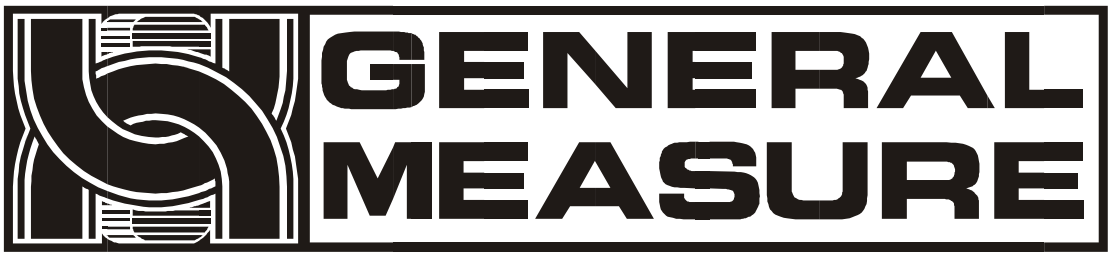



# Automatic Weigh Filler

# User's Manual

**Model no.: AF-25K-103A**

110610300001

# Contents

# 1.Information

The Weigh Filler AF-25K-103A is the perfect all-round weighing machine to fill sensitive granules from 5kgs to 25kgs, such as rice, bean, maize, seed etc. It is very flexible and applicable for very different products and it reaches a filling speed of 18 fillings per minute with just one weighing head. Underfeeding is impossible with the self-controlled weighing machine. This guarantees both satisfied customers and minimum product loss.

## 1.1.Characteristics

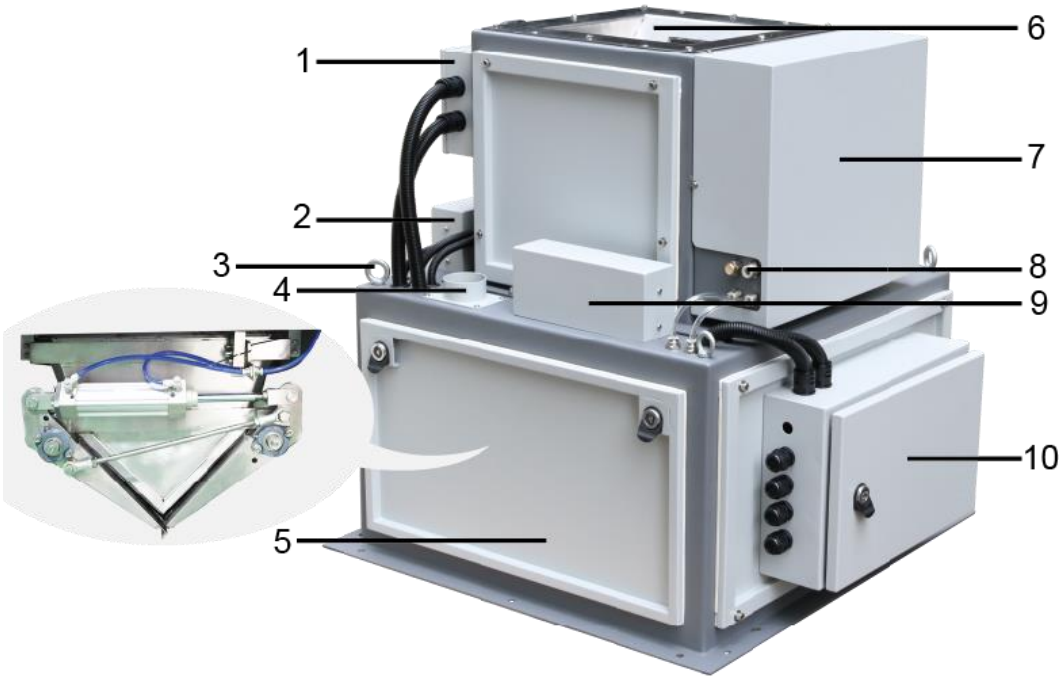
- Weighing capacity from 5kgs to 25kgs
- High visibility4.3inch TFT screenwith graphic user interface
- Weigh products precisely without inputting various setting
- Automatic weighing compensation and zero tracking
- 50,000pcs weight value for production statistics
- Data storage and data printout ready
- Access protection by password

## 1.2. Specification

| | |
|---|---|
| Model no. | AF-25K-103A |
| Weighing Range： | 5~25kgs |
| Accuracy： | ±10g |
| Weighing Hopper Volume： | 30L |
| Operation Air Pressure： | 0.4~0.6Mpa, 1.2m³/h |
| Power Supply： | AC110~260V，50~60Hz |
| Dimensions(L x W x H)： | 815mm x 730mm x 790mm |
| Operating Temperature | -10℃～40℃ |
| Relative Humidity | 90% R.H. Without dew |

## 1.3. Structure

The Weigh Filler AF-25K-103A are specially designed for sensitive granules, which are easy to integrate in packaging equipment.

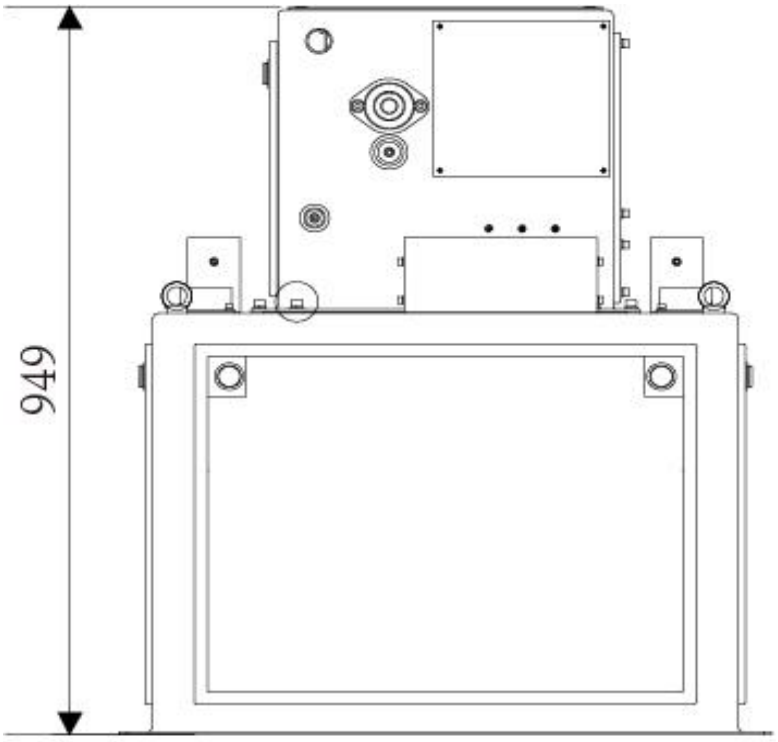


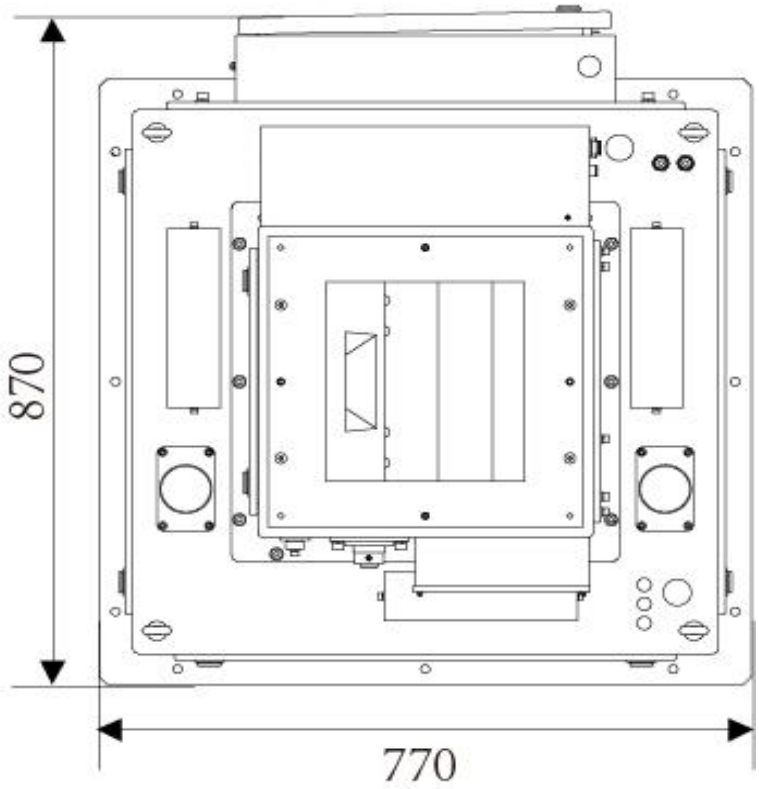

1. Junction box
2. Load cell
3. Lifting eyebolt
4. Dust removing flange
5. Weighing hopper
6. Filling hopper
7. Cylinder control box
8. Air vent
9. Load cell
10. Electronic Control box

Note: The user need take off the cover of dust removing flange first, then connect with the tube to remove inside dust.

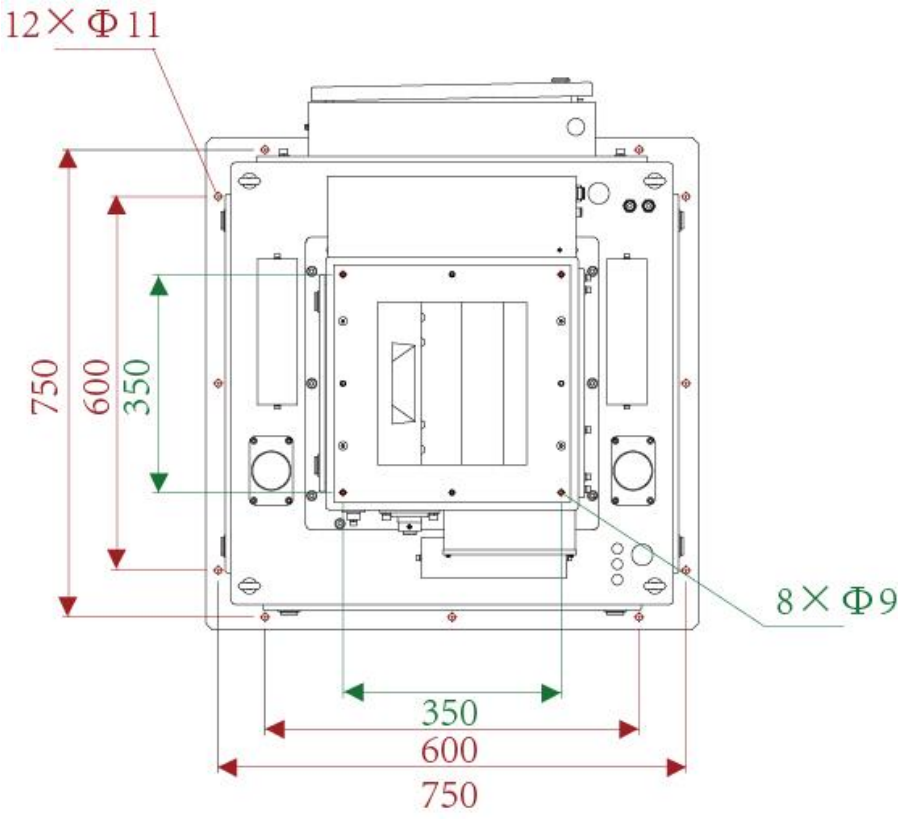
# 2. Dimension

## 2.1. Outward appearance

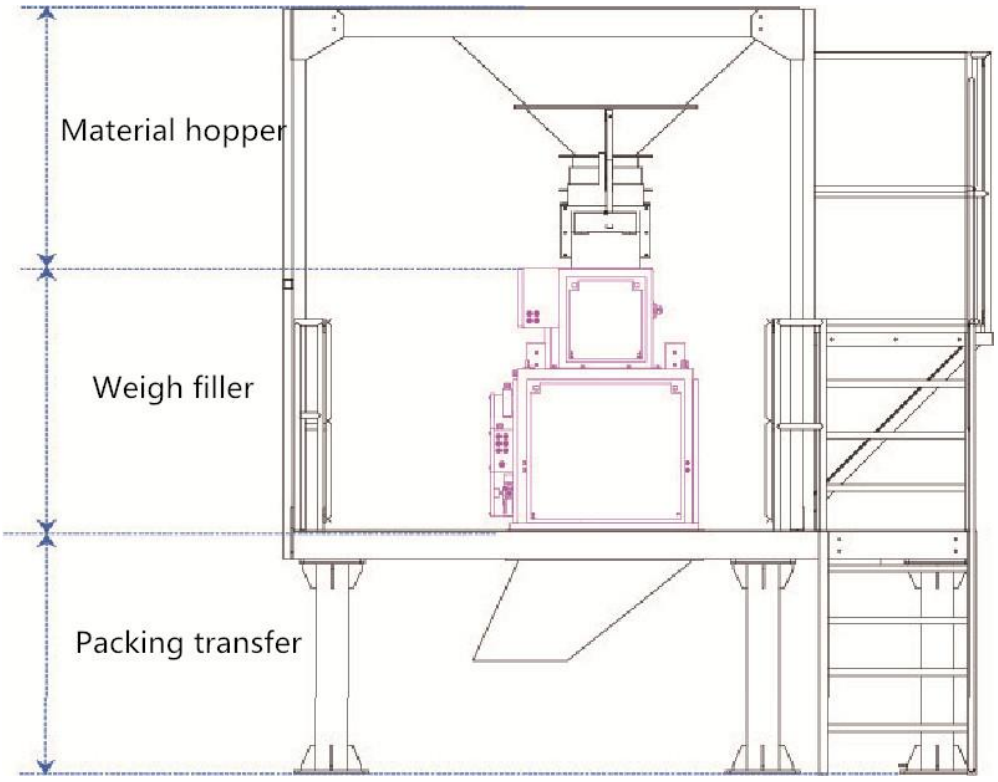


## 2.2. Flange size




## 2.3. Installation diagrammatic sketch



# 3. Installation

## 3.1. Warranty

We do not accept any liability for damages resulting from:

1) Non-compliance with our operating conditions and user's manual.

2) Unauthorized installation.

3) Defective electrical installation by the customer.

4) Structural changes to our equipment.

5) Incorrect operation.

6) Natural wear and tear.

## 3.2. Warning notice

The main switch must be off in the following situations:

1) Before carrying out work in the control cabinet, cut off power and disconnect the power connector.

2) When cleaning and maintenance work is being carried out on the outside of the control cabinet.

3) Risk to life from an electrical charge in the control cabinet.

The device must be operated by people who have been instructed in the operating procedure.

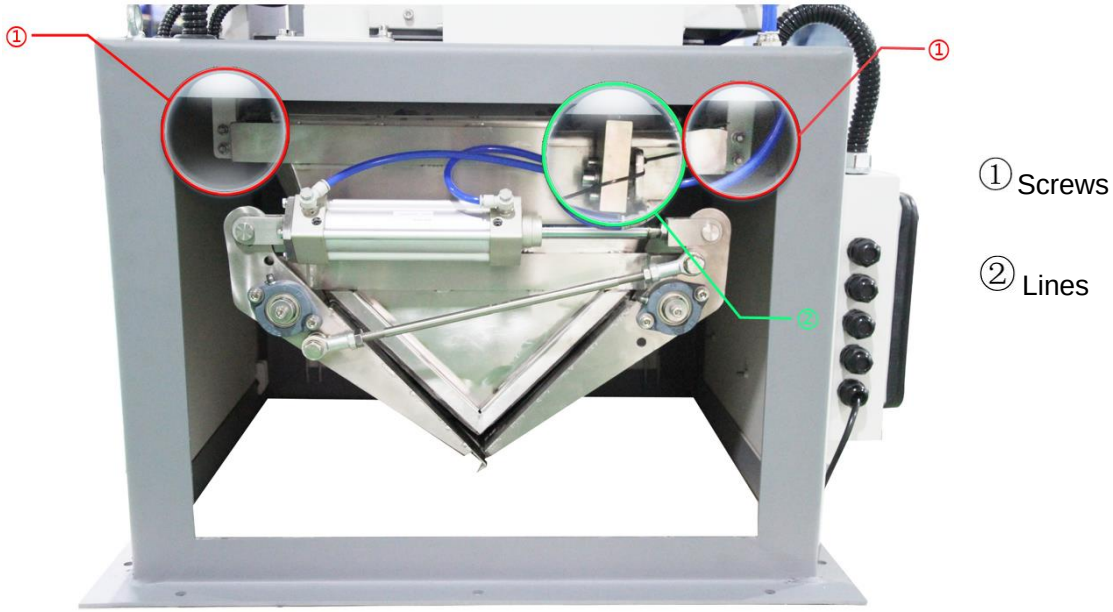
The operator must understand the safety instructions in this manual.

Even though the device is equipped with all the required safety installations, injuries to the operating personnel or damage to property is possible if the safety instructions are not heeded.

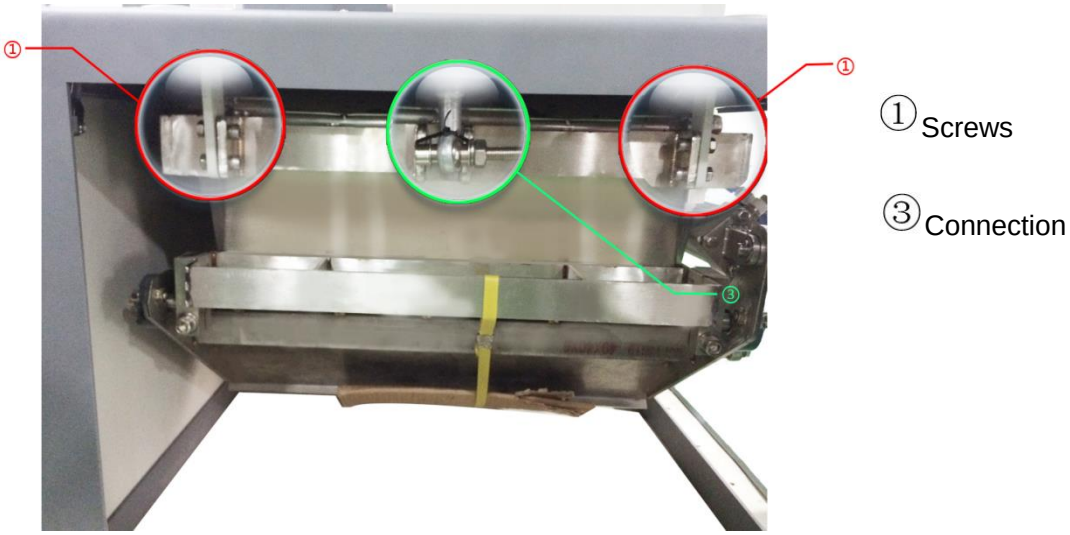
## 3.3. Connection

### 3.3.1 Load cell

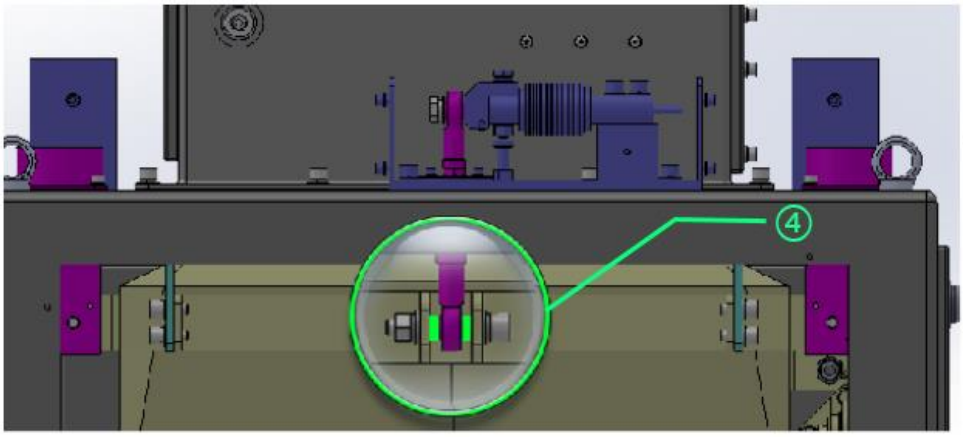
Please take off the screws on the protection boards which protect load cells to avoid damage in delivery




Side view-1




Side view-2



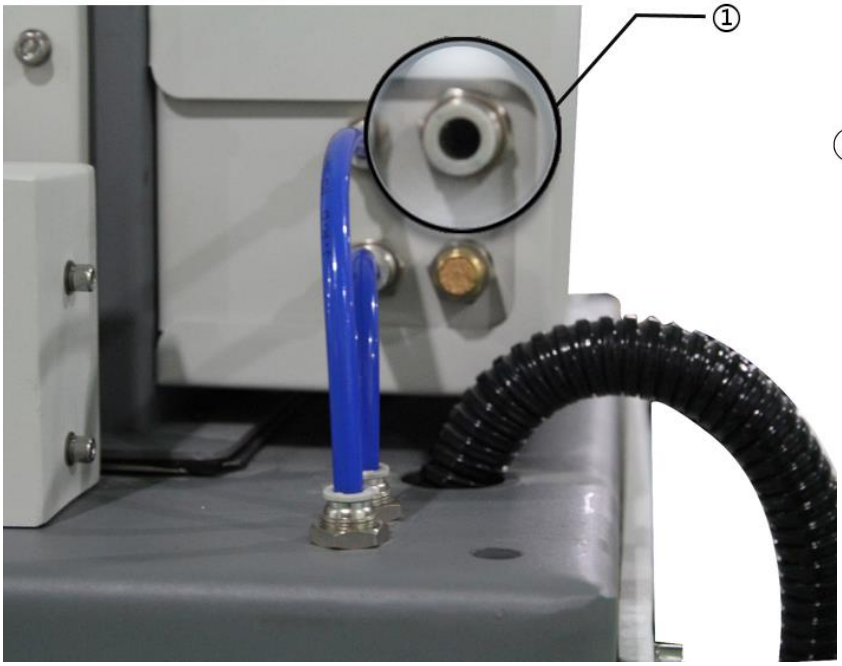

④ Screws

Sketch

Note: 1. Please install load cells after the weigh filler has been fixed on equipment.

2. Please fasten the screws when load cell connection and weighing device are in nature.

### 3.3.2 Air vent

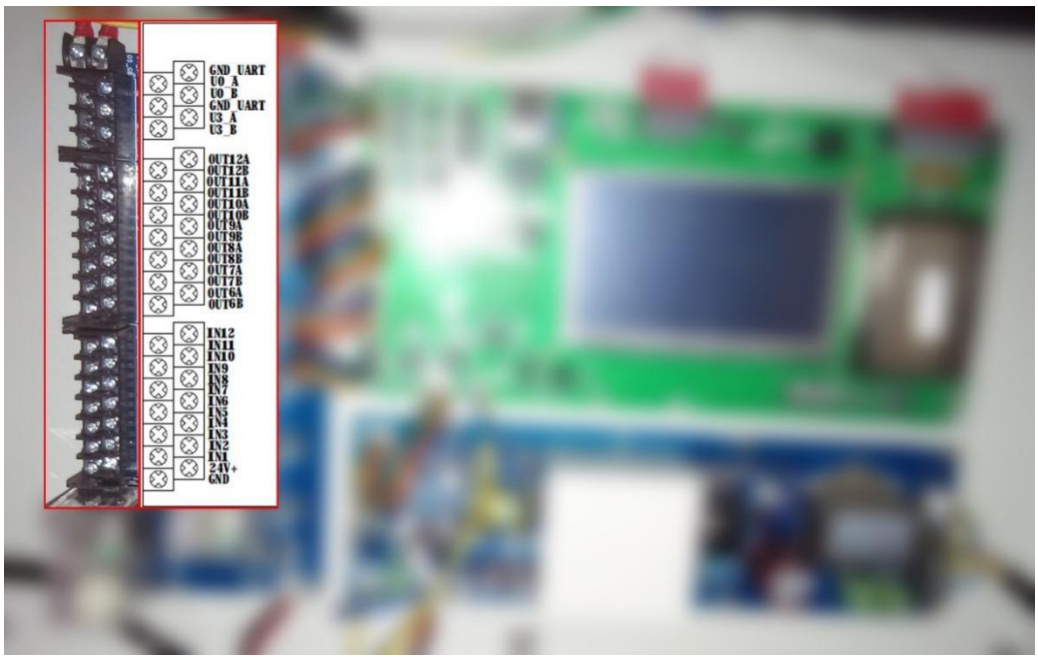



① Air vent

Operation air pressure：0.4~0.5Mpa, 1.2m³/h

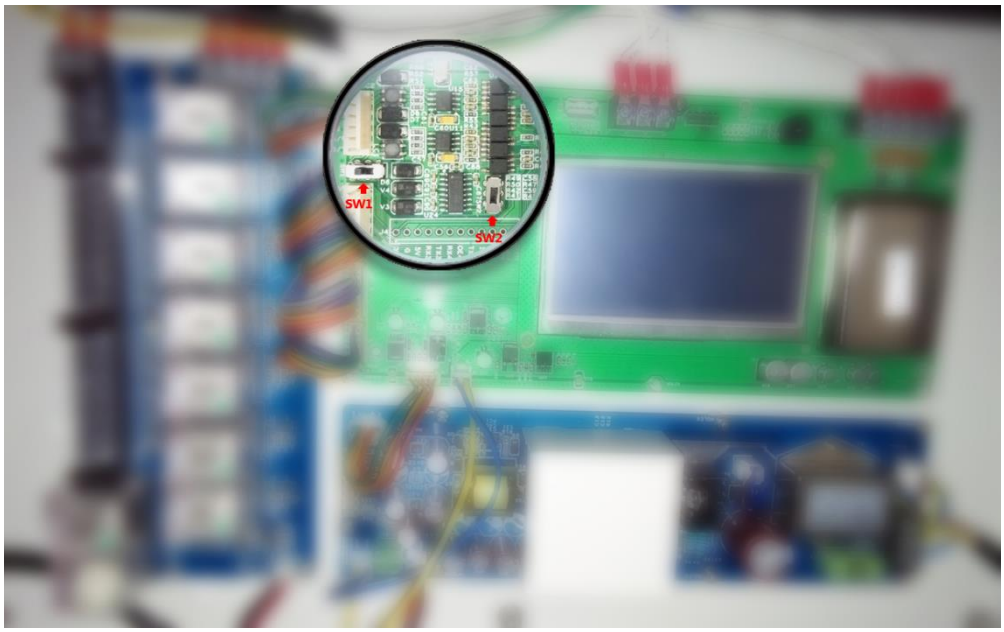
### 3.3.3 Serial port

IO terminals：

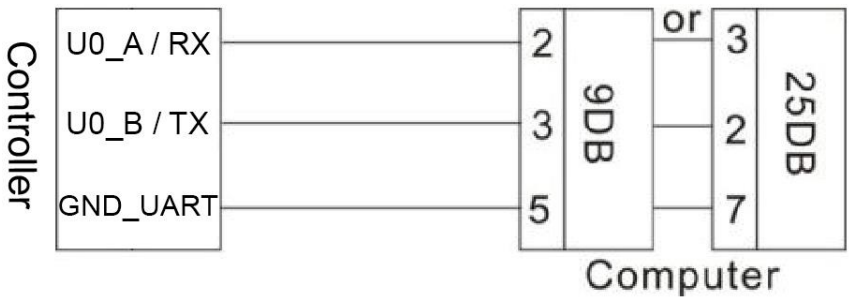



**1). Serial port 1（GND_UART、U0_A、U0_B）connection：**

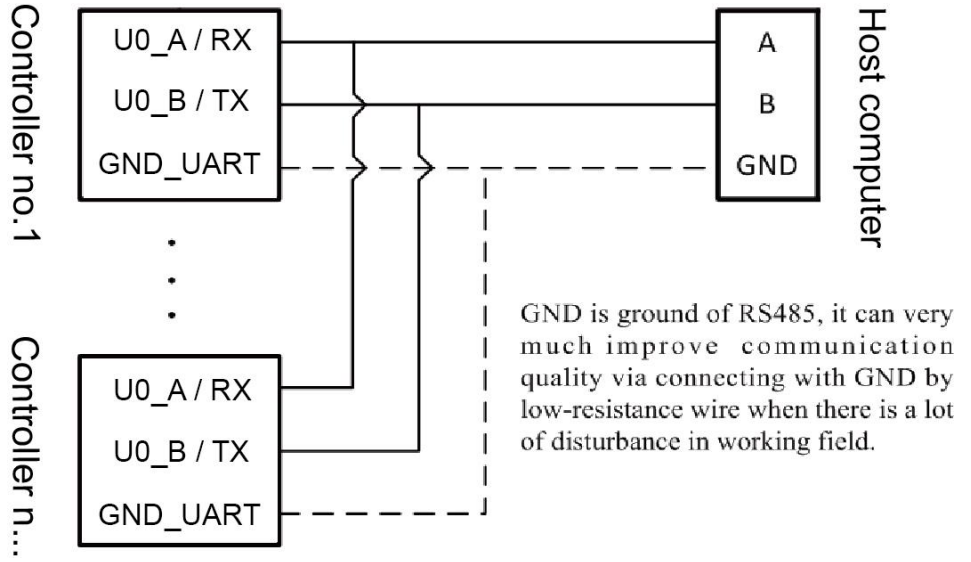
RS485/RS232 optional by SW1 and SW2 on main board: SW1 to left and SW2 up for RS485 communication, and SW1 to right and SW2 down for RS232 communication.



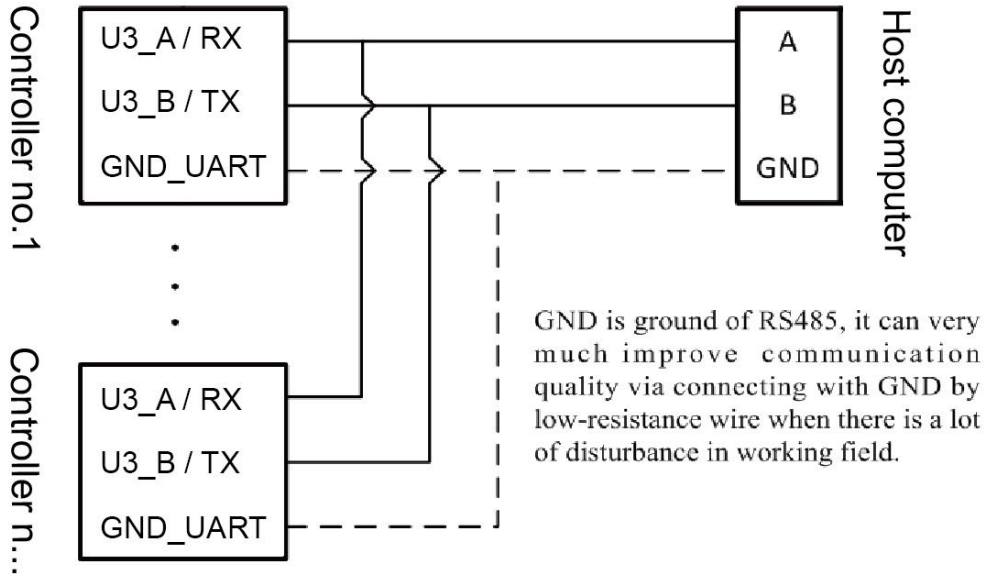
RS232 connection：




RS485 connection：



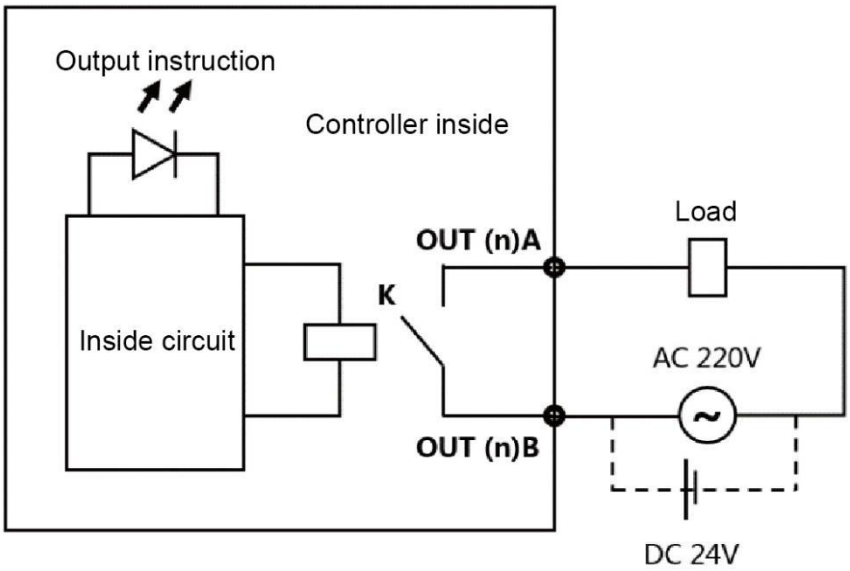

**2).Serial port2（GND_UART、U3_A、U3_B）：**Only RS485 connection



**3).（OUT6A、OUT6B）–（OUT12A、OUT12B）**

The user can refer parameter chapter to self-define 7pcs outputs.

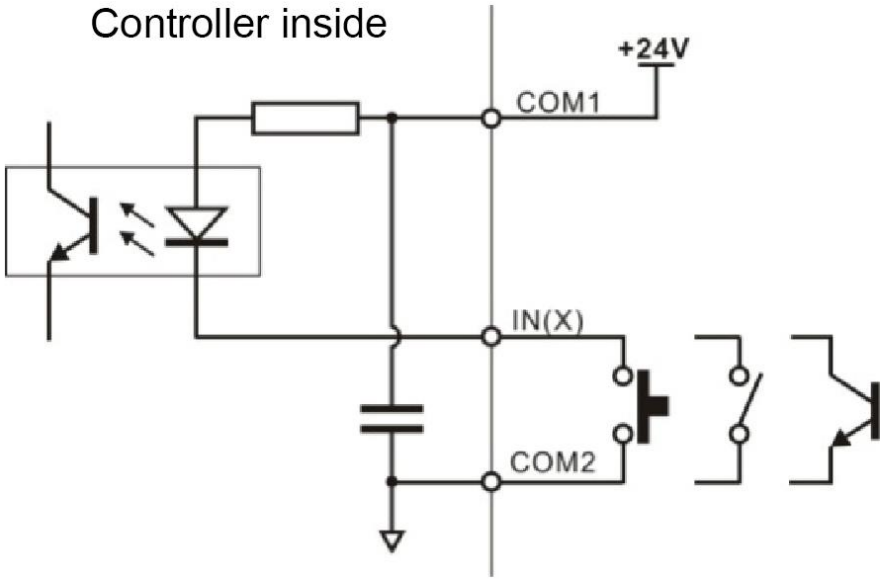
Controller output schematic as follows.**OUT1~OUT5**are set by manufactory, so the user don't need to connect and define.




**4). IN1–IN12：**

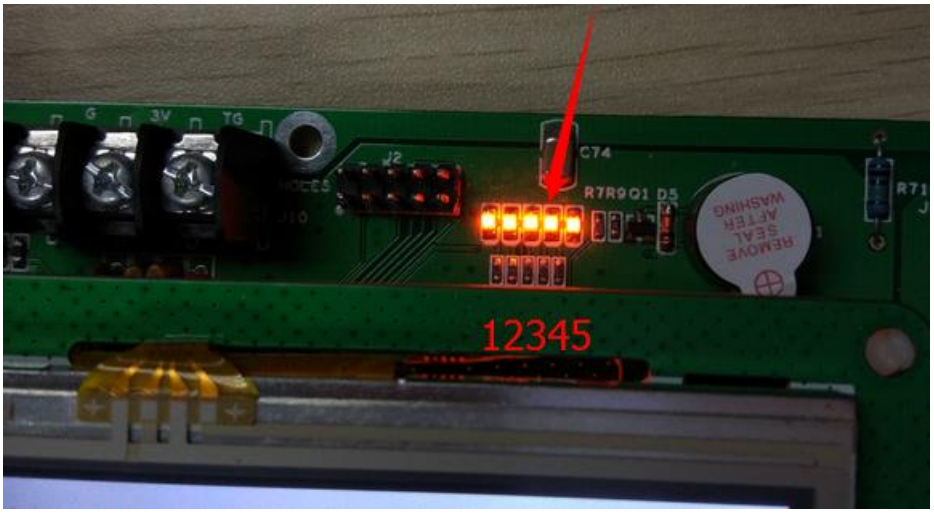
The user can refer parameter chapter to self-define 12pcs Inputs at active low.

Controller input schematic as follows.




5)**. 24V+、GND：**The terminal supply one DC24V power, which positive connect with indicator 24V+，negative electrode with indicator GND.

## 3.4. LED instruction




There are five LED lights named LED1~5 from the left to the right.

All of LED1~5 bright means the controller is updating within 4 seconds.

LED state instruction：

LED1：Sparkle interval time is one second. If not, the controller will have problems.

LED2：Bright for running. If not, the controller will stop.

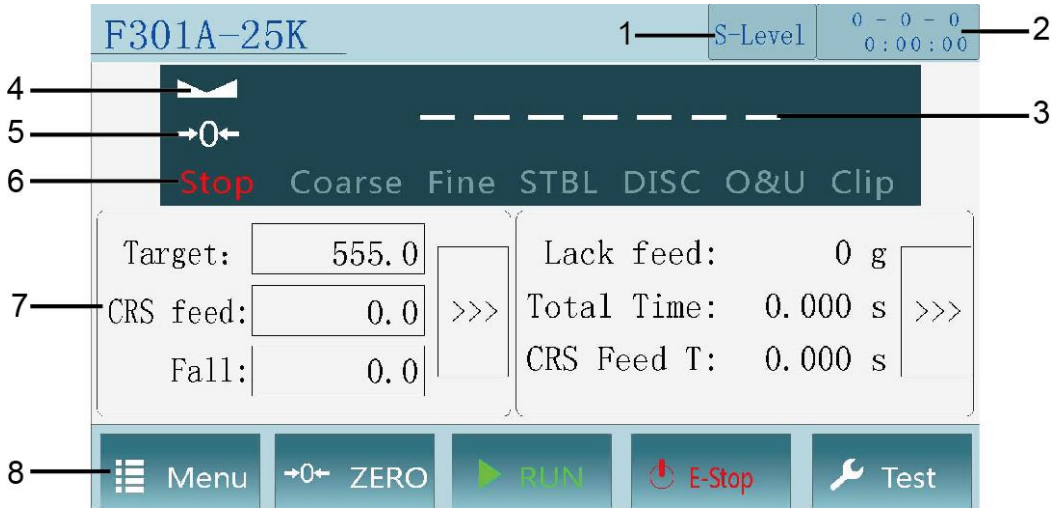
LED3：Bright for error in A/D convert module. If it is dark, the A/D convert module is OK.

LED4：Bright for serial port no. 1 to send data.

LED5：Bright for serial port no. 2 to send data.

# 4. Operation

## 4.1. Menu




Instruction:

① Load information：User level.

②System time and date：Current time and date.

③Weight display：Show weight value and unit.

④Stable sign：Green sign for stable and white sign for unstable.

⑤Zero sign：Green sign for zero and white sign for not zero.

⑥Procedure：Run/Stop, Coarse, Fine, Stable load, Discharge, Over and Under, Clip bag.

⑦Data：The left side is current recipe data which can be revised by users. The right side show statistics and last packing data.

⑧Function：5pcs keys for system function.

Key function:

：Enter main menu

：Set current weight to zero

：Start the packing process.

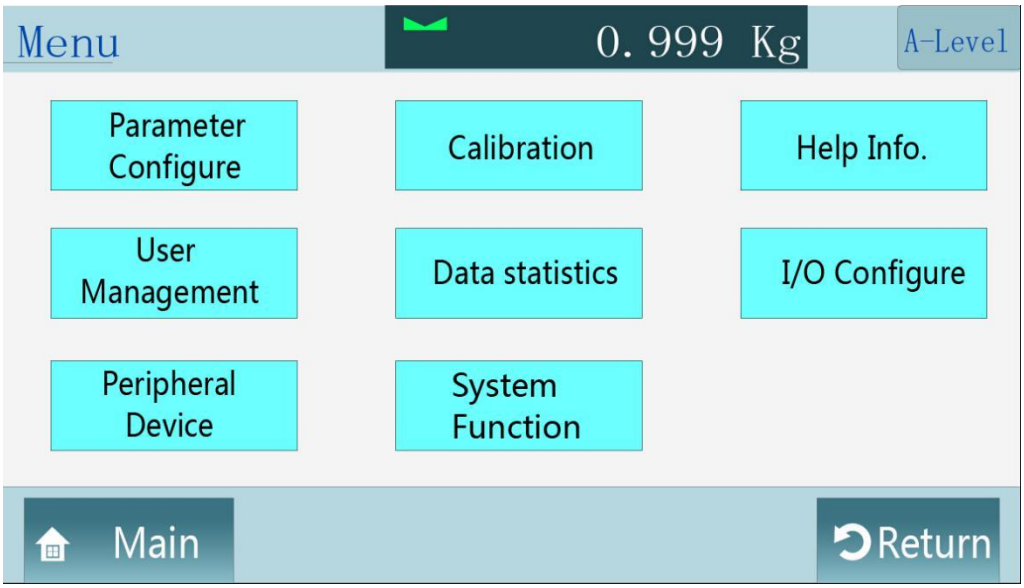
：Stop packing process in running

：Set parameters

## 4.2. Main menu

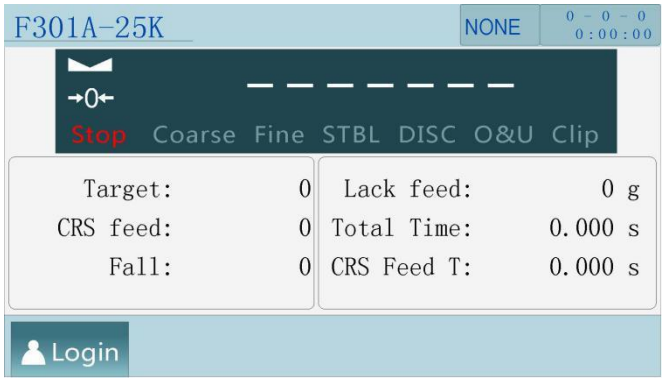
Press 

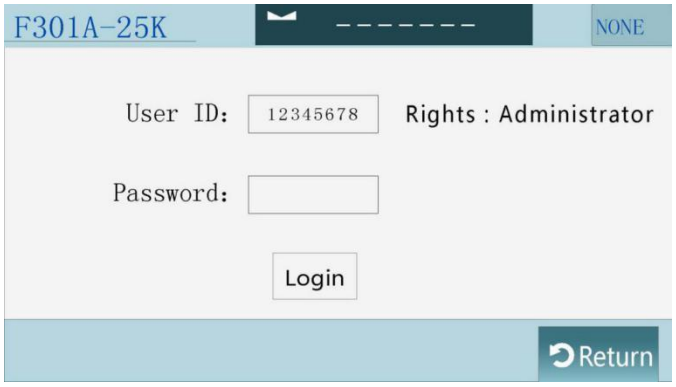
to enter main menu to select operation.




## 4.3. Login

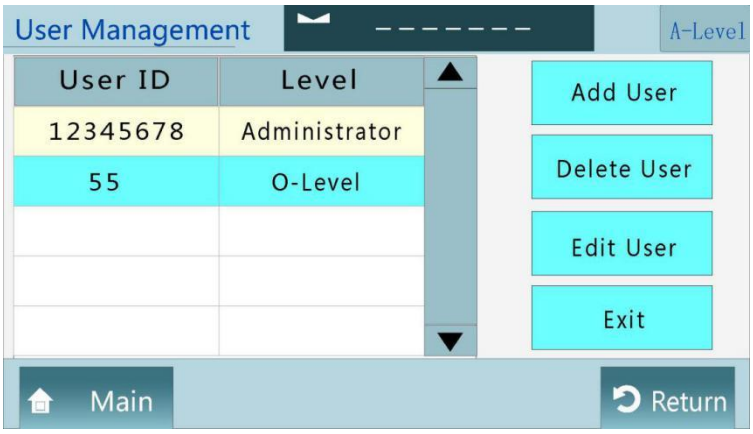
The default administrator ID is 12345678 and password is 000000. Please change the password to use for first time. For other users, please refer“User management”






## 4.4. User management

Press User Management to register authorization levels: Manufactory, System administrator, Administrator, Technician, Operator.





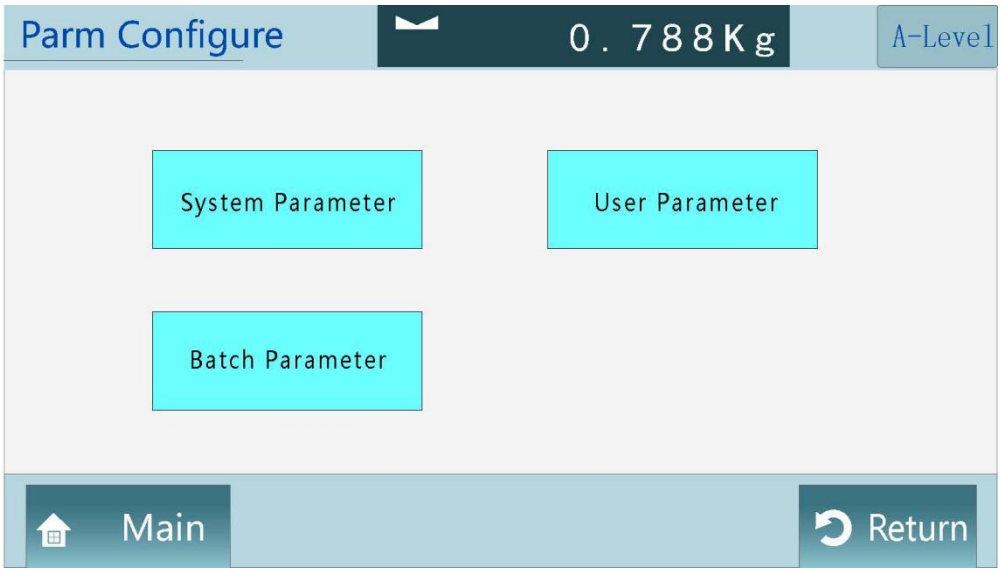
Level explanation：

| User / Menu | Manufactory | System administrator | Administrator | Technician | Operator |
|---|---|---|---|---|---|
| Parameter Configure | √ | √ | √ | √ | √ |

| | | | | | |
|---|---|---|---|---|---|
| Calibration | √ | √ | √ | √ | √ |
| Help | √ | √ | √ | √ | √ |
| User management | √ | √ | √ | √ | √ |
| Data Statistics | √ | √ | √ | √ | × |
| I/O Configure | √ | √ | √ | √ | × |
| Peripheral Device | √ | √ | √ | √ | × |
| System Function | √ | √ | √ | × | × |
| Manufactory | √ | × | × | × | × |

## 4.5. Parameter Configure

Press Parameter Configure to set System Parameter, User Parameter and Batch Parameter.




### 4.5.1 System parameter

| No. | Parameter | Range | Initial | Instruction |
|---|---|---|---|---|
| 1 | Unit | g Kg t lb | Kg | System unit |
| 2 | Decimal point | 0<br>0.0<br>0.00<br>0.000<br>0.0000 | 0.000 | System decimal point |
| 3 | Mini division | 1 / 2 / 5 / 10 / 20 / 50 | 1 | Mini division |

| | | | | |
|---|---|---|---|---|
| 4 | Max. capacity | xxxxxx | 100.000 | Max. capacity |
| 5 | Work mode | Single | Single | Single scale |
| 6 | Automatic zeroing interval | 0~999999 | 80 | Zeroing after some packing times. Not to zero If 0.<br>Note: Not to zero for first packing. |
| 7 | Zeroing range | 1%~99% | 10% | 1%~99% of max. capacity. |
| 8 | Stable range | 0~99 | 5 | 0~99d optional.<br>Stable state will be continue if 0. |
| 9 | Stable time | 0.001~9.999 | 0.3 s | Stable weight within stable time, otherwise unstable. |
| 10 | Zero tracking range | 0~9 | 3 | 0~9d optional<br>Not to track zero if 0. |
| 11 | Zero tracking time | 0.001~9.999 | 2 s | |
| 12 | Running AD filter grade | 0～9 | 2 | The bigger the stronger |
| 13 | Stop AD filter grade | 0～9 | 9 | The bigger the stronger |
| 14 | Automatic zeroing switch | ON/OFF | OFF | Zeroing or not when power supply is on. |
| 15 | Manual discharging switch | ON/OFF | OFF | Account to total or not for manual discharging. |
| 16 | Fix weight display switch | ON/OFF | OFF | After meeting target weight, the value will be displayed continuously till discharging. |
| 17 | Automatically adjust filling door switch | ON/OFF | ON | Adjustable |
| 18 | Screen bright time | Bright / 10 minute / 5 minutes / 1 minute | 5 minutes | |
| 19 | Language | Chinese / English | Chinese | Operation language |

**Self-adjustable parameter:**

| No. | Parameter | Initial | Instruction |
|---|---|---|---|
| 1 | ON/OFF | ON | Self-adjustable coarse filling and fine filling switch |
| 2 | 0~10 | 0 | Packing speed grade.<br>0 is normal. The bigger the slower, but higher precision. |
| 3 | ON/OFF | OFF | Positive deviation function switch<br>ON：The weighing result will be positive deviation compared with target value in filling.<br>OFF：The weighing result will be positive or minus around 0 in filling. |

**Date and time**

Press 

to check date & time or change setting, then confirm if changed.

**Communication parameters for serial port 1 and 2：**

| No. | Parameter | Initial | Instruction |
|---|---|---|---|
| **1** | 1~99 | **1** | ID code |
| **2** | Modbus-RTU / Modbus-ASCII/ Printer | Modbus-RTU | Communication parameters |
| **3** | 9600、19200、38400、57600、115200、256000 | 38400 | Baud rate |
| 4 | 1-8-NONE-2、1-8-EVEN-1、1-8-ODD-1、1-8-NONE-1 | 1-8-EVEN-1 | Data format |
| **5** | High-low / | High-low | Register data |

| | | | |
|---|---|---|---|
| | Low-high | | |

**Ethernet parameters：**

| No. | Parameter | Initial | Instruction |
|---|---|---|---|
| **1** | Modbus-TCP | Modbus-TCP | Communication protocol |
| **2** | High-low / Low-high | High-low | Register data |
| **3** | 0~65535 | **502** | ID |
| **4** | **xxx.xxx.xxx.xxx** | **0.0.0.0** | IP address |
| **5** | | | MAC address |

### 4.5.2 User parameter

The user can set 20 set recipes parameters as follows：

| No. | Parameter | Initial | Instruction |
|---|---|---|---|
| **1** | 1~20 | 1 | Recipe no. |
| **2** | xxxxxx | **0** | Target value |
| **3** | xxxxxx | **0** | Leading quantity of coarse feeding. When present weight **≥** Target value-Leading quantity of coarse feeding, and then shut off coarse feeding. |
| **4** | xxxxxx | **0** | Free fall value. When present weight ≥ target value-free fall value，and then shut off the fine feeding. |
| **5** | 0～99.999 s | **0.3 s** | Discharge time<br>Output discharging signal within effective time. |
| **6** | ON/OFF | **OFF** | Over / under tolerance switch |
| **7** | xxxxxx | **0** | Over tolerance<br>Present weight ≥ target value + over value. |
| **8** | xxxxxx | **0** | Under tolerance<br>Present weight ≤ target value - under value. |
| **9** | 0～99.999 s | **2 s** | Alarm time for over/under tolerance |
| **10** | ON/OFF | **OFF** | Pause switch for over/under tolerance<br>**ON**：Stop. The user can press “Clear alarm” to go on or press “E-Stop” to stop running.<br>**OFF**：Just output alarm signal, not stop. |

| | | | |
|---|---|---|---|
| **11** | 0～99 | **1** | Single weighing times<br>Weigh once to discharge for packing. If 0, it will directly discharge with bag or not. |
| **12** | 0～99.999 s | **0 s** | Delay time before filling<br>Begin to fill material after delay time **t1.** |
| **13** | 0～99.999 s | **0.9 s** | Fix weight time.<br>Output discharging signal after this time when filling has finished. |

### 4.5.3 Batch parameter

The user can press 

to set batching times. The device will pause to output alarm signal after finished, then the user can clear alarm by pressing “Clear alarm” , “ Stop” or “ E-Stop” .

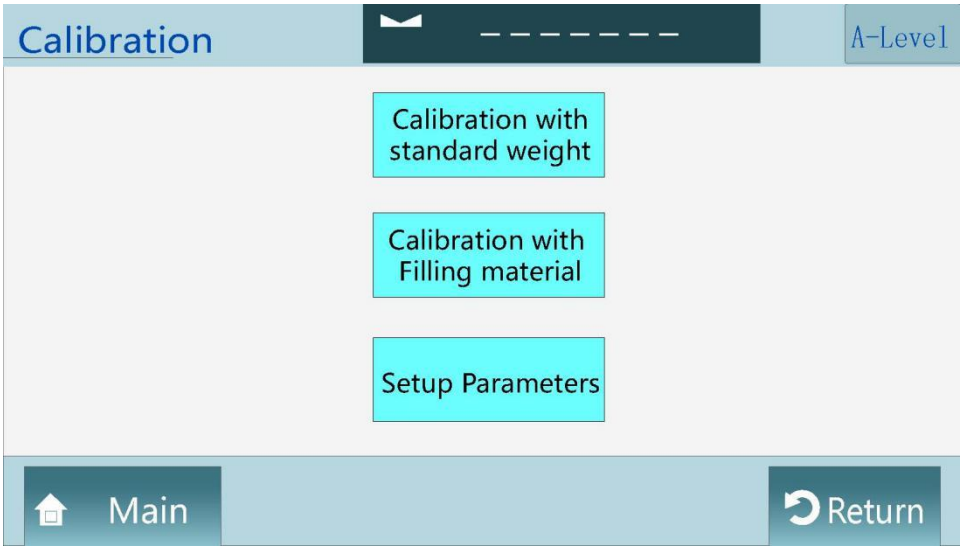
## 4.6. Calibration

The user need calibrate AF-25K-103A to use for first time or any change or weighing error.

Please press 

to enter 

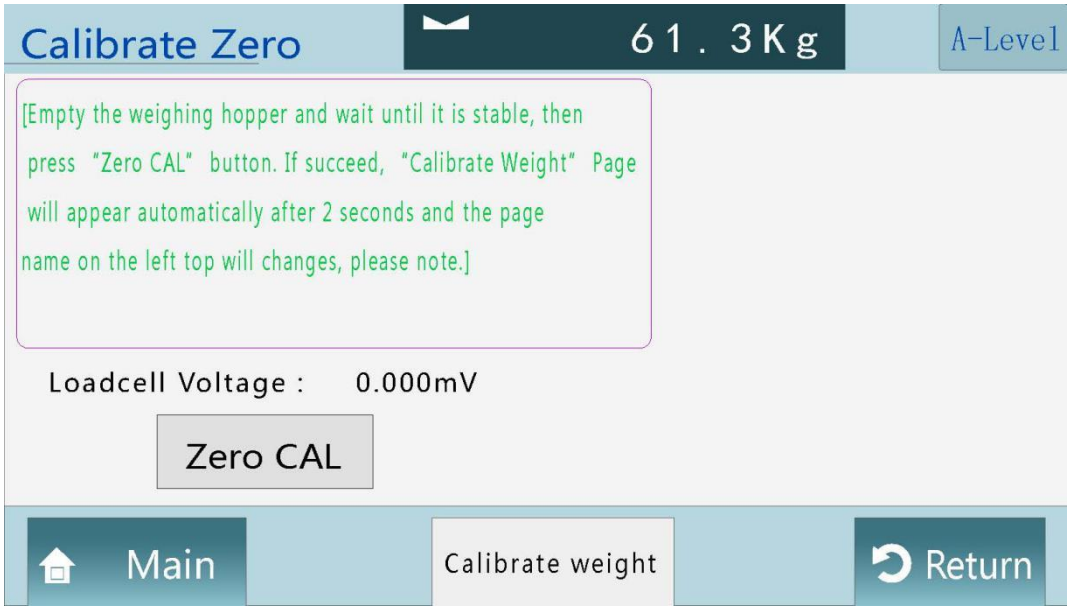
as follows:



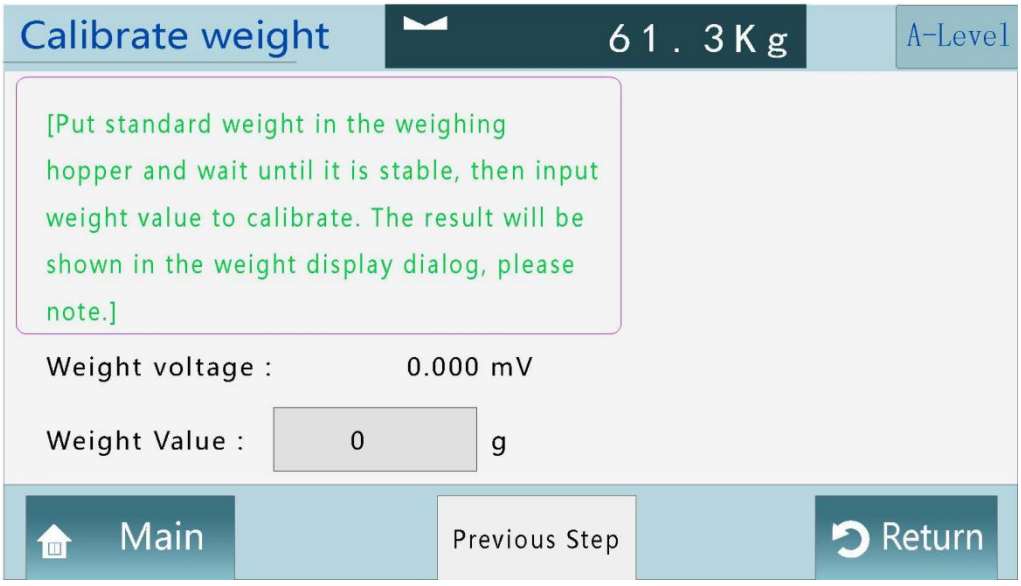

Note: The user can calibrate by standard weight or filling material.

### 4.6.1 Calibration with standard weight

1) Zero calibration: Empty hopper and press “Zero calibration” to display zero on screen. Then device will enter gain calibration automatically after zero calibration has been finished 2 seconds later.



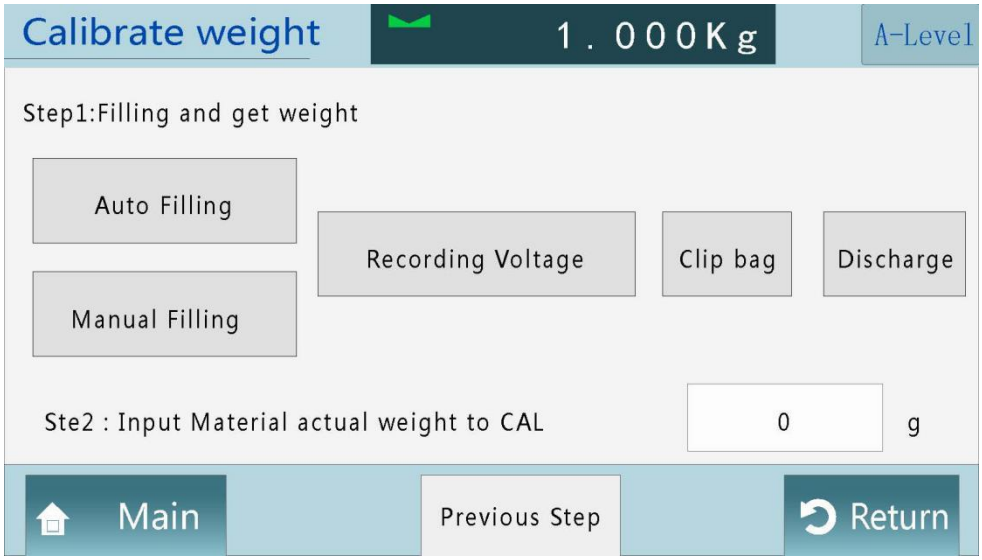

2) Gain calibration: Put standard weight on weighing device and input the weight value in dialogue window, which value should be same as the weight display on screen.




### 4.6.2 Calibration with filling material

1) Zero calibration: Empty hopper and press “Zero calibration” to display zero on screen. Then device will enter gain calibration automatically after zero calibration has been finished 2 seconds later.

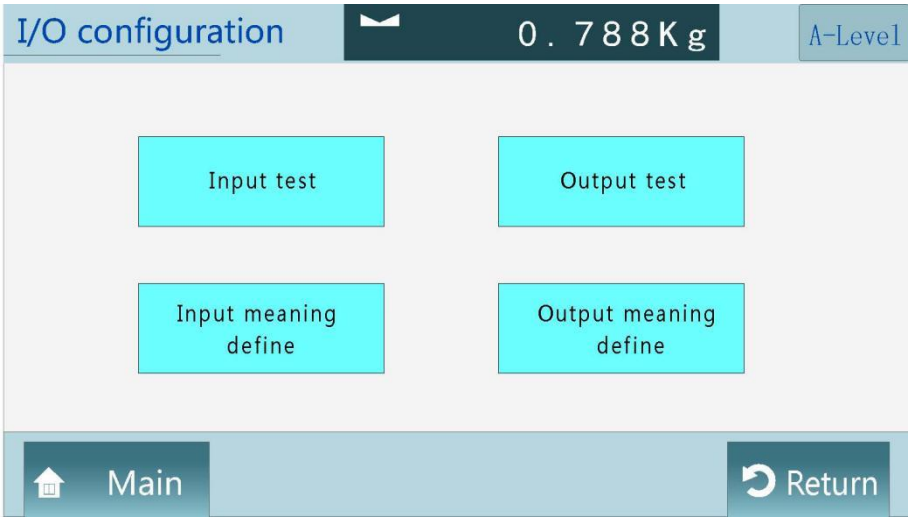
2) Gain calibration: After finish filling, press “record current weight” till “OK”, then press discharge to weigh the material again. Input the weight value in “weight again” dialogue window for gain calibration.




## 4.7. I/O configure

Press 

to test and define I/O: 12pcs input and 7pcs output




### 4.7.1 Input meaning define：

| No. | Define | Meaning |
|---|---|---|
| IN1 | 1 Run | 0：None<br>1：Run<br>2：E-Stop<br>3：Stop<br>4：Zeroing |
| IN2 | 2 E-Stop | |
| IN3 | 3 Stop | |

| | | |
|---|---|---|
| IN4 | 4 Zeroing | 5：Clear alarm<br>6：Select recipe<br>7：Clip/release bag<br>8：Manual discharging<br>9：Manual fine filling<br>10：Manual coarse filling<br>11：Print grand total<br>12：Upper level<br>13：Lower level<br>14：Run/Stop (level signal)<br>15：Run/E-stop (level signal)<br>16：Manual discharging (level signal)<br>17：Manual fine filling (level signal)<br>18：Manual coarse filling (level signal)<br>19：Push rod to open material gate<br>20：Push rod to close material gate |
| IN5 | 5 Clear alarm | |
| IN6 | 6 Select recipe | |
| IN7 | 7 Clip/release bag | |
| IN8 | 8 Manual discharging | |
| IN9 | 9 Manual fine filling | |
| IN10 | 10 Manual coarse filling | |
| IN11 | 0 None | |
| IN12 | 0 None | |

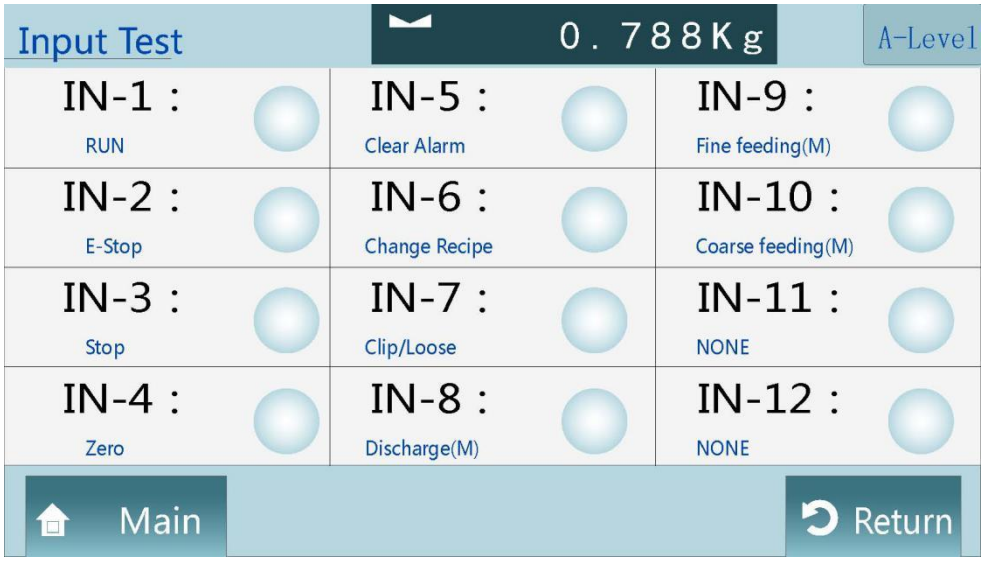
### 4.7.2 Output meaning define：

| No. | Define | Meaning |
|---|---|---|
| OUT1 (Manufactory) | 3 Coarse filling | 0：None<br>1：Run<br>2：Stop<br>3：Coarse filling<br>4：Fine filling<br>5：Discharge<br>6：Fix weight/finish filling/target<br>7：Over/under tolerance<br>8：Alarm<br>9：Clip bag<br>10：Printing code<br>11：Feeding<br>12：Lack material<br>13：Batch done<br>14：Push rod to open material gate<br>15：Push rod to close material gate<br>16：Finish packing once<br>(Output finishing signal after discharging 2 second later) |
| OUT2 (Manufactory) | 4 Fine filling | |
| OUT3 (Manufactory) | 5 Discharge | |
| OUT4 (Manufactory) | 14Push rod to open material gate | |
| OUT5 (Manufactory) | 15Push rod to close material gate | |
| OUT6 | 9 Clip bag | |
| OUT7 | 1 Run | |
| OUT8 | 8 Alarm | |
| OUT9 | 10 Printing code | |
| OUT10 | 13Batch done | |
| OUT11 | 7Over/under tolerance | |
| OUT12 | 16Finish packing once | |

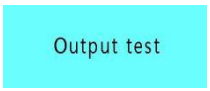
### 4.7.3 Input test

Press 

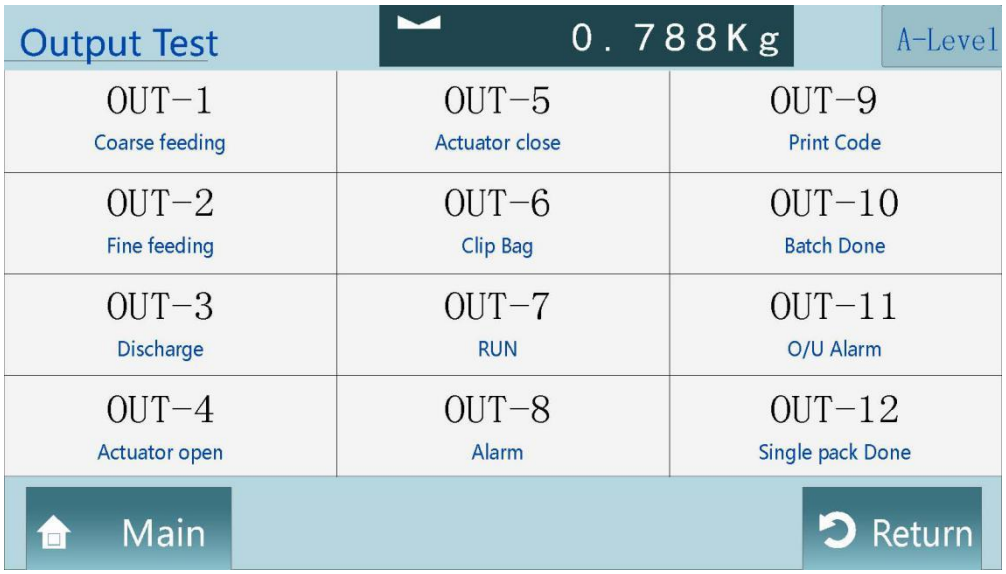
to test connection, which green light instructs ok, but gray not.




### 4.7.4 Output test

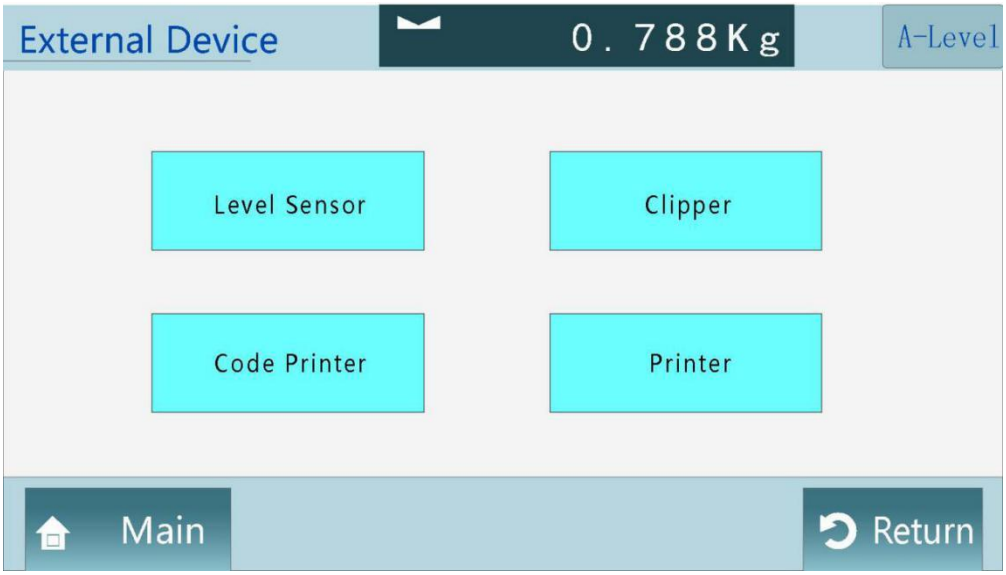
Press 

to test connection, which green instruct ok, but gray not. The user can press again to check if reset.




## 4.8. Peripheral device

Peripheral device: Level Sensor, Clipper, Code Printer and Printer.




### 4.8.1 Level sensor

**Dual level sensor**

The device can control feeding function: When both upper and under levels input ineffective, the feeding output effective; When the upper level input effective, the feeding output ineffective. At same time, the device will check if the under level input effective before each filling, if not, the device will output lack material signal and waiting till the under level input effective. But in the whole of filling, the device will not check whether the under level input effective or not.

**Single level sensor**

The device won’t control to feed material, only check under level before filling. if not, the device will output lack material signal and waiting till the under level input effective. The filling won’t start till the under level input effective before each feeding. But in the whole of filling, the device will not check whether the under level input effective or not.

**No level**

The indicator doesn’t control to feed materials and doesn’t check whether the under level input effective or not.

### 4.8.2 Clipper

| No. | Parameter | Initial | Instruction |
|---|---|---|---|
| **1** | 0.000~99.999 second | **0.5 s** | Delay time after clip bag<br>Finish clip bag after this time |
| **2** | 0.000~99.999 second | **0.5 s** | Delay time before release bag<br>Once discharge, then release bag after this time |

### 4.8.3 Code printer

1) When the device output clip bag signal and start delay time for printing code at same time, then the device output signal to print code after delay time, the signal will be ineffective after that.

2) Printing code is effective in running or stop status.

3) Release bag is available in printing code.

4) Finish to print code when E-stop signal input.

| No. | Parameter | Initial | Instruction |
|---|---|---|---|
| **1** | ON/OFF | **OFF** | Code printer switch |
| **2** | 0.000~99.999 second | **0 s** | Delay time before printing code |
| **3** | 0.000~99.999 second | **2.0 s** | Code printer output effective time |
| **4** | ON/OFF | **OFF** | Inhibit to discharge in printing code |

### 4.8.4 Printer

Please set baud rate and communication format same as printer when serial port 1 or 2 communication protocol is “ Serial port printer ”.

| No. | Parameter | Initial | Instruction |
|---|---|---|---|
| **1** | 16 row /32 row | **32 row** | Printing format of 16 rows or 32 rows. |
| **2** | Chinese / English | **Chinese** | Printing language |
| **3** | 0~9 | **3** | Printing lines after one set of data |
| **4** | ON/OFF | **OFF** | Automatic printing switch |

**Automatic printing**

The device will print packing details automatically every time if the switch is “**ON**”.

32 row printing format as follows：

Packing Detail

ID: 1

Run Time:2000/01/01 80:00

Unit:kg

| Total | Times | Rec | Target | Result |
|---|---|---|---|---|
| 2 | 1 | 1.000 | 0.995 | |
| 3 | 1 | 1.000 | 1.016 | |
| 4 | 1 | 1.000 | 1.093 | |
| 5 | 1 | 1.000 | 1.009 | |

**Print total report**

Press “PRINT” for total report in stop status.

32 row printing format as follows：

Total Report

ID: 1

Time: 2000/01/01 80:00

---

Total Times: 0

Total Value: 0.000kg

---

**Print recipe report**

Press “PRINT” for recipe report in stop status.

32 row printing format as follows：

Rec. Report

ID: 1

Time: 2000/01/01 80:00

---

Rec.: 5

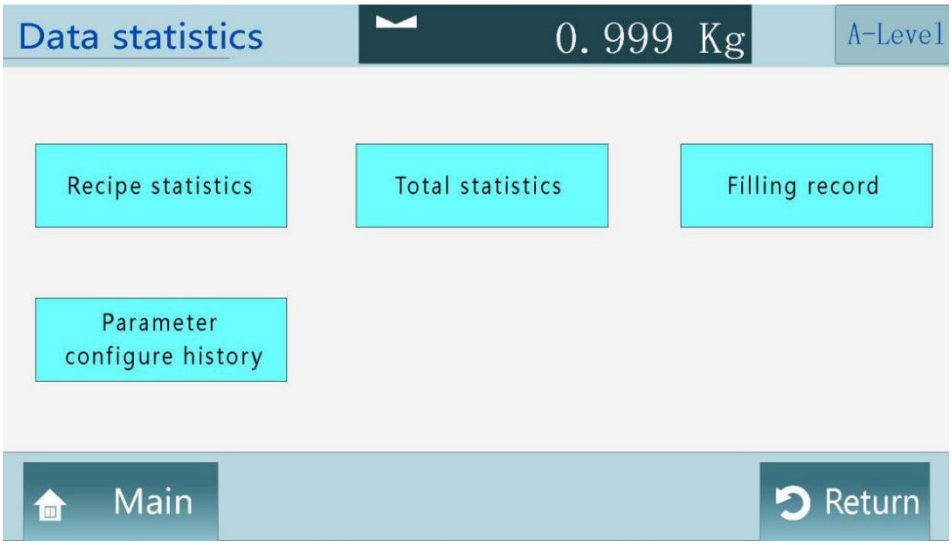
Target: 0.000

Rec. Times: 0

Rec. Value: 0.000kg

_____

## 4.9. Data statistics




**Recipe statistics :** Store all of recipes, which can be zeroing.

**Total statistics :** Store all of total reports, which can be zeroing or printing.

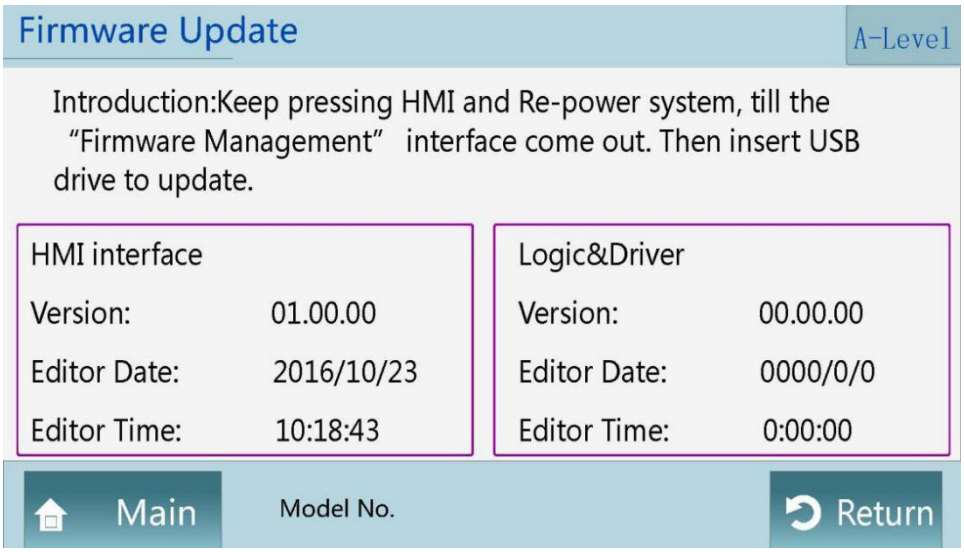
**Filling record :** Store 50,000pcs records at most, which can be output **to** U disk.

**Parameter configure history :** Store revised parameters, such as date, time, data etc.

## 4.10. System function

### 4.10.1 Firmware update

The user can view software version, date and time as follows:




Update tool: U disk

Update file route : Update program must be saved in up_gm file at the root of U disk.

Update file name: HMI interface program must be namedDispUp.gm

Logic&Driver program must be named CtrlUp.gm

Note: The power supply do not break in updating.

### 4.10.2 Backup and reset

**Initialize all of parameters :** Reset all of parameters to initialization

**Initialize basic parameters :** Reset basic parameters to initialization

**Initialize calibration parameters :** Reset calibration parameters to initialization

**Initialize recipe parameters :** Reset recipe parameters to initialization

**Initialize peripheral device parameters :** Reset peripheral parameters to initialization

**Initialize self-adaptive parameters :** Reset self-adaptive parameters to initialization

**Initialize communication parameters :** Reset communication parameters to initialization

**Initialize I/O configuration :** Reset I/O configuration to initialization

**Initialize self-adaptive statistics :** Reset self-adaptive statistics and renew statistics

### 4.10.3 Output to USB

The user can output parameter values and statistics to file folder data_gm in the root of U disk by CSV format as follows:

ParameterCalib.csv :Calibration parameters

ParameterBasic.csv :Basic parameters

ParameterUser.csv :User parameters

ParameterIODef.csv : IO define

ParameterComm.csv :Communication parameters

ParameterPeri.csv : Peripheral parameters

ParameterAdapt.csv : Adaptive parameters

ParameterPushrod.csv : Push-rod parameters

ParameterHide.csv : High degree parameters

StatisticAcc.csv : Accumulative statistics

StatisticPacking.csv :Packing statistics

StatisticPara.csv : Parameter revised statistics

### 4.10.3 USB input

The user can input parameter file from folder data_gm in the root of U disk, which file name is same as above.

# 5. Procedure

## 5.1. Procedure

The whole procedure as follows:

1. Check target value and material gate before running.
2. Delay time before filling.
3. If the self-adaptive function is ON, the user need learn how to set parameters about the leading quantity and free fall on first packaging. And the controller will automatically adapt coarse filling and free fall base on the first packaging.
4. Fix weight time after filling finished
5. Record the fixed weight as the packing report.
6. Dealing with over/under tolerance if need.
7. Discharge if clip bag signal is effective.
8. Release bag when discharging time is over.

## 5.2. Self-adaptive function

If the self-adaptive function is ON, the controller will automatically set the leading quantity of coarse filling and free fall.

There are two courses on self-adaptive function：self-learn and self-adjust

Self-learn：There is only target weight in a recipe, but no leading quantity of coarse filling and free fall setting, then the controller will self-learn to set these values automatically.

Self-adjust：The controller has got the leading quantity of coarse filling and free fall values, but need adjust the values base on packing procedure in one period, thus to ensure weighing precision in consideration of packing speed.

# 6. ModBus Communication Description

## 6.1 Communication Description

When select ModBus-RTU or ModBus-ASCII as communication parameter, which is ModBus communication.

## 6.2 Register Address.

*The background color in yellow means read-only register and could not write.

*The background color in black means register allow to write when running.

| ModBus Address | Description | Remark | Parameter | Value |
|---|---|---|---|---|
| Status | | | | |
| 0 | Present Weight 4-byte signed integers | | | |
| 1 | | | | |
| 2 | Status 1 | .0: AD sampling module abnormal<br>.1：Memory card failure<br>.2：Pusher feedback signal abnormal<br>.3：Load cell signal abnormal<br>.4：Weight overlimit<br>.5：Weight stable<br>.6：Zero point<br>.7：Minus<br>.8：Stable millivolt<br>.9：Locked<br><br>…… | | |

| | | | | |
|---|---|---|---|---|
| 3 | Status 2 | .0：Run<br>.1：Before filling<br>.2：Coarse filling<br>.3：Slow filling<br>.4：Fix weight<br>.5：Overlimit<br>.6：Underlimit<br>.7：Alarm<br>.8：Clip bag<br>.9：Discharge<br>.10：Material supply<br>.11：Material lack<br>.12：Upper level<br>.13：Under level<br>.14：Code<br>.15：Bagging completed | | |
| 4 | Status 3 | .0：Adjust filling door<br>.1：Getting parameter<br>.2：Package done<br>.3：<br>…… | | |
| 5 | Alarm | 0：Non alarm<br>1：Batch completed<br>2：Zero over range（2s）<br>3：Unstable zero（2s）<br>4：Can't start as target is 0.（2s）<br>5：Over / under pause<br>6：Not allow to print（2s）<br>7：Not allow to zero when running（2s）<br>8：Over / under alarm<br>9：Auto-learn failure<br>10：Pusher adjust failure<br>11：Discharge failure | | |
| 6 | Preset bags | | 0~999999 | |
| 7 | | | | |
| 8 | Left bags | | 0~999999 | |
| 9 | | | | |
| 10 | Year | | 2000~2099 | |
| 11 | Month | | 1~12 | |
| 12 | Date | | 1~31 | |
| 13 | Week | No need to write week in. | 1~7 | |
| 14 | Hour | | 0~23 | |

| | | | | |
|---|---|---|---|---|
| 15 | Minute | | 0~59 | |
| 16 | Second | | 0~59 | |
| | | | | |
| 50 | Weight of last bag | | | |
| 51 | | | | |
| 52 | Bagging time of last bag | Unit: ms | | |
| 53 | | | | |
| 54 | Coarse filling time | Unit: ms | | |
| 55 | | | | |
| 56 | Slow filling time | Unit: ms | | |
| 57 | | | | |
| 58 | Weight fix time | Unit: ms | | |
| 59 | | | | |
| 60 | Discharge time | Unit: ms | | |
| 61 | | | | |
| | | | | |
| Calibration Part | | | | |
| 100 | Zero calibration | | Write 1 to proceed zero calibration. | |
| 101 | | | | |
| 102 | Gain calibration with weight (Input weight) | Input present weight to finish gain calibration. | 0~999999 | |
| 103 | | | | |
| 104 | Material gain calibration (Record present AD) | | Input I to record gain AD | |
| 105 | | | | |
| 106 | Material gain calibration (Input weight) | Input gain weight. | 0~999999 | |
| 107 | | | | |
| 108 | Absolute millivolt | | | |
| 109 | | | | |
| 110 | Gain millivolt | | | |
| 111 | | | | |
| 112 | Calibration result | | 0：None<br>1：Calibration done<br>2: Unstable voltage of load cell<br>3：Wrong weight input. | |

| | | | | |
|---|---|---|---|---|
| | | | 4：Load cell voltage too large<br>5：Load cell voltage too low<br>6：High calibration resolution<br>(Alarm will clear automatically after 2 seconds.) | |
| | | | | |
| Basic Parameter | | | | |
| 200 | Unit | 0：g；1：kg；2：t；3：lb | 0~3 | 1 |
| 201 | Decimal point | | 0~4 | 3 |
| 202 | Mini division | | 1、2、5、10、20、50 | 1 |
| 203<br>204 | Maximum capacity | | 1~999999 | 100000 |
| 205 | Work mode | 0：Solo indicator； | 0~2 | 0 |
| 206 | Auto-zero interval | | 0~9999 | 80 |
| 207 | Zeroing range | | 1~99% | 10 |
| 208 | Stable range | | 0~99d | 5 |
| 209 | Stable time | | 100~9999ms | 300 |
| 210 | Zero tracking range | | 0~9d | 3 |
| 211 | Zero tracking time | | 0~9999ms | 2000 |
| 212 | Running AD filter grade | | 0~9 | 2 |
| 213 | Stop AD filter grade | | 0~9 | 9 |
| 214 | Power-on auto-zero switch | | 0~1 | 0 |
| 215 | Manual discharging switch | | 0~1 | 0 |
| 216 | Fix weight display switch | | 0~1 | 1 |
| | | | | |
| User Parameter | | | | |
| 300 | Recipe no. | | 1~20 | 1 |

| | | | | |
|---|---|---|---|---|
| 301<br>302 | Target value | | 0~999999 | 0 |
| 303<br>304 | Leading quantity of coarse feeding | | 0~999999 | 0 |
| 305<br>306 | Leading quantity of fine feeding | | 0~999999 | 0 |
| 307<br>308 | Discharge time | | 0~99999ms | 300 |
| 309<br>310 | Delay time before filling | | 0~99999ms | 0 |
| 311<br>312 | Fix weight time | | 0~99999ms | 900 |
| 313 | Under/Over detection switch | | 0~1 | 0 |
| 314<br>315 | Overlimit | | 0~999999 | 0 |
| 316<br>317 | Underlimit | | 0~999999 | 0 |
| 318<br>319 | Under/Over alarm time | | 0~99999ms | 2000 |
| 320 | Under/Over pause | | 0~1 | 0 |
| 321 | Solo scale combination times | | 0~99 | 1 |
| 322 | Feeding door size | | 0~5<br>0： ~4.950<br>1：4.950~9.950<br>2：<br>9.950~14.950<br>3：<br>14.950~19.950<br>4：<br>19.950~24.950<br>5：24.950~ | |
| 323 | Feeding signal output mode | 0：Combination output<br>1：Solo output | 0~1 | 0 |
| | | | | |
| I/O Module | | | | |
| 400 | Start/Finish I/O module test | Write 1 to start I/O module test and write 0 to finish I/O module. | 0~1 | |
| 401 | Input test | | 0~0x0FFF | |
| 402 | Output test | | 0~0x0FFF | |

| | | | | |
|---|---|---|---|---|
| 403 | IN1 | I/O Module | Input：<br>I0：<br>Non-definition<br>I1：Start<br>I2：Emergency stop<br>I3：Stop<br>I4：Zero<br>I5：Clear alarm<br>I6：Select recipe<br>I7：Clip/Release bag<br>I8：Manual discharge<br>I9: Manual fine feeding<br>I10：Manual coarse feeding<br>I11：Print total<br>I12：Upper level<br>I13：Under level<br>I14：Start/Stop (Level signal)<br>I15：Start/Emergency stop (Level signal)<br>I16：Manual discharge (Level signal)<br>I17：Manual fine feeding (Level signal)<br>I18：Manual coarse feeding (Level signal)<br>I19：Pusher door open<br>I20：Pusher door close | 1 |
| 404 | IN2 | | | 2 |
| 405 | IN3 | | | 3 |
| 406 | IN4 | | | 4 |
| 407 | IN5 | | | 5 |
| 408 | IN6 | | | 6 |
| 409 | IN7 | | | 7 |
| 410 | IN8 | | | 8 |
| 411 | IN9 | | | 9 |
| 412 | IN10 | | | 10 |
| 413 | IN11 | | | 0 |
| 414 | IN12 | | | 0 |
| 415 | OUT1 | | Output： | 3 |

| | | | | |
|---|---|---|---|---|
| 416 | OUT2 | | O0：Non-definition<br>O1：Run<br>O2：Stop<br>O3：Coarse feeding<br>O4：Fine feeding<br>O5：Discharge<br>O6：Fix weight/Feeding completed<br>O7：Over/Under<br>O8：Alarm<br>O9：Clip bag<br>O10：Coding<br>O11：Supply material<br>O12：Lack material<br>O13：Preset bagging completed<br>O14：Pusher door open<br>O15：Pusher door close<br>O16：One package completed | 4 |
| 417 | OUT3 | | | 5 |
| 418 | OUT4 | | | 14 |
| 419 | OUT5 | | | 15 |
| 420 | OUT6 | | | 9 |
| 421 | OUT7 | | | 1 |
| 422 | OUT8 | | | 8 |
| 423 | OUT9 | | | 10 |
| 424 | OUT10 | | | 13 |
| 425 | OUT11 | | | 7 |
| 426 | OUT12 | | | 16 |
| 427 | Start | | Write：1<br>Read：1：Run<br>0：Stop | |
| 428 | Emergency stop | | Write：1<br>Read：1：Stop<br>0：Run | |
| 429 | Stop | | Write：1<br>Read：1：Stop signal had inputted.<br>0：Stop signal had not inputted | |

| | | | | |
|---|---|---|---|---|
| 430 | Zero | | Write：1<br>Read：1：weight value is 0。 0：Weight value is not 0。 | |
| 431 | Clear alarm | | Write：1<br>Read：1：Non-alarm。0：Alarm。 | |
| 432 | Select recipe | | Write：1<br>Read：0。 | |
| 433 | Clip/Release bag | | Write：1<br>Read：1：Clipped bag。0：Not clip bag。 | |
| 434 | Manual discharge | | Write：1<br>Read：1：valid discharge。0：invalid discharge。 | |
| 435 | Manual fine feeding | | Write：1<br>Read：1：Valid fine feeding。0：Invalid fine feeding。 | |
| 436 | Manual coarse feeding | | Write：1<br>Read：1：Valid coarse feeding<br>0：Invalid coarse feeding。 | |
| 437 | Auto-learn start again | | Write：1<br>Read：1：Auto-learning。<br>0：Auto-learn completed。 | |
| 438 | Auto feeding once (Stop after fix weight completed) | | Write：1<br>Read：1：Auto-feeding。<br>0：Not auto-feeding。 | |
| | | | | |
| Communication Part | | | | |
| 500 | Serial port1 ID | Serial port1 | 1~99 | 1 |

| | | | | |
|---|---|---|---|---|
| 501 | Serial port1 communication | | 0：Modbus-RTU<br>1：Modbus-ASCII<br>2：Printer | 0 |
| 502 | Serial port1 baud rate | | 0：9600<br>1：19200<br>2：38400<br>3：57600<br>4：115200<br>5：256000 | 2 |
| 503 | Serial port1 data format | | 0：18N2<br>1：18E1<br>2：18O1<br>3：18N1 | 1 |
| 504 | Serial port1 ModBus Hi-Lo | | 0：Hi-Lo<br>1：Lo-Hi | 0 |
| 505 | Serial port2 ID | Serial port2 | 1~99 | 1 |
| 506 | Serial port2 communication | | 0：Modbus-RTU<br>1：Modbus-ASCII<br>2：Printer | 0 |
| 507 | Serial port2 baud rate | | 0：9600<br>1：19200<br>2：38400<br>3：57600<br>4：115200<br>5：256000 | 2 |
| 508 | Serial port2 data format | | 0：18N2<br>1：18E1<br>2：18O1<br>3：18N1 | 1 |
| 509 | Serial port2 Hi-Lo | | 0：Hi-Lo<br>1：Lo-Hi | 0 |
| 510 | RJ45 Ethernet IP address Group1 | Ethernet | 0~255 | 0 |
| 511 | RJ45 Ethernet IP address Group2 | | 0~255 | 0 |
| 512 | RJ45 Ethernet IP address Group3 | | 0~255 | 0 |

| | | | | |
|---|---|---|---|---|
| 513 | RJ45 Ethernet IP address Group4 | | 0~255 | 0 |
| 514 | RJ45 Ethernet port No. | | 0~65535 | 502 |
| 515 | RJ45 Ethernet communication | | 0：Modbus TCP/IP | 0 |
| 516 | RJ45 网口 Modbus Hi-Lo | | 0：Hi-Lo<br>1：Lo-Hi | 0 |
| | | | | |
| | | | | |
| 600 | Clip bag delay timer | | 0~9999ms | 500 |
| 601 | Before release bag delay timer | | 0~9999ms | 500 |
| 602 | Coding switch | | 0~1 | 0 |
| 603 | Coding start delay | | 0~9999ms | 0 |
| 604 | Coding output timer | | 0~9999ms | 2000 |
| 605 | Not allow to discharge when coding | | 0~1 | 0 |
| 606 | Paper format | 0:16 lines；<br>1:32 lines | 0~1 | 1 |
| 607 | Print language | 0：Chinese<br>1：English | 0~1 | 0 |
| 608 | Printing line nos. | | 0~9 | 3 |
| 609 | Auto print | | 0~1 | 0 |
| 610 | Data total print | Read：0<br>Write：1. To print data total | | |
| 611 | Recipe total print | Read：0<br>Write：0：Print present recipe total.<br>1-20: To print recipe No.1-No.20 total.<br>100: To print all recipe total. (Do not print recipe total of target value is 0.) | | |
| | | | | |
| Auto Filler | | | | |
| 700 | Model | ASCII characters | | AF-25K |

| | | | | |
|---|---|---|---|---|
| 701 | | | | -103A |
| 702 | | | | |
| 703 | | | | |
| 704 | | | | |
| 705 | | | | |
| 706 | | | | |
| 707 | | | | |
| 708 | | | | |
| 709 | | | | |
| 710 | Version | | 0~999999 | |
| 711 | | | | |
| 712 | Compile date: Year | Compile date of present software. | 2000~2099 | |
| 713 | Compile date: Month | | 1~12 | |
| 714 | Compile date: Day | | 1~31 | |
| 715 | Compile date: Hour | | 0~99 | |
| 716 | Compile date: Second | | 1~12 | |
| 717 | Compile date: Second | | 1~31 | |
| 718 | Reset parameter | Reset parameter according to the value written in. | Write：<br>0: Reset all(Including below resets and clear data total, total, pusher parameter.)<br>1: Reset all.<br>2: Reset basic parameter<br>3: Reset calibration<br>4:Reset user parameter<br>5: Reset peripherals<br>6: Reset adaptive parameters | |

| | | | | |
|---|---|---|---|---|
| | | | 7: Reset communication parameters<br>8: Reset I/O module definition<br>9: Reset adaptive data total | |
| | | | | |
| 720 | USB ON/OFF | | 1：USB ON<br>0：USB OFF | |
| 721 | USB connection | | 0：USB connected<br>1：USB not connected | |
| 722 | USB mass storage device connected | | 0：Connected<br>1：Not connected | |

| | | | | |
|---|---|---|---|---|
| 723 | Data output | Write number in and output data to /data_gm file.<br><br>Calibration parameter：ParameterCalib.csv<br>Basic parameter：ParameterBasic.csv<br>User parameter：ParameterUser.csv<br>IO definition：ParameterIODef.csv<br>Communication parameter：ParameterComm.csv<br>Peripherals parameter：ParameterPeri.csv<br>Adaptive parameter：ParameterAdapt.csv<br>Pusher parameter：ParameterPushrod.csv<br>Hide parameter：ParameterHide.csv<br>Total：StatisticAcc.csv<br>Statistic packing Super：StatisticPacking.csv<br>Statistic packing：StatisticPacking.csv<br>Parameter correct accumulated：StatisticPara.csv | Write：<br>10：All parameters<br>11：Calibration parameter<br>12：Basic parameter<br>13：User parameter<br>14：IO definition<br>15：Communication parameter<br>16：Peripherals parameter<br>17：Adaptive parameter<br>18：Pusher parameter<br>19：Hide parameter<br>50：All accumulated Super<br>51：All accumulated<br>52：Total<br>53：Bagging record total Supper<br>54：Bagging record total<br>55：Parameter correct accumulated<br>Read：0 | |
| 724 | Data output result | | 0：Non<br>1：Successful<br>2：Failed<br>（Automatically clear after 2 seconds.） | |

| | | | | |
|---|---|---|---|---|
| 725 | Data input | Write number in and output data to /data_gm file.<br><br>Calibration parameter：ParameterCalib.csv<br>Basic parameter：ParameterBasic.csv<br>User parameter：ParameterUser.csv<br>IO definition：ParameterIODef.csv<br>Communication parameter：ParameterComm.csv<br>peripherals parameter：ParameterPeri.csv<br>Adaptive parameter：ParameterAdapt.csv<br>Pusher parameter：ParameterPushrod.csv<br>Hide parameter：ParameterHide.csv | Write：<br>10：All parameters<br>11：Calibration parameter<br>12：Basic parameter<br>13：User parameter<br>14：IO definition<br>15：Communication parameter<br>16：Peripherals parameter<br>17：Adaptive parameter<br>18：Pusher parameter<br>19：Hide parameter<br>Read：0 | |
| 726 | Input result | | 0：Non<br>1：Successful<br>2：Failed<br>3：Document not existed<br>（Automatically clear after 2 seconds.） | |
| | | | | |
| Target value | | | | |
| 1100 | Target (Recipe No.1) | | 0~999999 | |
| 1101 | | | | |
| 1102 | Target (Recipe No.2) | | | |
| 1103 | | | | |
| 1104 | Target (Recipe No.3) | | | |
| 1105 | | | | |
| 1106 | Target (Recipe No.4) | | | |
| 1107 | | | | |
| 1108 | Target (Recipe No.5) | | | |
| 1109 | | | | |
| 1110 | Target (Recipe | | | |

| | | | | |
|---|---|---|---|---|
| 1111 | No.6) | | | |
| 1112 | Target (Recipe No.7) | | | |
| 1113 | | | | |
| 1114 | Target (Recipe No.8) | | | |
| 1115 | | | | |
| 1116 | Target (Recipe No.9) | | | |
| 1117 | | | | |
| 1118 | Target (Recipe No.10) | | | |
| 1119 | | | | |
| 1120 | Target (Recipe No.11) | | | |
| 1121 | | | | |
| 1122 | Target (Recipe No.12) | | | |
| 1123 | | | | |
| 1124 | Target (Recipe No.13) | | | |
| 1125 | | | | |
| 1126 | Target (Recipe No.14) | | | |
| 1127 | | | | |
| 1128 | Target (Recipe No.15) | | | |
| 1129 | | | | |
| 1130 | Target (Recipe No.16) | | | |
| 1131 | | | | |
| 1132 | Target (Recipe No.17) | | | |
| 1133 | | | | |
| 1134 | Target (Recipe No.18) | | | |
| 1135 | | | | |
| 1136 | Target (Recipe No.19) | | | |
| 1137 | | | | |
| 1138 | Target (Recipe No.20) | | | |
| 1139 | | | | |
| | | | | |
| Total | | | | |
| 1200 | Clear total | Clear total and all recipe total when write in 1.<br>Clear total when write in 2. | | |
| 1201 | Clear recipe total | Clear recipe total when write in 0.<br>Clear recipe No.1-No.20 total when write in 1-20. | | |
| 1202 | Accumulated times | Max.: 9 decimal digits | | |
| 1203 | | | | |
| 1204 | Accumulated weight (High 4 bytes) | Max.: 13 decimal digits | | |
| 1205 | | | | |

| | | | | |
|---|---|---|---|---|
| 1206 | Accumulated weight（Low 9 bytes） | | | |
| 1207 | | | | |
| 1208 | Over total | Max.: 9 decimal digits | | |
| 1209 | | | | |
| 1210 | Under total | Max.: 9 decimal digits | | |
| 1211 | | | | |
| 1212 | Qualified quantity | Max.: 9 decimal digits | | |
| 1213 | | | | |
| 1214 | Qualified rate | 0~10000 | | |
| 1215 | Accumulated times（Recipe No.1） | | | |
| 1216 | | | | |
| 1217 | Accumulated weight（Recipe No.1）（High 4 bytes） | | | |
| 1218 | | | | |
| 1219 | Accumulated weight (Recipe No.1) (Low 9 bytes) | | | |
| 1220 | | | | |
| 1221 | Over total (Recipe No.1) | | | |
| 1222 | | | | |
| 1223 | Under total (Recipe No.1) | | | |
| 1224 | | | | |
| 1225 | Qualified quantity (Recipe No.1) | | | |
| 1226 | | | | |
| 1227 | Qualified rate (Recipe No.1) | | | |
| 1228 | Accumulated times（Recipe No.2） | | | |
| 1229 | | | | |
| 1230 | Accumulated weight（Recipe No.2）（High 4 bytes） | | | |
| 1231 | | | | |
| 1232 | Accumulated weight (Recipe No.2) (Low 9 bytes) | | | |
| 1233 | | | | |
| 1234 | Over total (Recipe No.2) | | | |
| 1235 | | | | |

| | | | | |
|---|---|---|---|---|
| 1236 | Under total (Recipe No.2) | | | |
| 1237 | | | | |
| 1238 | Qualified quantity (Recipe No.2) | | | |
| 1239 | | | | |
| 1240 | Qualified rate (Recipe No.2) | | | |
| 1241 | Accumulated times（Recipe No.3） | | | |
| 1242 | | | | |
| 1243 | Accumulated weight（Recipe No.3）（High 4 bytes） | | | |
| 1244 | | | | |
| 1245 | Accumulated weight (Recipe No.3) (Low 9 bytes) | | | |
| 1246 | | | | |
| 1247 | Over total (Recipe No.3) | | | |
| 1248 | | | | |
| 1249 | Under total (Recipe No.3) | | | |
| 1250 | | | | |
| 1251 | Qualified quantity (Recipe No.3) | | | |
| 1252 | | | | |
| 1253 | Qualified rate (Recipe No.3) | | | |
| 1254 | Accumulated times（Recipe No.4） | | | |
| 1255 | | | | |
| 1256 | Accumulated weight（Recipe No.4）（High 4 bytes） | | | |
| 1257 | | | | |
| 1258 | Accumulated weight (Recipe No.4) (Low 9 bytes) | | | |
| 1259 | | | | |
| 1260 | Over total (Recipe No.4) | | | |
| 1261 | | | | |
| 1262 | Under total (Recipe No.4) | | | |
| 1263 | | | | |
| 1264 | Qualified quantity (Recipe No.4) | | | |
| 1265 | | | | |

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|---|---|---|---|---|
| 1266 | Qualified rate (Recipe No.4) | | | |
| 1267 | Accumulated times（Recipe No.5） | | | |
| 1268 | | | | |
| 1269 | Accumulated weight（Recipe No.5）（High 4 bytes） | | | |
| 1270 | | | | |
| 1271 | Accumulated weight (Recipe No.5) (Low 9 bytes) | | | |
| 1272 | | | | |
| 1273 | Over total (Recipe No.5) | | | |
| 1274 | | | | |
| 1275 | Under total (Recipe No.5) | | | |
| 1276 | | | | |
| 1277 | Qualified quantity (Recipe No.5) | | | |
| 1278 | | | | |
| 1279 | Qualified rate (Recipe No.5) | | | |
| 1280 | Accumulated times（Recipe No.6） | | | |
| 1281 | | | | |
| 1282 | Accumulated weight（Recipe No.6）（High 4 bytes） | | | |
| 1283 | | | | |
| 1284 | Accumulated weight (Recipe No.6) (Low 9 bytes) | | | |
| 1285 | | | | |
| 1286 | Over total (Recipe No.6) | | | |
| 1287 | | | | |
| 1288 | Under total (Recipe No.6) | | | |
| 1289 | | | | |
| 1290 | Qualified quantity (Recipe No.6) | | | |
| 1291 | | | | |
| 1292 | Qualified rate (Recipe No.6) | | | |
| 1293 | Accumulated times（Recipe | | | |
| 1294 | | | | |

| | | | | |
|---|---|---|---|---|
| | No.7） | | | |
| 1295 | Accumulated weight（Recipe No.7）（High 4 bytes） | | | |
| 1296 | | | | |
| 1297 | Accumulated weight (Recipe No.7) (Low 9 bytes) | | | |
| 1298 | | | | |
| 1299 | Over total (Recipe No.7) | | | |
| 1300 | | | | |
| 1301 | Under total (Recipe No.7) | | | |
| 1302 | | | | |
| 1303 | Qualified quantity (Recipe No.7) | | | |
| 1304 | | | | |
| 1305 | Qualified rate (Recipe No.7) | | | |
| 1306 | Accumulated times（Recipe No.8） | | | |
| 1307 | | | | |
| 1308 | Accumulated weight（Recipe No.8）（High 4 bytes） | | | |
| 1309 | | | | |
| 1310 | Accumulated weight (Recipe No.8) (Low 9 bytes) | | | |
| 1311 | | | | |
| 1312 | Over total (Recipe No.8) | | | |
| 1313 | | | | |
| 1314 | Under total (Recipe No.8) | | | |
| 1315 | | | | |
| 1316 | Qualified quantity (Recipe No.8) | | | |
| 1317 | | | | |
| 1318 | Qualified rate (Recipe No.8) | | | |
| 1319 | Accumulated times（Recipe No.9） | | | |
| 1320 | | | | |
| 1321 | Accumulated weight（Recipe No.9）（High 4 | | | |
| 1322 | | | | |

| | | | | |
|---|---|---|---|---|
| | bytes） | | | |
| 1323 | Accumulated weight (Recipe No.9) (Low 9 bytes) | | | |
| 1324 | | | | |
| 1325 | Over total (Recipe No.9) | | | |
| 1326 | | | | |
| 1327 | Under total (Recipe No.9) | | | |
| 1328 | | | | |
| 1329 | Qualified quantity (Recipe No.9) | | | |
| 1330 | | | | |
| 1331 | Qualified rate (Recipe No.9) | | | |
| 1332 | Accumulated times（Recipe No.10） | | | |
| 1333 | | | | |
| 1334 | Accumulated weight（Recipe No.10）（High 4 bytes） | | | |
| 1335 | | | | |
| 1336 | Accumulated weight (Recipe No.10) (Low 9 bytes) | | | |
| 1337 | | | | |
| 1338 | Over total (Recipe No.10) | | | |
| 1339 | | | | |
| 1340 | Under total (Recipe No.10) | | | |
| 1341 | | | | |
| 1342 | Qualified quantity (Recipe No.10) | | | |
| 1343 | | | | |
| 1344 | Qualified rate (Recipe No.10) | | | |
| 1345 | Accumulated times（Recipe No.11） | | | |
| 1346 | | | | |
| 1347 | Accumulated weight（Recipe No.11）（High 4 bytes） | | | |
| 1348 | | | | |
| 1349 | Accumulated weight (Recipe No.11) (Low 9 | | | |
| 1350 | | | | |

| | | | | |
|---|---|---|---|---|
| | bytes) | | | |
| 1351 | Over total (Recipe No.11) | | | |
| 1352 | | | | |
| 1353 | Under total (Recipe No.11) | | | |
| 1354 | | | | |
| 1355 | Qualified quantity (Recipe No.11) | | | |
| 1356 | | | | |
| 1357 | Qualified rate (Recipe No.11) | | | |
| 1358 | Accumulated times（Recipe No.12） | | | |
| 1359 | | | | |
| 1360 | Accumulated weight（Recipe No.12）（High 4 bytes） | | | |
| 1361 | | | | |
| 1362 | Accumulated weight (Recipe No.12) (Low 9 bytes) | | | |
| 1363 | | | | |
| 1364 | Over total (Recipe No.12) | | | |
| 1365 | | | | |
| 1366 | Under total (Recipe No.12) | | | |
| 1367 | | | | |
| 1368 | Qualified quantity (Recipe No.12) | | | |
| 1369 | | | | |
| 1370 | Qualified rate (Recipe No.12) | | | |
| 1371 | Accumulated times（Recipe No.13） | | | |
| 1372 | | | | |
| 1373 | Accumulated weight（Recipe No.13）（High 4 bytes） | | | |
| 1374 | | | | |
| 1375 | Accumulated weight (Recipe No.13) (Low 9 bytes) | | | |
| 1376 | | | | |
| 1377 | Over total (Recipe No.13) | | | |
| 1378 | | | | |
| 1379 | Under total | | | |

| | | | | |
|---|---|---|---|---|
| 1380 | (Recipe No.13) | | | |
| 1381 | Qualified quantity (Recipe No.13) | | | |
| 1382 | | | | |
| 1383 | Qualified rate (Recipe No.13) | | | |
| 1384 | Accumulated times（Recipe No.14） | | | |
| 1385 | | | | |
| 1386 | Accumulated weight（Recipe No.14）（High 4 bytes） | | | |
| 1387 | | | | |
| 1388 | Accumulated weight (Recipe No.14) (Low 9 bytes) | | | |
| 1389 | | | | |
| 1390 | Over total (Recipe No.14) | | | |
| 1391 | | | | |
| 1392 | Under total (Recipe No.14) | | | |
| 1393 | | | | |
| 1394 | Qualified quantity (Recipe No.14) | | | |
| 1395 | | | | |
| 1396 | Qualified rate (Recipe No.14) | | | |
| 1397 | Accumulated times（Recipe No.15） | | | |
| 1398 | | | | |
| 1399 | Accumulated weight（Recipe No.15）（High 4 bytes） | | | |
| 1400 | | | | |
| 1401 | Accumulated weight (Recipe No.15) (Low 9 bytes) | | | |
| 1402 | | | | |
| 1403 | Over total (Recipe No.15) | | | |
| 1404 | | | | |
| 1405 | Under total (Recipe No.15) | | | |
| 1406 | | | | |
| 1407 | Qualified quantity (Recipe No.15) | | | |
| 1408 | | | | |
| 1409 | Qualified rate | | | |

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|---|---|---|---|---|
| | (Recipe No.15) | | | |
| 1410 | Accumulated times（Recipe No.16） | | | |
| 1411 | | | | |
| 1412 | Accumulated weight（Recipe No.16）（High 4 bytes） | | | |
| 1413 | | | | |
| 1414 | Accumulated weight (Recipe No.16) (Low 9 bytes) | | | |
| 1415 | | | | |
| 1416 | Over total (Recipe No.16) | | | |
| 1417 | | | | |
| 1418 | Under total (Recipe No.16) | | | |
| 1419 | | | | |
| 1420 | Qualified quantity (Recipe No.16) | | | |
| 1421 | | | | |
| 1422 | Qualified rate (Recipe No.16) | | | |
| 1423 | Accumulated times（Recipe No.17） | | | |
| 1424 | | | | |
| 1425 | Accumulated weight（Recipe No.17）（High 4 bytes） | | | |
| 1426 | | | | |
| 1427 | Accumulated weight (Recipe No.17) (Low 9 bytes) | | | |
| 1428 | | | | |
| 1429 | Over total (Recipe No.17) | | | |
| 1430 | | | | |
| 1431 | Under total (Recipe No.17) | | | |
| 1432 | | | | |
| 1433 | Qualified quantity (Recipe No.17) | | | |
| 1434 | | | | |
| 1435 | Qualified rate (Recipe No.17) | | | |
| 1436 | Accumulated times（Recipe No.18） | | | |
| 1437 | | | | |

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|---|---|---|---|---|
| 1438 | Accumulated weight（Recipe No.18）（High 4 bytes） | | | |
| 1439 | | | | |
| 1440 | Accumulated weight (Recipe No.18) (Low 9 bytes) | | | |
| 1441 | | | | |
| 1442 | Over total (Recipe No.18) | | | |
| 1443 | | | | |
| 1444 | Under total (Recipe No.18) | | | |
| 1445 | | | | |
| 1446 | Qualified quantity (Recipe No.18) | | | |
| 1447 | | | | |
| 1448 | Qualified rate (Recipe No.18) | | | |
| 1449 | Accumulated times（Recipe No.19） | | | |
| 1450 | | | | |
| 1451 | Accumulated weight（Recipe No.19）（High 4 bytes） | | | |
| 1452 | | | | |
| 1453 | Accumulated weight (Recipe No.19) (Low 9 bytes) | | | |
| 1454 | | | | |
| 1455 | Over total (Recipe No.19) | | | |
| 1456 | | | | |
| 1457 | Under total (Recipe No.19) | | | |
| 1458 | | | | |
| 1459 | Qualified quantity (Recipe No.19) | | | |
| 1460 | | | | |
| 1461 | Qualified rate (Recipe No.19) | | | |
| 1462 | Accumulated times（Recipe No.20） | | | |
| 1463 | | | | |
| 1464 | Accumulated weight（Recipe No.20）（High 4 bytes） | | | |
| 1465 | | | | |

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|---|---|---|---|---|
| 1466 | Accumulated weight (Recipe No.20) (Low 9 bytes) | | | |
| 1467 | | | | |
| 1468 | Over total (Recipe No.20) | | | |
| 1469 | | | | |
| 1470 | Under total (Recipe No.20) | | | |
| 1471 | | | | |
| 1472 | Qualified quantity (Recipe No.20) | | | |
| 1473 | | | | |
| 1474 | Qualified rate (Recipe No.20) | | | |
| | | | | |
| | | | | |
| Packaging Records | | | | |
| 1500 | Records total | Clear records when write in 0. | 0~50000 | |
| 1501 | Check initial records | | 1~50000 | |
| 1502 | Serial number（1） | There is 64 registers, with 128 bytes and it will need 1564 sectors. | 1~50000 | |
| 1503 | Accumulated times（1） | | 0~999999999 | |
| 1504 | | | | |
| 1505 | Date（1） | | Decimal 8 bits. For example, 20160111 (Jan., 11th, 2016). | |
| 1506 | | | | |
| 1507 | Time（1） | | Decimal 6 bits. For example, 160552 (16:05:52) | |
| 1508 | | | | |
| 1509 | Recipe No.（1） | | 1~20 | |
| 1510 | Weight（1） | | Weight | |
| 1511 | | | | |
| 1512 | Target（1） | | Weight | |
| 1513 | | | | |
| 1514 | Leading quantity of coarse feeding（1） | | Weight | |
| 1515 | | | | |
| 1516 | Free fall value（1） | | Weight | |
| 1517 | | | | |
| 1518 | Packaging time for one bag | | ms | |
| 1519 | | | | |

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|---|---|---|---|---|
| | （1） | | | |
| 1520 | Reserved | | | |
| 1521 | | | | |
| 1522 | | | | |
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| 1546 | | | | |
| 1547 | | | | |
| 1548 | | | | |
| 1549 | Unused | | | |
| 1550 | | | | |
| 1551 | | | | |
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| 1561 | | | | |
| 1562 | | | | |
| 1563 | | | | |
| 1564 | | | | |
| 1565 | | | | |
| 1566 | Serial NO.（2）,Reference NO.(1) | | | |
| … | | | | |
| 1629 | | | | |
| 1630 | Serial NO.（3）,Reference NO.(1) | | | |
| | | | | |
| 1693 | | | | |
| 1694 | Serial NO.（4）,Reference NO.(1) | | | |
| | | | | |
| 1757 | | | | |
| 1758 | Serial NO.（5）,Reference NO.(1) | | | |
| | | | | |
| 1821 | | | | |
| | | | | |
| Parameter revise records | | | | |
| 1900 | Records total | Clear when write in 0. | 0~50000 | |
| 1901 | Check initial records | | 1~50000 | |
| 1902 | Serial No.（1） | There is 16 registers and it will need 392 sectors. | 1~50000 | |
| 1903 | Edit Date（1） | | Decimal 8 bits. For example, 20160111 (Jan., 11th, 2016). | |
| 1904 | | | | |
| 1905 | Edit time（1） | | Decimal 6 bits. For example, 160552 (16:05:52) | |
| 1906 | | | | |
| 1907 | Edit source（1） | | 0：UART0(Serial port1)<br>1：UART1(With display)<br>2：UART2(Serial port2)<br>3：UART3(Reserv | |

| | | | | |
|---|---|---|---|---|
| | | | ed)<br>4：<br>TCP(Ethernet) | |
| 1908 | Parameter address（1） | | Modbus address | |
| 1909 | Edit value（1） | | | |
| 1910 | | | | |
| 1911 | Initial value（1） | | | |
| 1912 | | | | |
| 1913 | | | | |
| 1914 | | | | |
| 1915 | | | | |
| 1916 | | | | |
| 1917 | | | | |
| 1918 | Serial No.(2), Reference No.(1) | | | |
| … | | | | |
| 1933 | | | | |
| 1934 | Serial No.(3), Reference No.(1) | | | |
| … | | | | |
| 1949 | | | | |
| 1950 | Serial No.(4), Reference No.(1) | | | |
| … | | | | |
| 1965 | | | | |
| 1966 | Serial No.(5), Reference No.(1) | | | |
| … | | | | |
| 1981 | | | | |