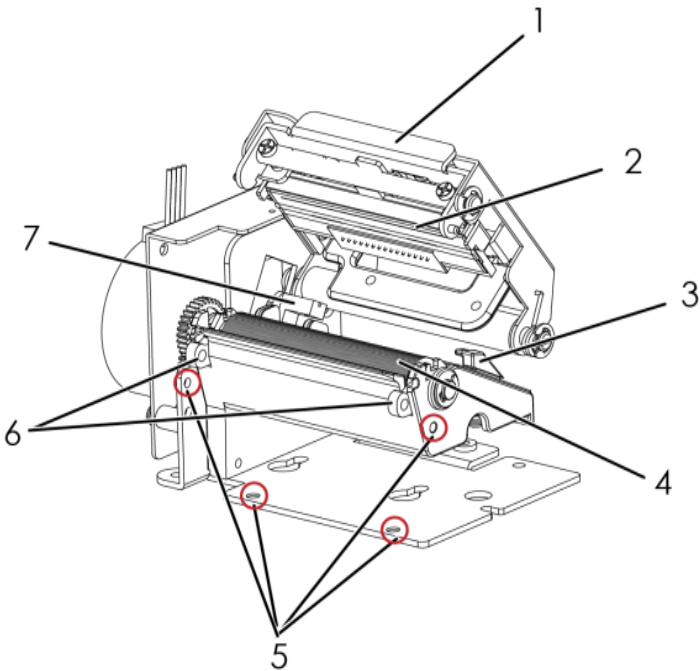
Printing Mechanism

Model		PE200	PE230	PE300	PE330
Print Method		Direct Thermal			
Resolution		203 dpi (8 dot/mm)	300 dpi (12 dot/mm)	203 dpi (8 dot/mm)	300 dpi (12 dot/mm)
Print Speed		6 IPS (152 mm/s)	4 IPS	6 IPS (152 mm/s)	4 IPS
Print Width		2.12" (54mm)	2.24" (56.9mm)	3.15" (80 mm)	3.20" (81.2mm)
Print Length		Min. 0.39" (10 mm)** ; Max. 68" (1727 mm)	Min. 0.16" (4 mm); Max. 30" (762 mm)	Min. 0.39" (10 mm)** ; Max. 68" (1727 mm)	Min. 0.16" (4 mm)**; Max. 30" (762 mm)
Sensor Type		Fixed transmissive sensor, Left aligned			
Media	Types	Continuous form, gap labels, label length set by auto sensing or programming		Continuous form, gap labels, label length set by auto sensing or programming	
	Width	Min. 1" (25.4 mm) – Max. 2.36" (60 mm)		Min. 1" (25.4 mm) – Max. 3.25" (82.5 mm)	
	Thickness	Min. 0.002" (0.05 mm) – Max. 0.0067" (0.17 mm)		Min. 0.002" (0.05 mm) – Max. 0.0067" (0.17 mm)	
	Label Roll Diameter	Max. 2.67" (68 mm)		Max. 2.67" (68 mm)	
	Core Diameter	1" (25.4 mm), 1.5" (38.1 mm)		1" (25.4 mm), 1.5" (38.1 mm)	
Rewind liner roll Diameter		Rewind liner roll size (OD): 66 mm			
Print Head	Logic Supply Voltage	3.3V			
	Printing Applied Voltage	24V			
Motor	Operation Voltage	24V			
Environment	Operation Temperature	41°F to 104°F (5°C to 40°C)			
	Storage Temperature	-4°F to 122°F (-20°C to 50°C)			
Humidity	Operation	30-85%, non-condensing			
	Storage	10-90%, non-condensing			
Dimension	Length	65 mm (2.56")		65 mm (2.56")	
	Height	65 mm (2.56")		65 mm (2.56")	
	Width	122mm (4.80")		150.1 mm (5.91")	
Weight		< 0.5Kg, exclusive consumables, internal rewinder and mainboard		< 0.577Kg, exclusive consumables, internal rewinder and mainboard	
Options		Cutter External label rewinder Label Taken Sensor			

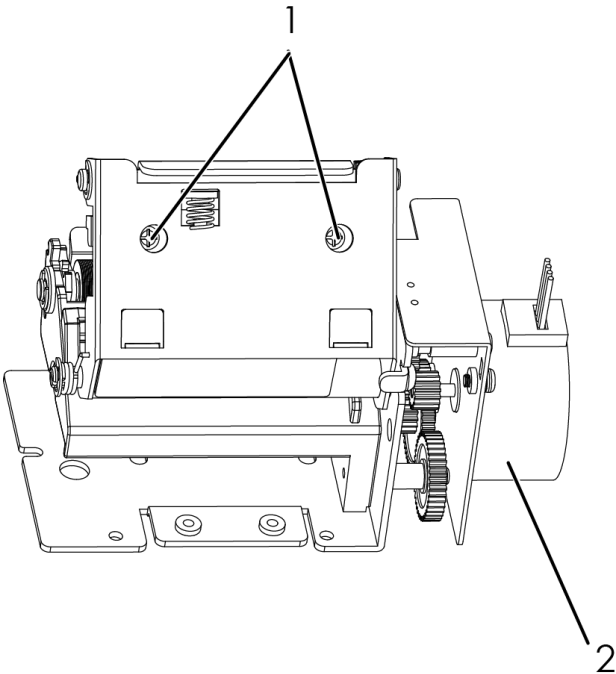
*Specifications are subject to change without notice. All company and/or product names are trademarks and/or registered trademarks of their respective owners.

**Minimum print height and maximum print speed specification compliance can be dependent on non-standard material variables such as label type, thickness, spacing, liner construction, etc. GoDEX is pleased to test non-standard materials for minimum print height, and maximum print speed capability.

2.2 General Description



1	Printer Head Release Latch
2	Printer Head
3	Media Guide
4	Platen
5	Cutter Module Mount
6	Media Roller Release Knob
7	Left Aligned Fixed Transmissive Sensor



1	Print head fixing screw
2	Motor

3. Installation

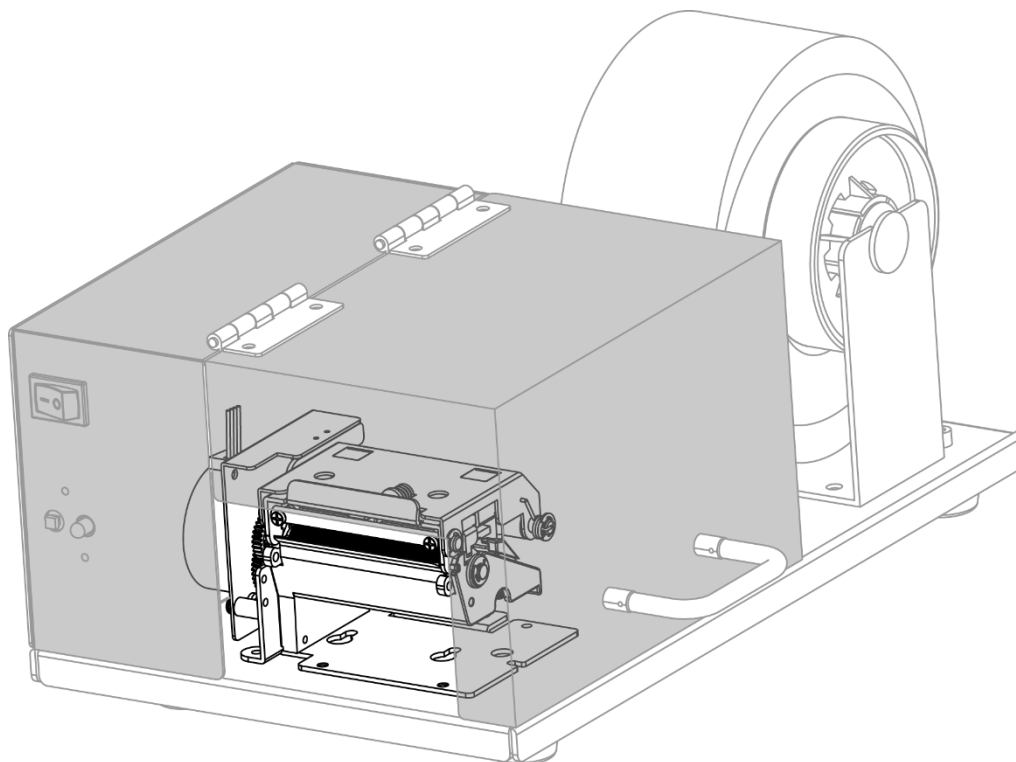
3.1 Site Location

Located away from hazardous materials and environments.

Installed within an enclosed structure that conform to the module's environmental requirement.

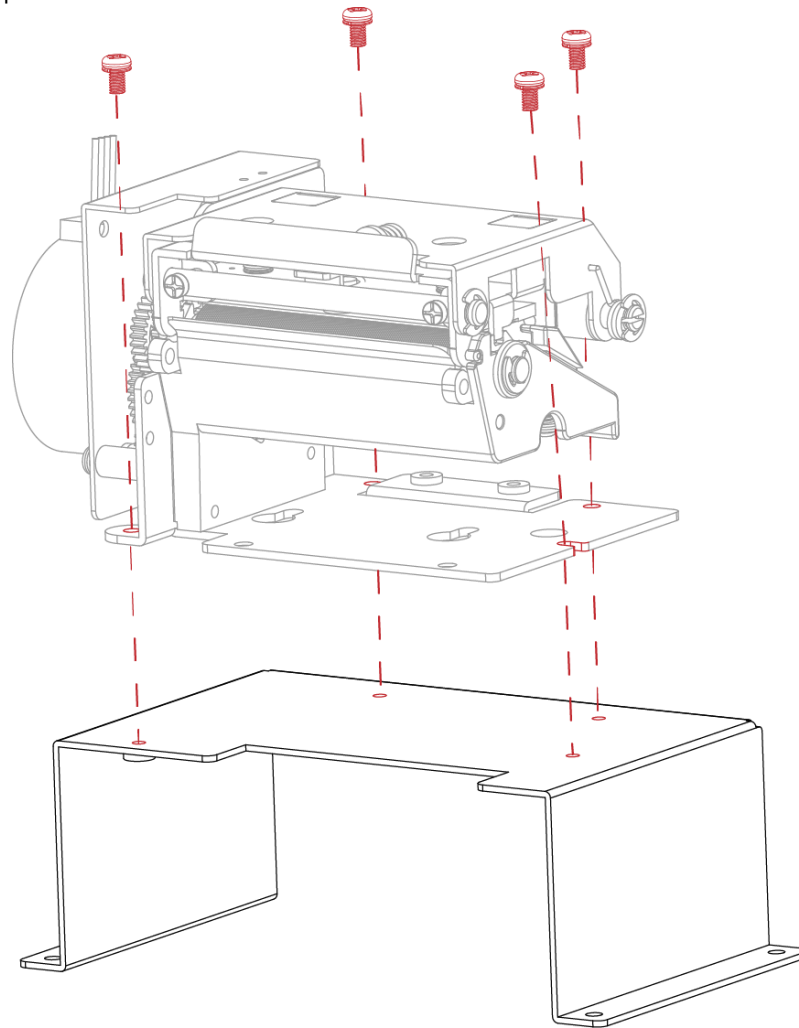
Located in an appropriate distance to avoid a mechanical and electromagnetic interference.

Installed in a suitable structure to make operation, media loading and maintenance easily.



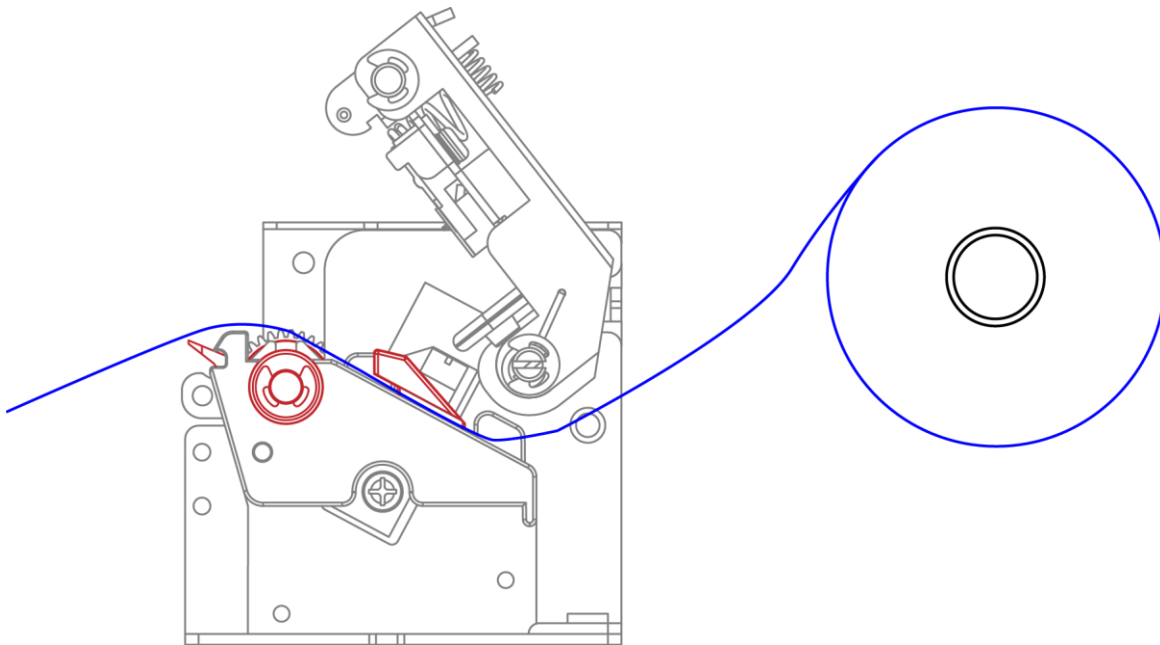
3.2 Installation Requirements

The printer has four bores in its bottom frame for mounting to a supporting structure. Support structure must be sturdy and stable to prevent unnecessary movement or vibration. Support structure should be well designed to provide suitable environmental conditions that meet the required specifications.



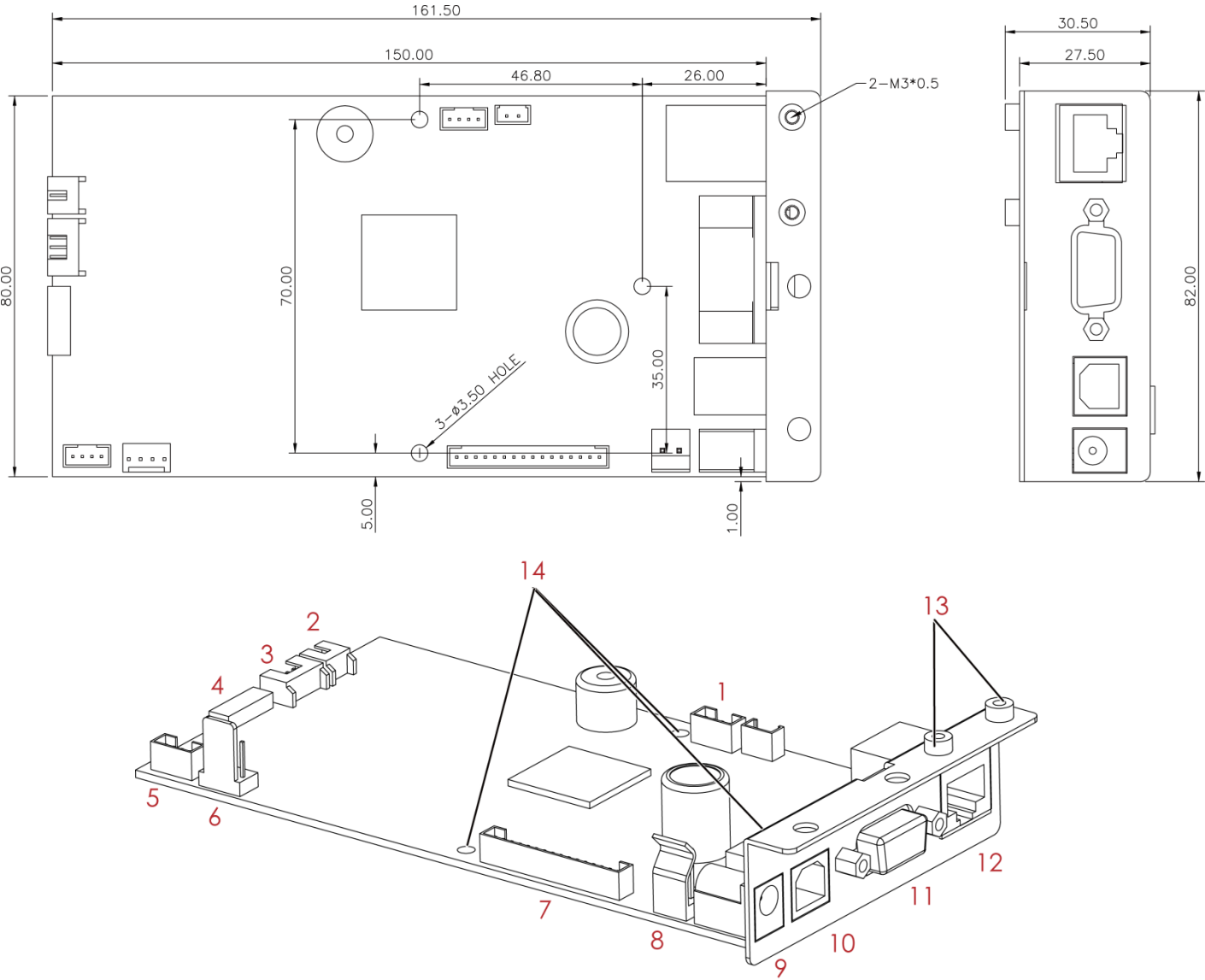
3.3 Media Loading

Guide the media through the path as illustrated. Use adjustable media guide to regulate the media.



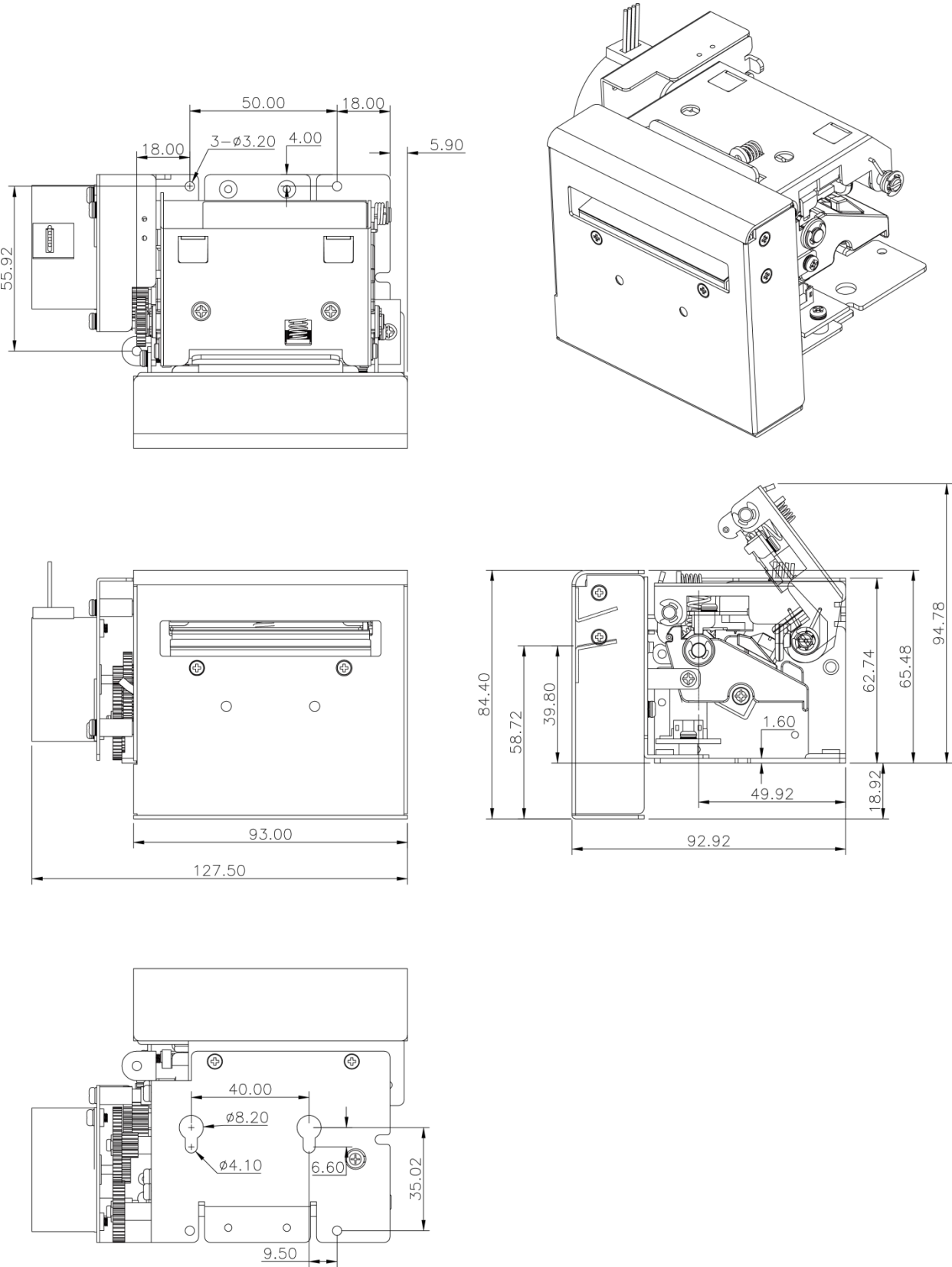
4. Accessories(dimension)

4.1 PCBA

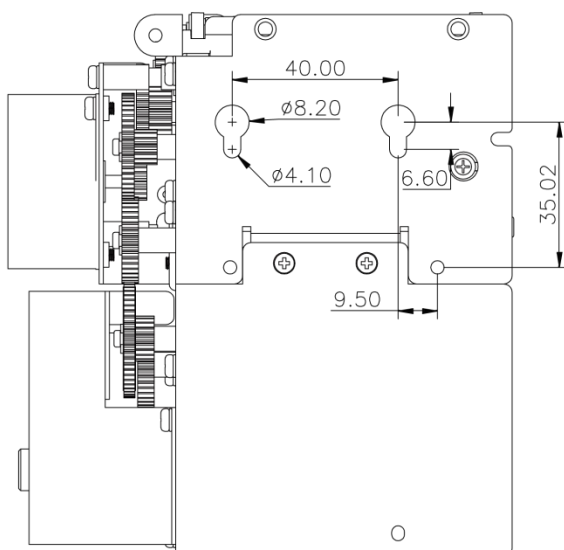
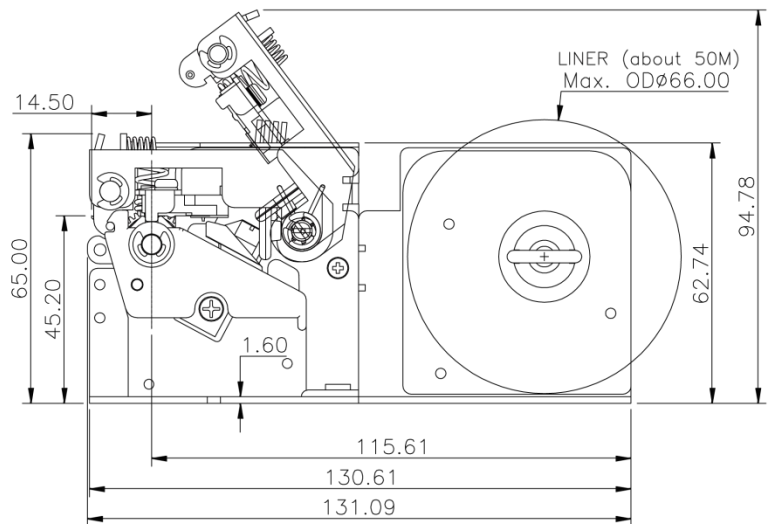
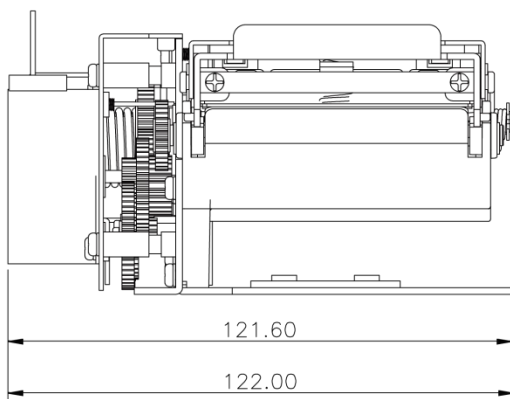
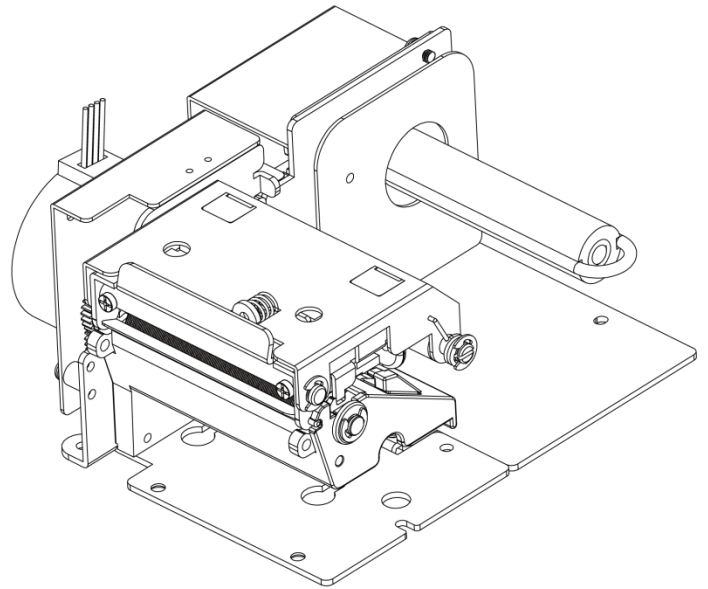
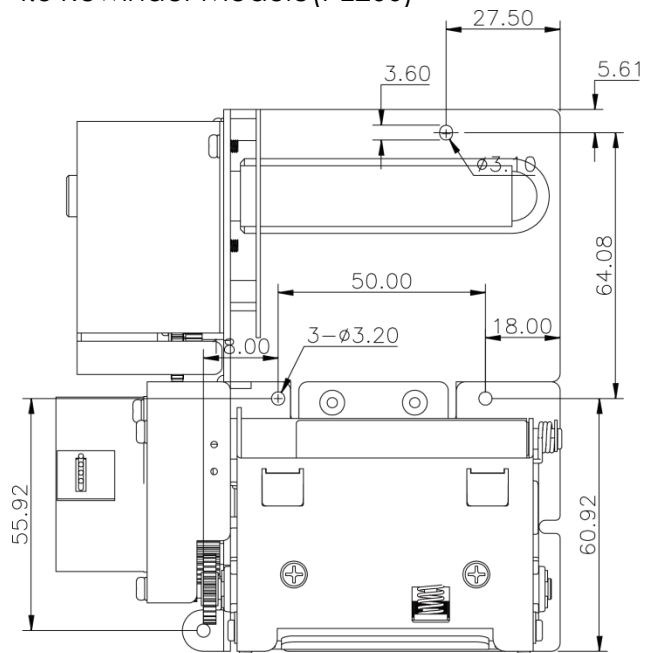


1	LED indicator & Feed button
2	Dispenser
3	Cutter
4	BT&WiFi
5	Transmissive Sensor
6	Motor
7	Printer Head
8	Power Switch
9	Power Slot
10	USB Port
11	Serial Port (RS-232)
12	Ethernet Port
13	Ground Mount Screw Bores
14	PCB Fix Screw Bores

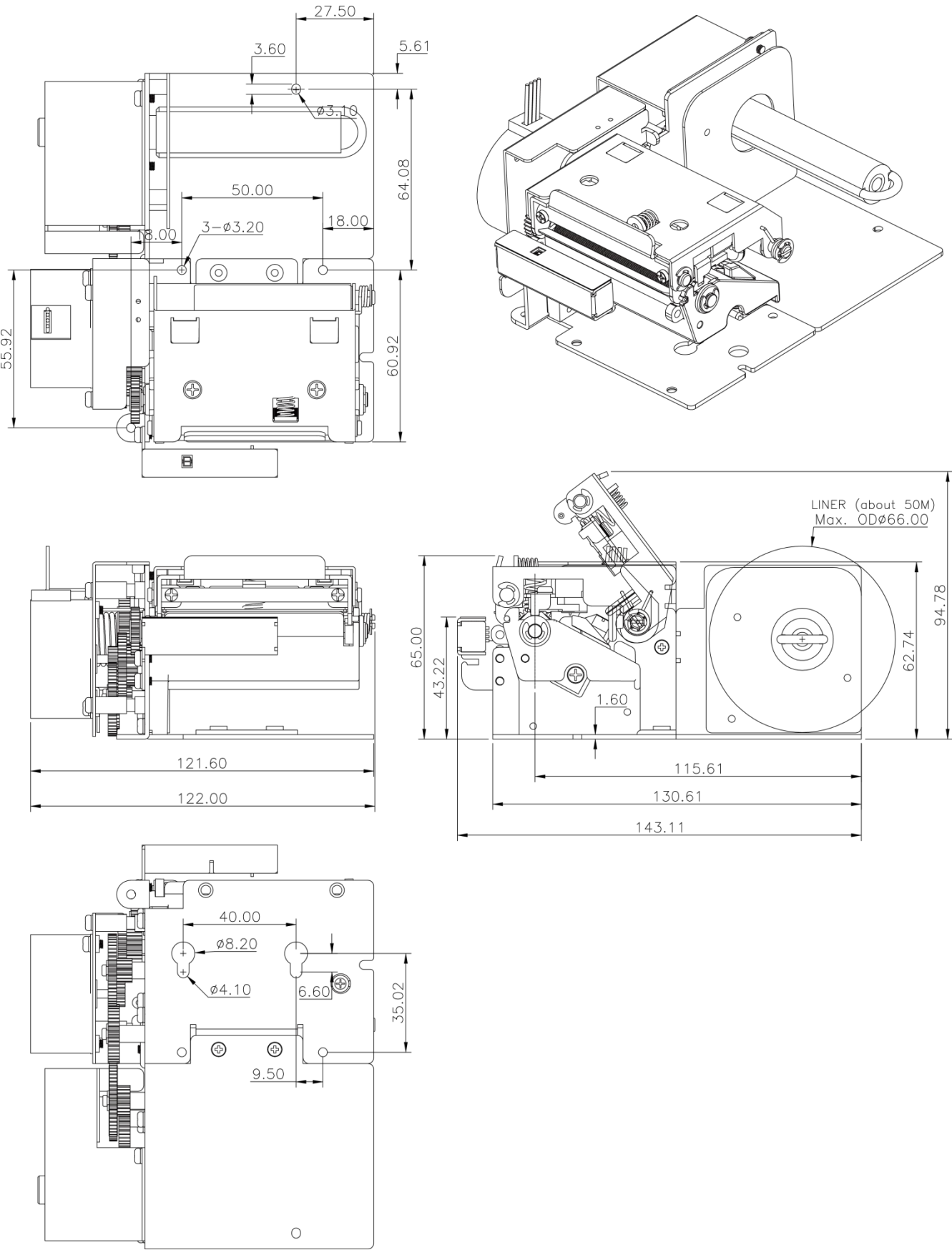
4.2 Linerless Cutter Module(PE200)



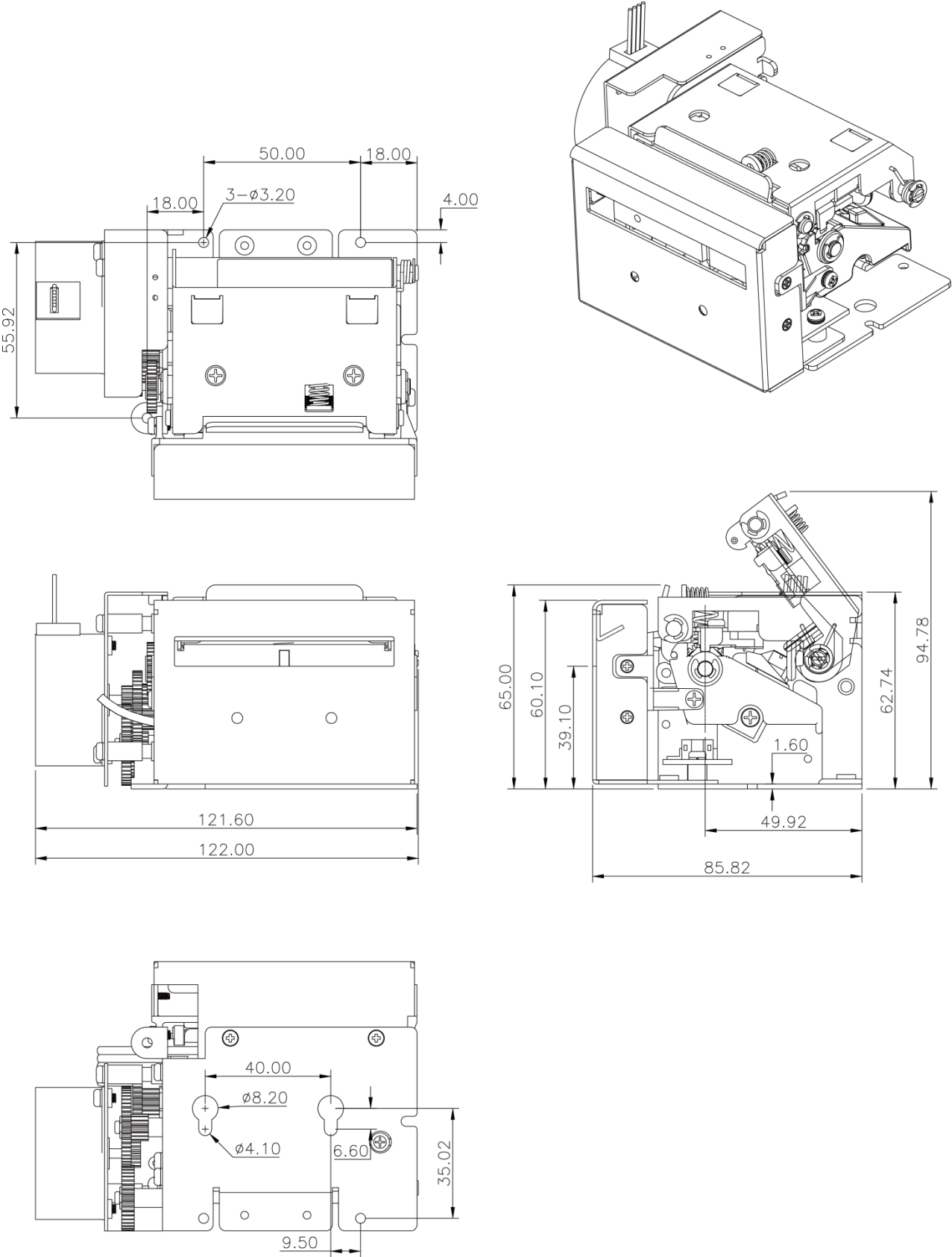
4.3 Rewinder Module(PE200)



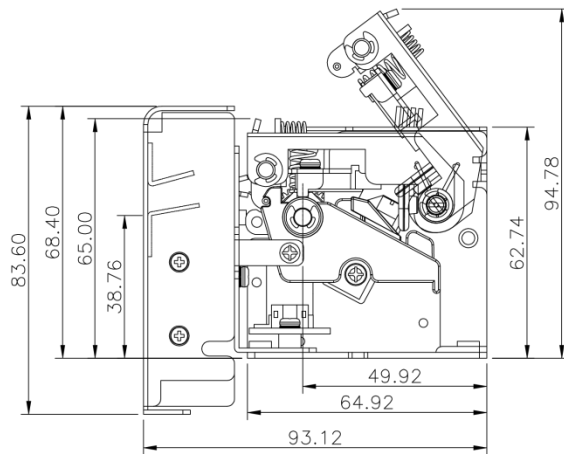
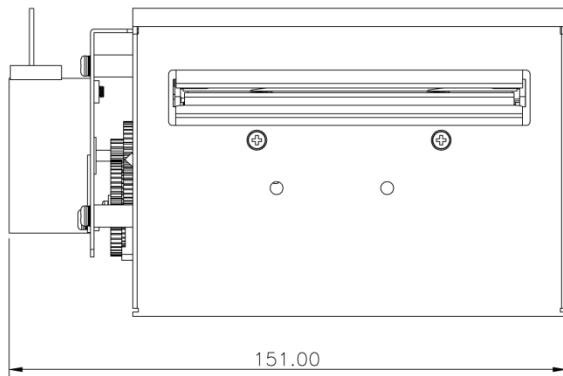
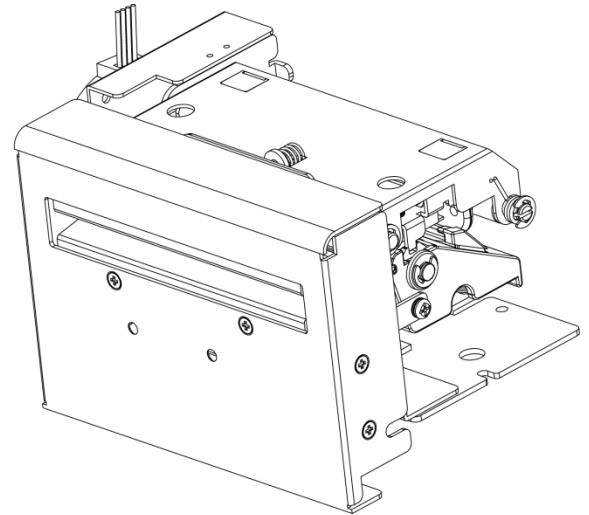
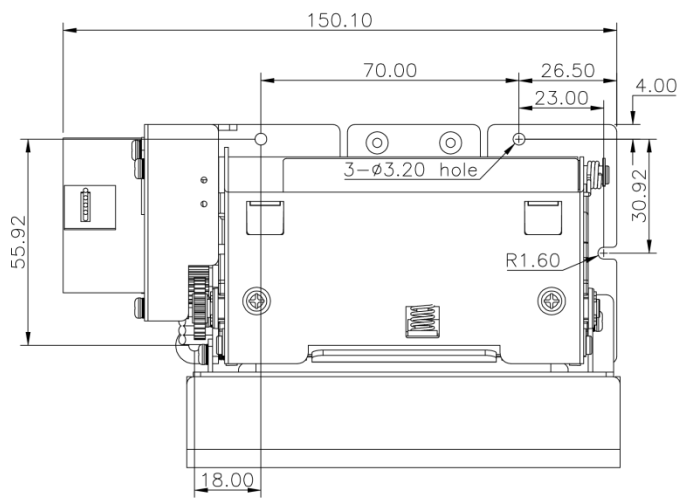
4.4 Label Taken Sensor and Rewinder(PE200)



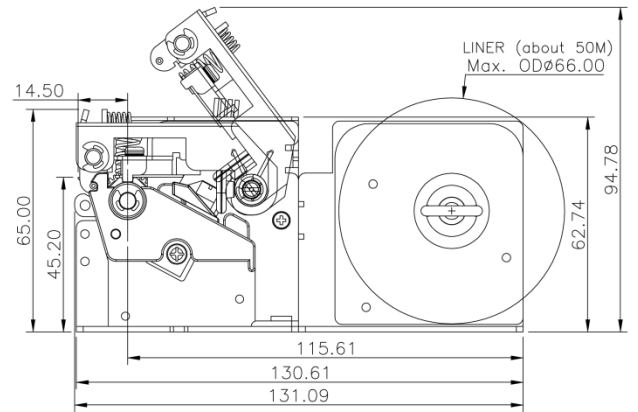
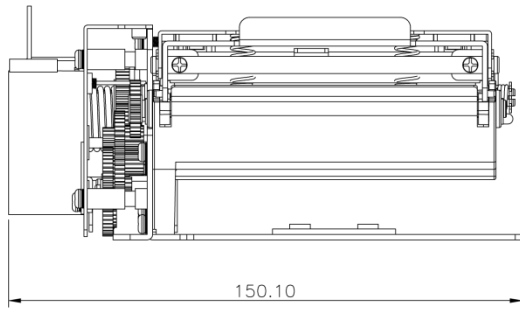
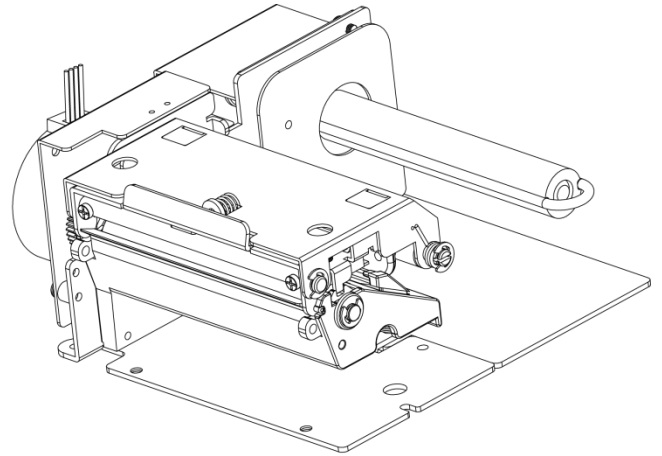
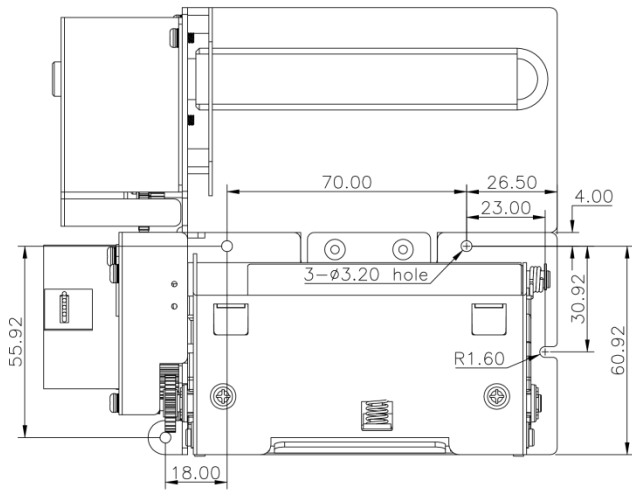
4.5 Standard Cutter Module(PE200)



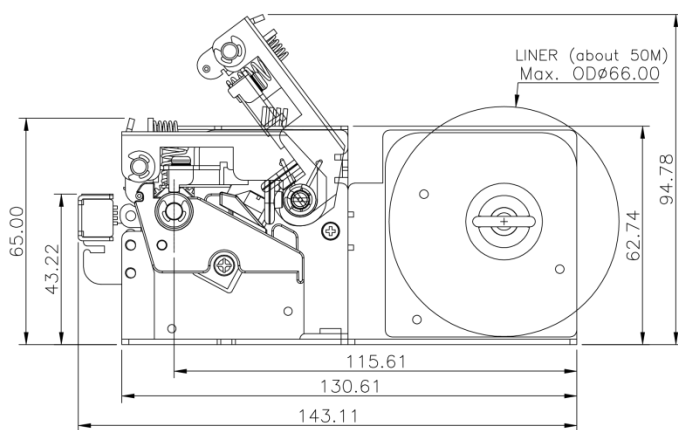
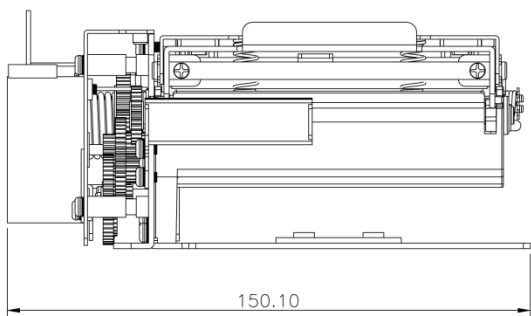
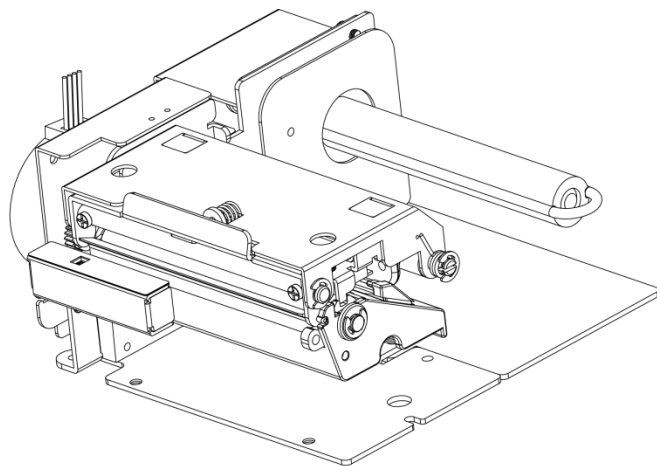
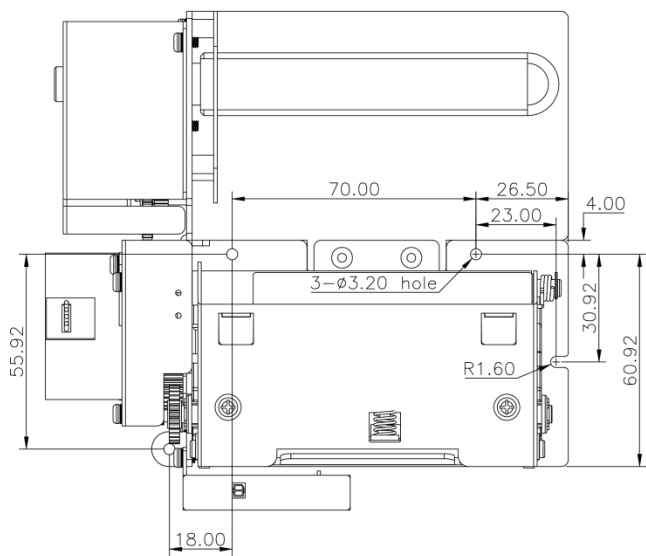
4.6 Linerless Cutter Module (PE300)



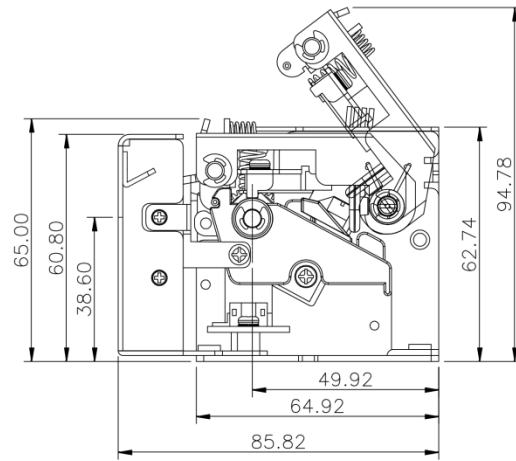
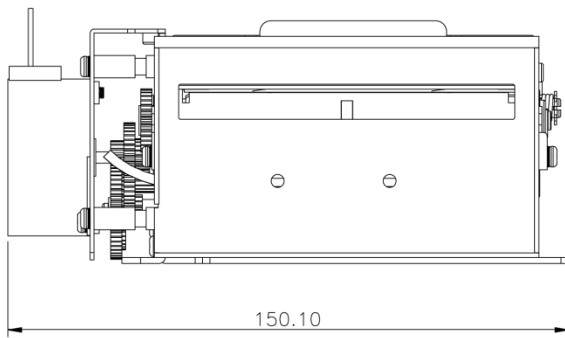
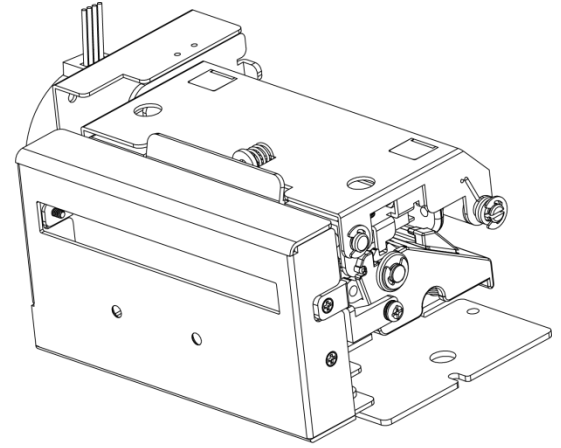
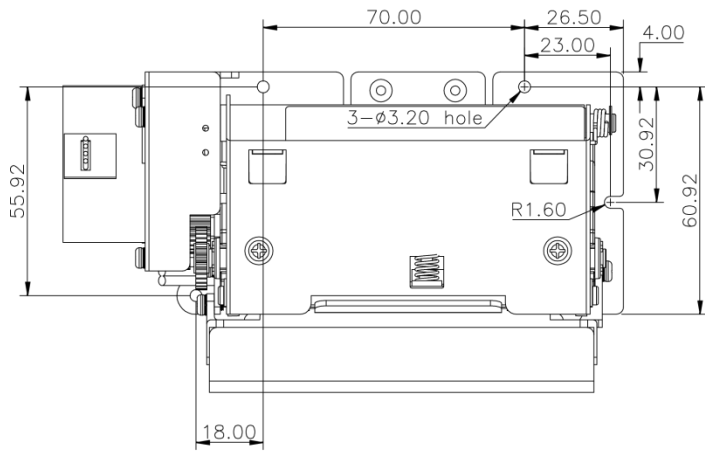
4.7 Rewinder Module(PE300)



4.8 Label Taken Sensor and Rewinder(PE300)

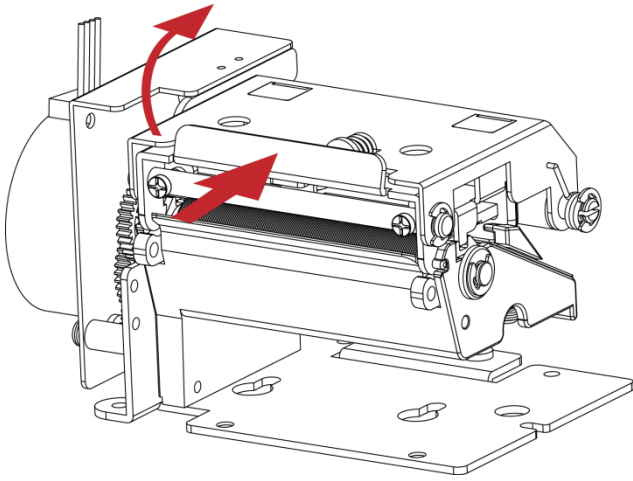


4.9 Standard Cutter Module(PE300)

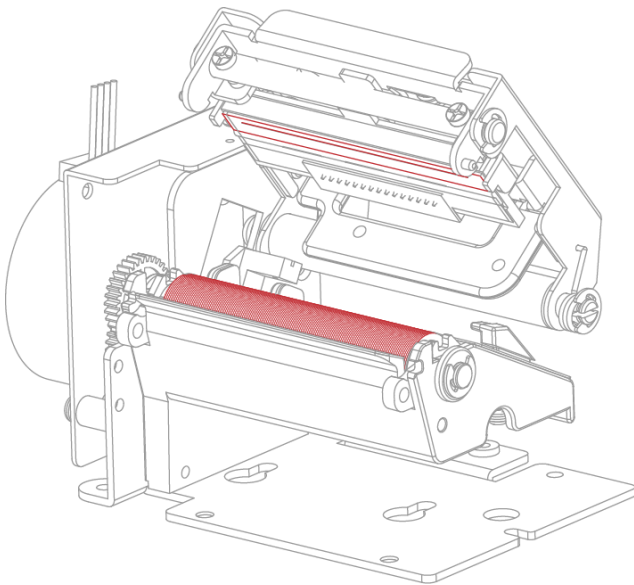


5. Regular Maintenance

5.1 Printer Head and platen Cleaning



Step1.Lift up the TPH.

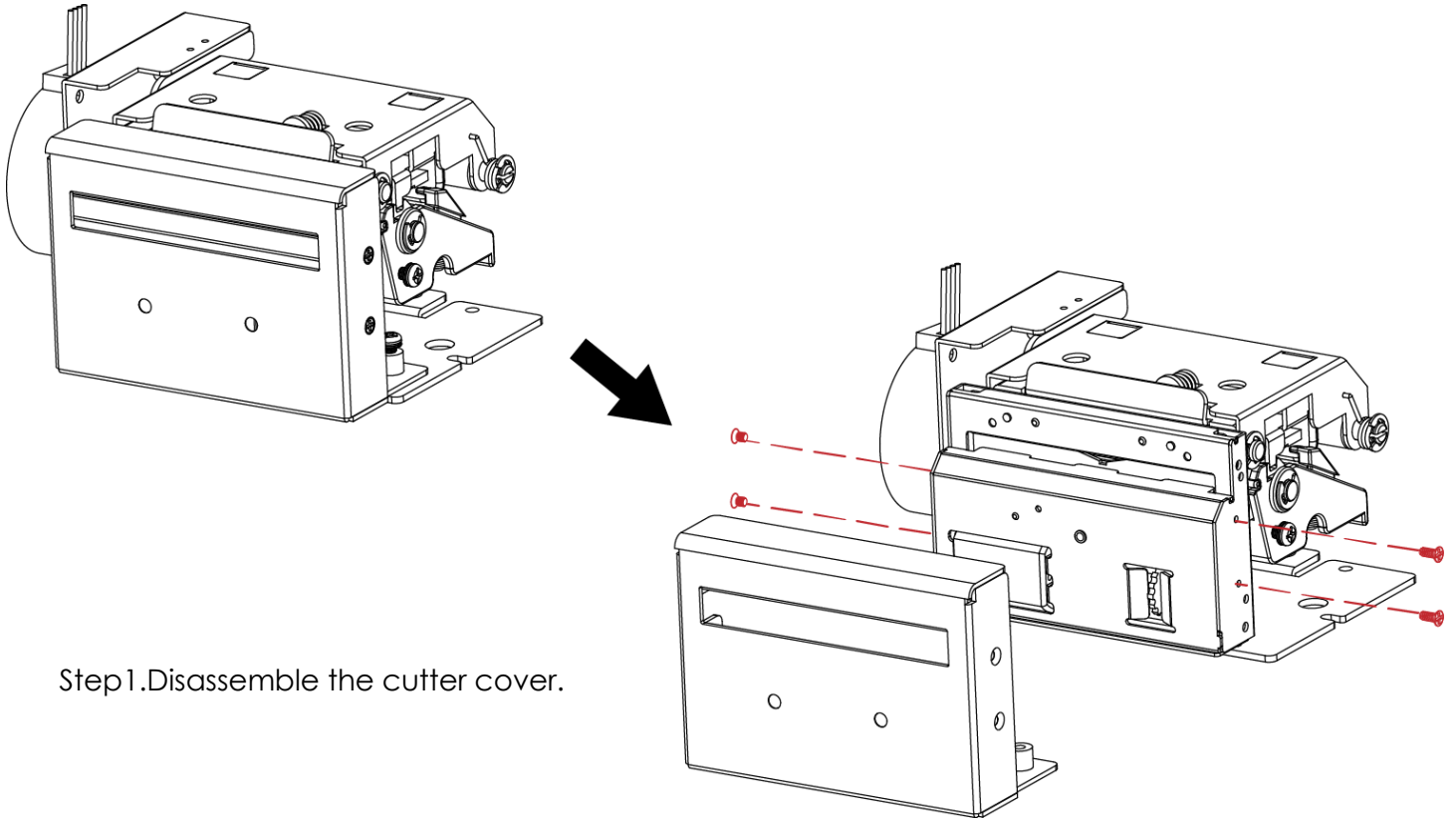


Step2.Wipe the platen with a **dry cloth** or a cloth with silicone oil.

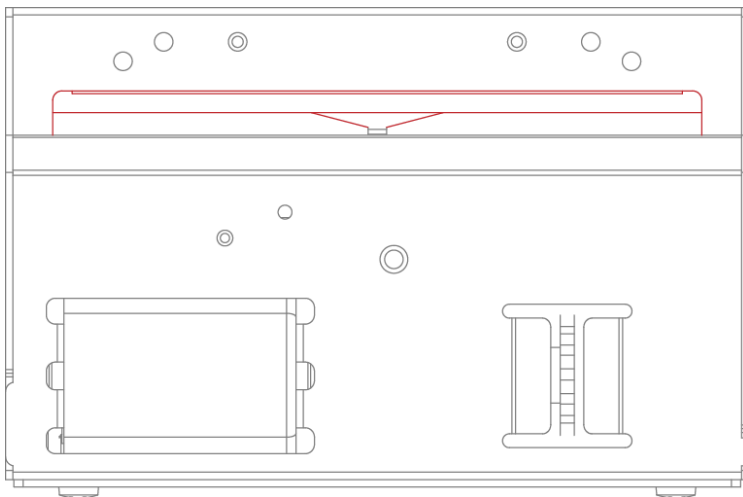
Step3. Wipe the printer head with a **cleaning pen** or a **cloth dampened with alcohol**.

*Note : Do not use alcohol and other cleaning agents containing solvents to clean the platen and cutters.

5.2 Cutter Cleaning



Step1.Disassemble the cutter cover.



Step2. Clean the blade edge up with a cotton bud. (Remove any accumulation of dirt, paper dust and adhesives.)

*Note : Do not use alcohol and other cleaning agents containing solvents to clean the platen and cutters.

6. Operator Panel

6.1 Feed Button

When you press the FEED button, the printer moves the label to the defined stop position. If you are using continuous labels, pressing the FEED button will move label stock until you release the button again. If you are using individual labels, pressing the FEED button will move only one label. If the label does not stop at the correct position, you need to run the auto-detection function on the label stock.

6.2 LED Status

Press the FEED button and keep it pressed, then switch on the printer. You will hear two beeps and the LED lights up red. Release the FEED button. The printer will now automatically measure the label size and then print a test page

LED indicator	Status	Description
Green	Standby mode	The printer is ready for operation.
Red (flashing)	Error mode	The printer has detected an error. (see Section 7. Troubleshooting)

6.3 Label Size Calibration

The printer can automatically detect and store label height.

That means the host computer does not need to transmit the label height to the printer.

1. Check that the label sensor is positioned correctly.
2. Check that the label stock is loaded correctly.
3. Switch off the printer.
4. Switch on the printer, keeping the FEED button pressed. When the LED starts to flash red, release the FEED button. The printer will now measure the label stock and store the label height.
5. Once the printer has successfully measured the label stock, it will print a self-test label.

6.4 Label Size Calibration Printout

The self-test function helps you find out whether the printer is functioning normally.

The printer prints the following test page:

Model & Version	→	PE200:GX.XXX
USB ID setting	→	USB S/N : 12345678
Serial port setting	→	Serial port : 96,N,8,1
MAC address of Ethernet port	→	MAC Addr: xx-xx-xx-xx-xx-xx
IP protocol setting	→	DHCP Enable
IP address of Ethernet port	→	IP xxx.xxx.xxx.xxx
Gateway setting	→	Gateway xxx.xxx.xxx.xxx
Netmask setting	→	Sub-Mask xxx.xxx.xxx.xxx
		#####
Number of DRAM installed	→	1 DRAM installed
Image buffer size	→	Image buffer size : 1500 KB
Number of forms	→	0000 FORM(S) IN MEMORY
Number of graphics	→	0000 GRAPHIC(S) IN MEMORY
Number of fonts	→	000 FONT(S) IN MEMORY
Number of Asian fonts	→	000 ASIAN FONT(S) IN MEMORY
Number of Databases	→	000 DATABASE(S) IN MEMORY
Number of Scalable fonts	→	000 TTF(S) IN MEMORY
Free memory size	→	4073 KB FREE MEMORY
Speed, Density, Ref. Point, Print direction	→	^S4 ^H8 ^R000 ~R200
Label width, Form length, Stop position	→	^W102 ^Q100,3 ^E18
Cutter, Label Dispenser, Mode	→	Option : ^D0 ^O0 ^AD
Sensor Setting	→	Reflective AD: 1.96 2.84 2.49 [0.88_23]
Code Page	→	Code Page: 850
Printer is on factory default	→	Default state= Yes

7. Troubleshooting

LED indicator	Beeps	Description	Solution
 (flashing)	None	High temperature at the print head.	Once the print head has cooled down, the printer switches to standby mode.
	2 x 2 beeps	No paper is detected.	Make sure that the label sensor is positioned correctly. If the sensor still does not detect the paper, run the auto-detection function again.
		The paper is finished.	Replace the label roll.
	2 x 2 beeps	Paper feed problem.	Possible reasons: the print medium has become trapped around the rubber roll; the sensor cannot detect a gap or black mark between the labels; there is no paper. Please reset the sensor.
	2 x 2 beeps	The memory is full. The printer prints the message "Memory full".	Delete unnecessary data or install additional memory.
	2 x 2 beeps	Unable to find file. The printer prints the message "Filename cannot be found".	Use the "~X4" command to print all files. Then check whether the files exist and whether the names are correct.
	2 x 2 beeps	A file of the same name already exists. The printer prints the message "Filename is repeated".	Change the name of the file and try storing it again.

Appendix

Printer Interface

Serial port

Default setting : Baud rate 9600, no parity, 8 data bits, 1 stop bit, XON/XOFF protocol and RTS/CTS

RS232C housing (9-pin to 9-pin)

DB9 socket		DB9 plug
---	1_____1	+5V, max 500mA
RXD	2_____2	TXD
TXD	3_____3	RXD
DTR	4_____4	N/C
GND	5_____5	GND
DSR	6_____6	RTS
RTS	7_____7	CTS
CTS	8_____8	RTS
RI	9_____9	N/C
Computer		Printer

【Note】 The total current to the serial port may not exceed 500 mA.

USB port

Connector type : Type B

Pin No.	1	2	3	4
Function	VBUS	D-	D+	GND

Ethernet (RJ-45)

PIN NO.	FUNCTION
1	T+
2	T-
3	R+
4	N/C
5	N/C
6	R-
7	N/C
8	N/C