LF-5K
Automatic Quantitative Unit
Linear Feeder

Operating Instruction

杰 • 曼 • 科 • 技

531701020013 Ver A0

Content

As our products are constantly improving and updating, we reserve the right to modify this manual at any time without prior notice.To this end, please visit the company website frequently for timely information.

Company website: http://www.gmweighing.com

1. Overview

LF-5K is an automatic quantitative unit suitable for quantitative packaging of granular materials. The feeding mechanism adopts the mode of "vibration feeder" to realize multi-stage feeding, and the unloading is driven by cylinder to realize rapid unloading.The product has the characteristics of high speed, high precision and wide range, which can be widely used in the quantitative packaging machinery of grain, feed, chemical, rubber and plastic industries.

1.1 Product parameters, functions and features

1.1.1 Product parameters

specifications	LF-5K
Electrical source	AC220V±10%, 50/60Hz, 120W
The quantitative range	0.25 ~ 5 kg
The weighing accuracy	Plus or minus 2 ~ 5 g
Weighing speed	900 PCS/hour or less
Metering bucket volume	8L
Working temperature	In 0 ~ 40 DHS C
Maximum humidity	90% OF R.H is not dewy
Air source	0.4 ~ 0.6 MPa after $2m^3/h$

Note: packaging accuracy and speed may fluctuate due to material, feed and other environmental factors. The precision and speed are the test data of using round grain rice in our company's test line.

1.1.2 Product features

1.Automatic weighing function.

2.Two speed (vibrating feed) feeding control.

3.Automatic zero clearing function.

4.Automatic correction function of process control parameters.

5.Accumulative and statistical functions.

1.1.3 Product features

1. Intelligent: only set the target value, and automatically adjust the optimal quantitative speed under the condition of ensuring the accuracy.
2. Simple installation: standard external interface flange, quick installation.
3. Data export: with USB interface, data record export is more convenient.
4. Simple operation: 7 inch touch screen, Chinese and English display.
5. Material: 304 stainless steel for contact material.
6. High speed, high precision: double vibration plate vibration feeding, both fast and accurate.

1.2 The working principle of

The equipment starts two material speed feeding process, namely: fast and slow feeding, the switch of each speed feeding takes the corresponding advance quantity in the formula as the control cut-off point, in order to avoid the impact of overshoot on the measurement, the corresponding prohibition discriminant time is set;After feeding, enter the value setting process, the value setting time can be set, after the end of the value, the equipment through the switch output "feeding complete" signal;The equipment receives the external "unloading" effective switching signal, the equipment will drive the cylinder to open the unloading door of the metering bucket, when the weight of the material in the metering bucket is lower than the zero zone value set before, the equipment drives the cylinder to close the unloading door, complete a quantitative process;Before starting the next quantification process, the equipment carries out a pre-feeding delay, and then the next feeding, and so on.

1.3 Main purpose and scope of application

LF-5K automatic quantitative unit is mainly suitable for quantitative packaging of granular materials, weighing range 0.25~5kg.

2. Precautions for safe use

2.1 Safe operation

Before installing and using the product, read the product instruction carefully and have the equipment tested by professional personnel

2.1.1 Basic Safety Instructions

1. The power supply meets the requirements of this manual, and the equipment grounding meets the requirements.
2. Power and air should be turned off before starting cleaning, maintenance and repair.
3. Only use cleaners that do not damage mechanical and electrical equipment.
4. The mounting frame connected with the product should be stable and reliable.
5. Please cut off the power supply and air source when installing the metering bucket.

6 metering bucket and sensor connected parts and sensors are not allowed to knock, overload and other damage to the sensor behavior.

7. During the use of the equipment, no part of the body is allowed to extend into the equipment, and the weigher door has been firmly installed before use.

8. Machines that pack materials harmful to human body should be cleaned after using special protective tools according to the existing regulations of the country where the machines are operated.For details, please contact the relevant local authorities.

2.1.2 Operation safety instructions

1. In order to avoid dangerous accidents, only one person is allowed to operate the machine.
2. The machine should only be operated by properly trained personnel.
3. Operating instructions, especially safety instructions and regulations, must be read and fully understood by the operator (or anyone responsible for operating the machine) before the machine is run.
4. Before the machine runs, the operator must check whether the scale works normally, whether the machine is fixed and the appearance is normal.

5. In case of any danger, click the "emergency stop" button on the main interface or disconnect the main power supply immediately.

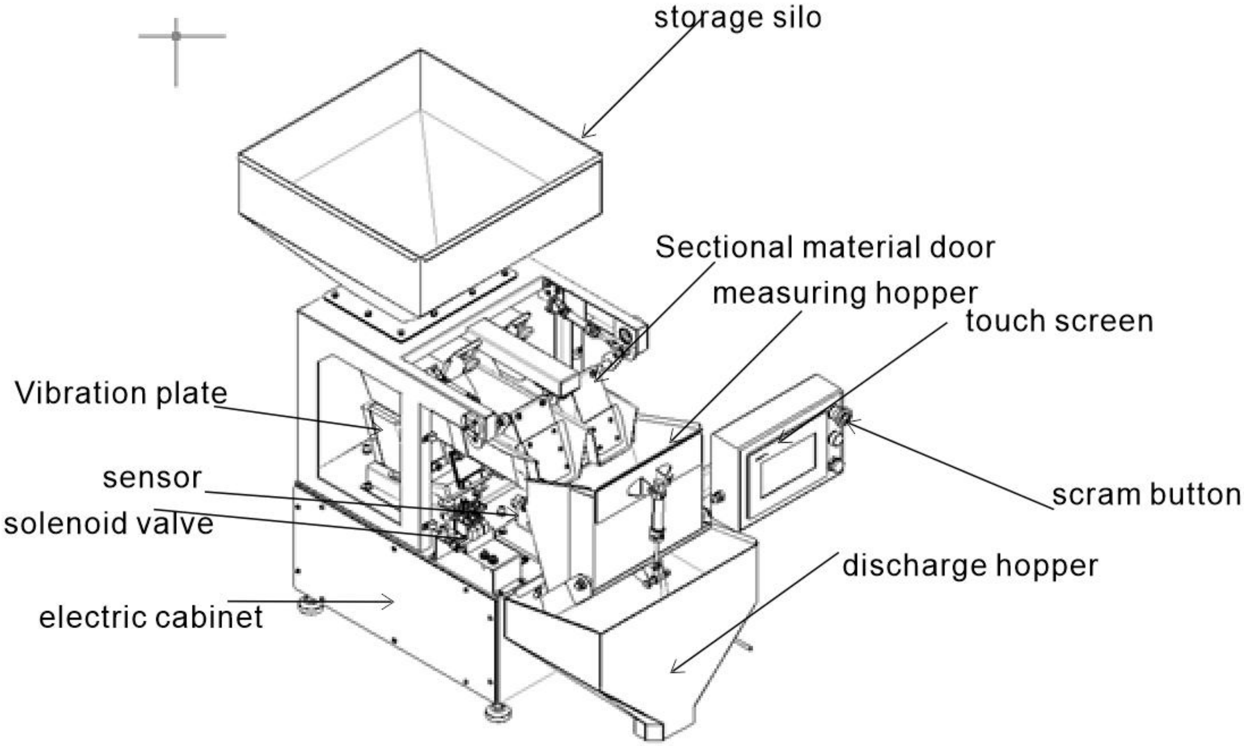
6. For the electrical and electronic system, it is not allowed to modify, replace or carry out any other non-standard operation; Any updates or modifications must be made by General Measure technologies.

7. Wear safety helmets and other protective devices when maintaining equipment, especially when entering the packaging area.

8. Be careful to step on or off the maintenance platform.

3. Product installation and transportation protection

3.1 The overall appearance and mechanism of the product are introduced



Overall appearance

Storage hopper: Storage of materials to be weighed.

Cut-off door: the door should be closed immediately when the vibration plate stops to prevent the material from falling into the metering bucket and affecting the accuracy.

Vibration plate: the main function of weighing is to control the feed quantity.

Measuring bucket: temporarily store the materials to be weighed quantitatively weighing materials and unloading.

Discharge port: the material after quantitative weighing is discharged and transferred to the next process.

Electrical control box: built-in circuit board and external signal connection, I/O control connection and power connection.

Sensor: Obtain the weight of the material.

Touch screen: Used to operate the device.

Emergency stop button: stops the device in an emergency.

Solenoid valve: control unloading door, cutting door cylinder action.

3.2 The installation conditions

3.2.1 Equipment installation basis and installation conditions

1. Temperature: -10~40℃
2. Humidity: not more than 90% R.H.
3. Power supply: AC110~260V, 50Hz/60Hz, about 120W.
4. Air source: 0.4~ 0.5mpa 1.2m³/h.
5. Installation plane: horizontal solid steel support frame.
6. Static electricity: Ensure that the device is reliably grounded.
7. Harmful radio waves: keep away from powerful sources of harmful radio waves such as wireless devices.
8. Electrical and gas technical parameters meet and are in place

3.3 Unpacking and inspection

Please read this operation manual carefully before unpacking for

3.3.1 The inspection

1. Pay attention to the words and warning signs on the containers before unpacking them.
2. Before unpacking the box, check whether the box is seriously squeezed and deformed during transportation. If the damage is serious, consider whether the equipment is damaged.
3. Read the packing list before unpacking and proofread it after unpacking to avoid omission.

4. After unpacking the device, check whether the screws connecting the device are loose.

5. Check whether the metal hose is in good condition before unpacking the device.

6. After unpacking the whole machine, check whether the scale is normal and whether the action of the moving parts is normal.

7. During debugging after the assembly of the unpacked machine, pay attention to whether the sealing of the parts through which the material passes under the predetermined pressure is reliable. This check must be made before starting the machine.

3.3.2 Spare parts

1. Accessories: equipment side panel opening key, packing list, invoice, product manual and quality inspection certificate.

2. Unpack the device and check whether the accessories are complete and whether the device package is intact.

3. Original General Measure Technologies must be used.

The company is not responsible for the loss caused by using other parts.

If you have any questions, please don't hesitate to contact us.

3.4 Product packaging and transportation protection

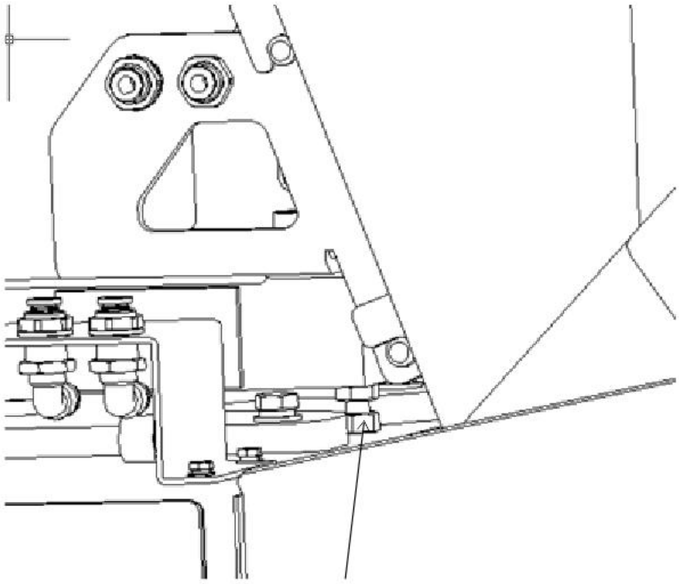
3.4.1 Packaging requirements

1 Single, double machine two kinds of packing boxes.

2. Packed in wooden cases, stackable in two layers, GB/T4857.3 Basic test for transport packages, static load stacking test method.

3 GB/T4857.7 Transport package basic test, sinusoidal vibration (constant frequency) test method.

3.4.2 Transport protection



limit protection

1. Before transportation, screw the limit bolt shown to attach the sensor and remove the measuring bucket.
2. The appearance of the device wrapped by winding film.

3.4.3 Remove transport limit protection

1. After the device is unpacked and checked correctly, lower the limit bolt to about 0.5mm to 1.0mm away from the sensor, and tighten the nut below the bolt.

2. Hang the metering bucket back to the metering bucket support seat

3.4.4 Requirements for equipment installation and maintenance

1.The operator must accept the company's skill training and safety education, and hold a work permit.

2.The personnel responsible for operating the machine must read and fully understand the operation manual.

3.Operators must have short hair or long hair up, clothing and shoes and hats should be easy to work.Wear a safety helmet and insulating shoes during testing or maintenance.

4.The operator must strictly follow the procedures and steps stipulated in the user manual.

5.Before lubrication, mechanical adjustment, maintenance and repair of the equipment, the power supply shall be cut off, the air source shall be closed, the residual pressure in the pneumatic pipeline shall be released, and the warning signs shall be hung at the electric control cabinet, the power switch and the air source valve.

6.The maintenance and repair of the air pressure system must be carried out under the condition of cutting off the power supply and releasing the pressure completely.

7.The production line shall not be operated until all safety protection facilities are in place.

8.After the device is powered on, do not touch the moving parts of the device.

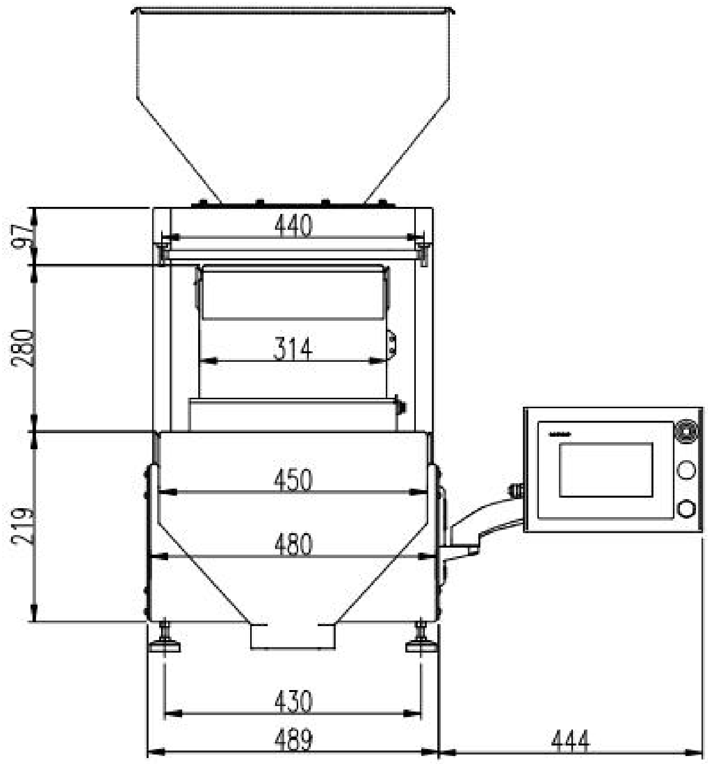
9.When the production line is in operation, do not enter dangerous areas or cross the production line.

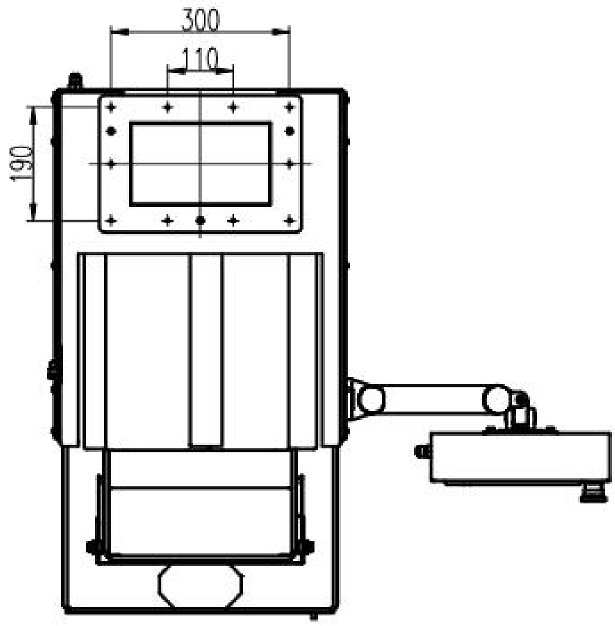
10.Do not modify the setting parameters of wiring in the control cabinet, motherboard program and driver.

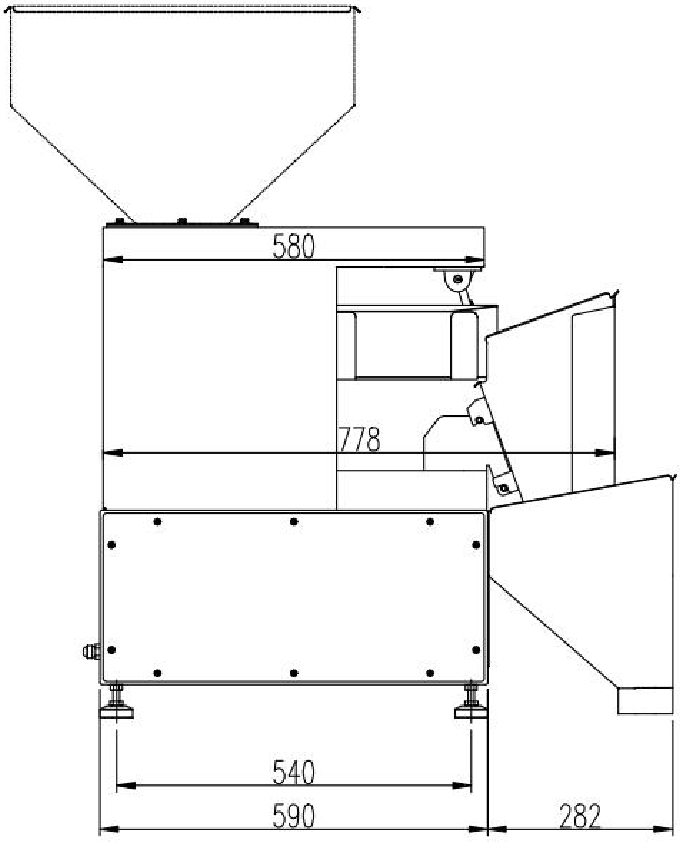
11.The tool installation is reliable and safe, and the operator understands and understands all the safety requirements of the tool

4. Product size

Product size unit: mm



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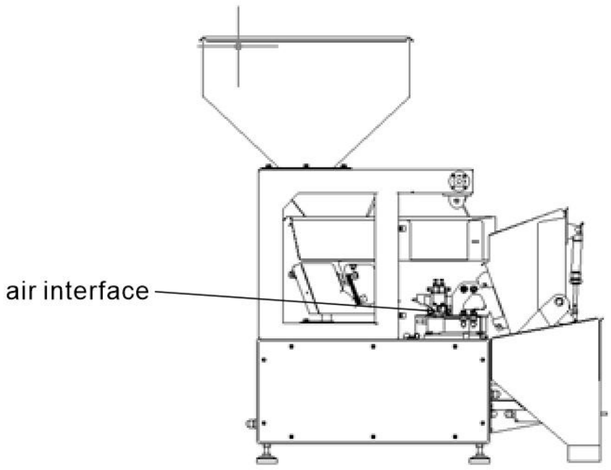
5. Electrical connections

5.1Air supply connection

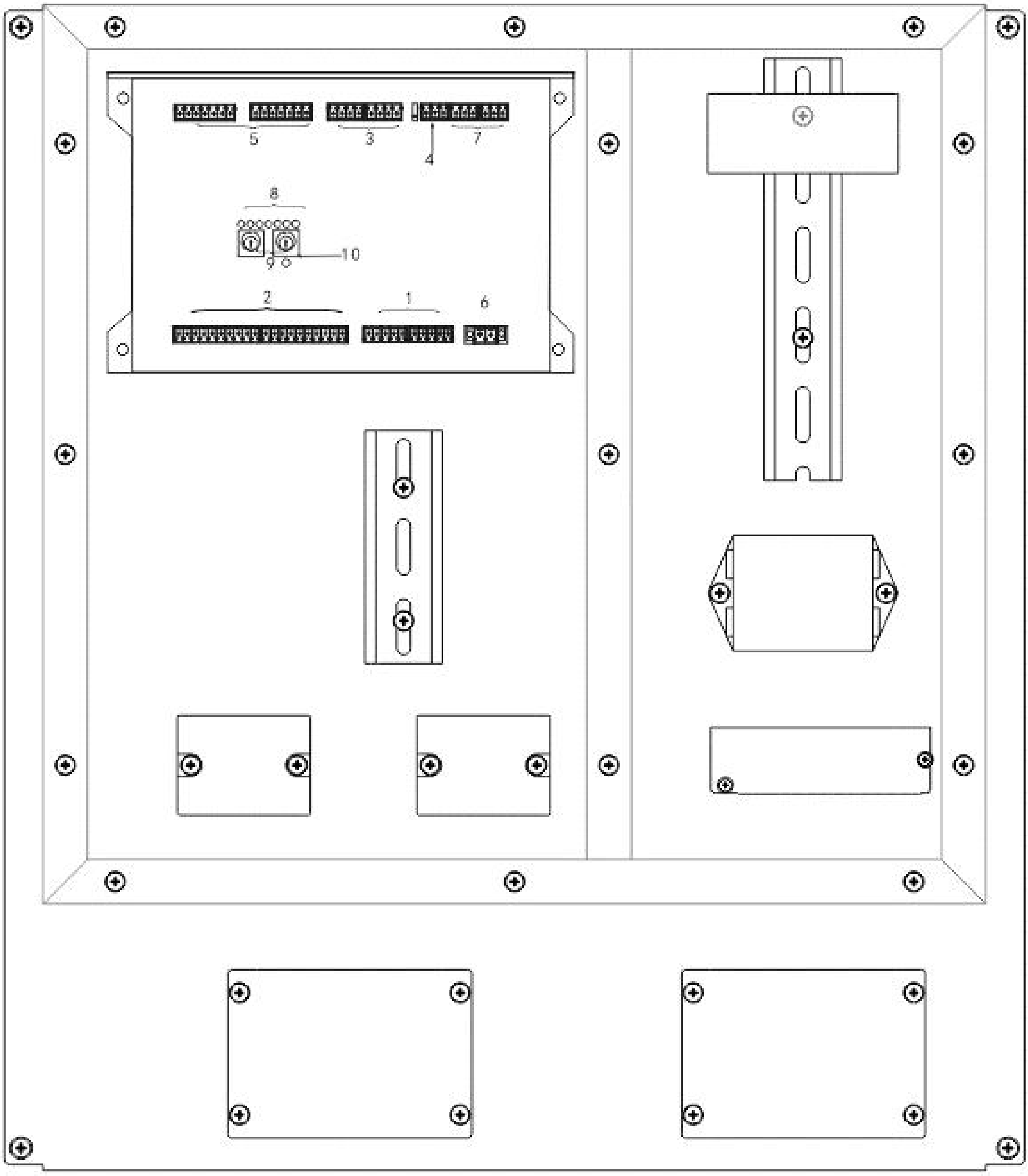


Air source inlet φ6 air pipe, air source standard: 0.4~ 0.6mpa 2m³/h

5.2Electrical connections

Insert the single-wire 220V power plug into the onsite power socket.

The internal layout of the electric control box is shown as follows: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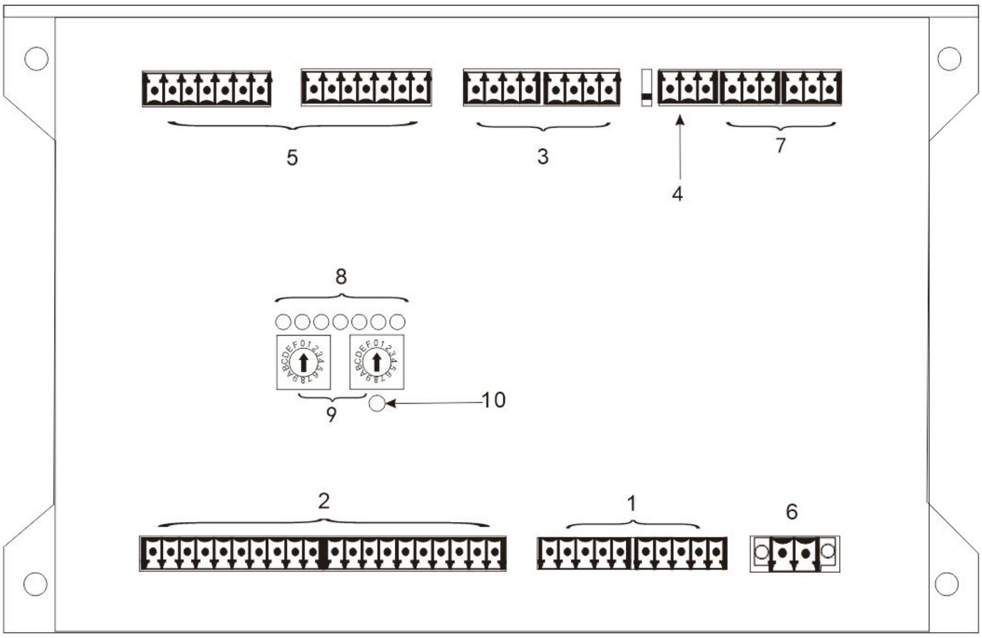


The controller interfaces are defined as follows:

1: input port, 10 custom switch input ports (IN1~IN10), valid for low level, the definition of each port can be selected by oneself.

2: output port, 20 customized switch output ports (OUT1 to OUT20), the definition of each port can be selected.

3: voltage output port of the vibrating disk. The voltage output ports of the two vibrating disks are SV1+, SV1-, LV1+, LV1- and SV2+, SV2-, LV2+, and LV2- respectively.Where, SV1+ and SV1- are analog signals of small vibration tray controller, while LV1+ and LV1- are analog signals of large vibration tray controller.SV2+ and SV2- : analog signals of the small vibration tray controller; LV2+ and LV2- : analog signals of the large vibration tray controller.

4: Reserved function, CAN communication.

5: sensor cable port, 2 sensor cable ports (EX1+, EX1-, SN1+, SN1-, SG1+, SG1-,

SHILD, EX2+, EX2-, SN2+, SN2-, SG2+, SG2-, SHILD).

6: power line port, instrument 24V power port (24V+, 24V-).

7: Two RS485 serial communication ports. Serial port 1 (A1, B1, GND) is generally used for local HMI.(A2,B2,GND), can be used for communication of upper computer. All support Modbus communication.

8, status indicators, 7 status indicators respectively indicating POWER, WORK, COM1, COM2, N/A, RUN, ALARM.

9. Communication ID number. Two dip switches can be set corresponding to COM1 and COM2 communication ID number respectively.

10, reset button, reset the controller.

6. The Modbus address table

6.1 The MODBUS protocol

6.1.1 Function Codes and Exception Codes

Function codes supported by the instrument:

Function code	The name of the	instructions
03	Read the register	A maximum of 125 registers are read at a time.
06	Write a single register	Use this feature code to write a single hold register.
10	Write multiple registers	This command only supports writing dual registers, and the address must be aligned when writing. It is not allowed to write only part of the dual registers, and it is allowed to read only part of the dual registers.
01	Read the coil	Note that this length is in bits.
05	Write the coil	

Note: this meter only supports the above MODBUS function codes, the meter will not respond to other function codes.

MODBUS exception code response

code	The name of the	meaning
02	Invalid data address	For this meter, the error code indicates that the received data address is an invalid address.
03	Invalid data value	The part of data written and the range allowed.
04	From the machine fault	An unrecoverable error occurred while the meter was attempting to perform the requested operation.
07	An unsuccessful programming	For the meter, the command received cannot be executed in the current condition.

	request	

Modbus transmission mode

RTU mode

When RTU mode is selected for communication, every 8-bit byte in the information is divided into two 4-bit hexadecimal characters.

Data format: 8-bit data bit, 1-bit stop bit, parity (8-E-1)

8-bit data bit, 1-bit stop bit, odd check (8-O-1)

8-bit data bit, 1-bit stop bit, no parity (8-N-1)

8-bit data bit, 2-bit stop bit, no parity (8-N-2)

Wave rate: 9600/19200/115200/38400/57600 (choose one)

Code: binary

ASCII mode

When communicating in ASCII mode is selected, every 8 bytes in a message is transmitted as 2 ASCII characters.

Data format: 8-bit data bit, 1-bit stop bit, parity (8-E-1)

8-bit data bit, 1-bit stop bit, odd check (8-O-1)

8-bit data bit, 1-bit stop bit, no parity (8-N-1)

8-bit data bit, 2-bit stop bit, no parity (8-N-2)

7 data bits, 1 stop bit, parity (7-E-1)

7 data bits, 1 stop bit, odd check (7-O-1)

7-bit data bit, 2-bit stop bit, no parity (7-N-2)

Wave rate: 9600/19200/115200/38400/57600 (choose one)

Code: ASCII

Continuous transmission protocol

Data frame format description:

The starting character	A Weighing status	A scale feeding state	A balance weight	B Weighing status	B scale feeding state	B balance weight	The checksum	terminator

◆ Start character - 1 bit, 40H

Weight status: 1 bit, A scale /B scale weight status

D7	D6	D5	D4	D3	D2	D1	D0
	0 (the same)	1 - the AD 0 - normal	1 - range 0 - normal	1 - negative spillover 0 - normal	1 - is overflow 0 - normal	1 - zero 0 - other than zero	1 - stable 0 and instability

Feeding state - 2, A scale /B scale feeding state: state 0;State 1

State 0:

D7	D6	D5	D4	D3	D2	D1	D0
	0 (the same)	1 - said 0 - normal	1 - fill material 0 - not	1- End of feeding 0 - not	01: slow I add 10: 11: fast		1 - before loading 0 - not

Condition 1:

D7	D6	D5	D4	D3	D2	D1	D0
	0 (the same)	00: stop 01: run 10: clear material 11: vibration disk test		1 - IO tests 0 - not	1 - owed 0 - not	1 - very poor 0 - not	1 - unloading 0 - not

Weight - 8 positions, A scale /B scale weight;Contains symbol and decimal point, blank space to fill 20H

Check sum - 2 bits, standard CRC

◆ End character - 2 bits: 0D 0A

Such as sending data:

40 01 00 00 20 20 20 20 2B 31 36 32 01 00 00 20 20 20 20 2B 33 31 32 02 C7 0D 0A

It means that A balance is stable and stopped, and the weight is +1632;B the balance is stable and stopped, and the weight is +312.

Result sending mode

When the serial port communication protocol is set to "Result sending" (i.e., when the address of 48003 and 48023 is set to "3"), each scale will be sent once after completion (valid for good status). If another scale is completed during the sending of a scale, the result of another scale shall be sent after the interval of "Continuous sending Interval" after the end of this sending.

Data frame format description:

The starting character	A state of balance	A scale result serial number	A balance weight	B state of balance	B Scale result serial number	B balance weight	The checksum	terminator

◆ Start character - 1 bit, 40H

◆ State -- 1 bit, A /B weight result state

O: out of tolerance;U: deficit;Q: Qualified;F: Feeding

◆ Result serial number - 1, each time +1, only the channel after the completion of a feeding will add 1, only with the channel quantitative process is completed.

Weight - 8 positions, A scale /B scale weight;Contains symbol and decimal point, blank space to fill 20H

The MODBUS address table is as follows:

<table>
<tr><th>PLC address</th><th>Function address</th><th>meaning</th><th colspan="2">instructions</th></tr>
<tr><td colspan="5">The following is a read-only register (function code 0x03)</td></tr>
<tr><td colspan="5">Instrument status parameter</td></tr>
<tr><td>40001-40002.</td><td>0000-0001.</td><td>Weighing value</td><td colspan="2">A 4-byte signed integer</td></tr>
<tr><td>40003-40004.</td><td>0002-0003.</td><td>B Weighing value</td><td colspan="2">A 4-byte signed integer</td></tr>
<tr><td rowspan="4">40005</td><td rowspan="4">0004</td><td rowspan="4">Weighingstatus</td><td>position</td><td>instructions</td></tr>
<tr><td>00:</td><td>stable</td></tr>
<tr><td>. 01:</td><td>zero</td></tr>
<tr><td>. 02:</td><td>Show weight minus sign</td></tr>
</table>

			. 03:	Overflow condition
			. 04:	Weight overflow
			.05:	Weight overflow
			. 6:	Sensor overflow
			07:	Negative sensor overflow
			. 08:	Millivolts are stable
			09:	Displays the current net weight
			. 10:	The ADC fault
			. 11:	Calculate the weight using theoretical values
			. 12:	bipolar
			, 13 ~ 15:	keep
40006	**00005**	A Error code 1 (Calibration errors)	**00.**	Zero point calibration is unstable
			.01	Negative sensor overflow during zero calibration
			. 02	Sensor overflow during zero calibration
			.03	Weight calibration is unstable
			. 04	Negative sensor overflow during weight calibration
			.05	Sensor overflow during weight calibration
			. 6	keep
			07.	Weight input cannot be zero
			. 08	Weight input exceeds maximum range
			The 09	Beyond minimum resolution

			10.	The previous weight point is not calibrated (Special for multi-point calibration)
			11.	In hardware protection during calibration (Used when hardware calibration switch is available)
			12.	Remote calibration is performed when remote calibration is prohibited (When serial port calibration switch is available)
			, 13 ~ 15:	keep
40007	**00006**	A Error code 2 (Zero tare operation error generation Code - when the corresponding state is valid, Read as 1)	**00:**	Power-on clearing exceeds the threshold
			. 01:	It is unstable during power-on and zero clearing
			. 02:	Clear zero out of range
			. 03:	Unstable at zero clearing
			. 04	Negative sensor overflow during zero clearing
			.05:	The sensor overflowed during zero clearing
			. 6:	The remote reset switch is not enabled during remote reset (Used when serial port reset switch is available)
			07:	Zero clearance is not allowed in the net weight state (For tare operation)
			. 08:	Net weight condition does not allow peeling

				(For tare operation)
			09:	Remote tare is not enabled when remotely operating tare Operation permit switch (For tare operation)
			, 10 ~ 15:	keep
40008	**00007**	**B Weighing status**	position	instructions
			00:	stable
			. 01:	zero
			. 02:	Show weight minus sign
			. 03:	Overflow condition
			. 04:	Weight overflow
			.05:	Weight overflow
			. 6:	Sensor overflow
			07:	Negative sensor overflow
			. 08:	Millivolts are stable
			09:	Displays the current net weight
			. 10:	The ADC fault
			. 11:	Calculate the weight using theoretical values
			. 12:	bipolar
			, 13 ~ 15:	keep
40009	**00008**	B Error code 1 (Calibration errors)	**00.**	Zero point calibration is unstable
			.01	Negative sensor overflow during zero calibration
			. 02	Sensor overflow during zero calibration

			.03	Weight calibration is unstable
			. 04	Negative sensor overflow during weight calibration
			.05	Sensor overflow during weight calibration
			. 6	keep
			07.	Weight input cannot be zero
			. 08	Weight input exceeds maximum range
			The 09	Beyond minimum resolution
			10.	The previous weight point is not calibrated (Special for multi-point calibration)
			11.	In hardware protection during calibration (Used when hardware calibration switch is available)
			12.	Remote calibration is performed when remote calibration is prohibited (When serial port calibration switch is available)
			, 13 ~ 15:	keep
40010	**00009**	B Error code 2 (Zero tare operation error generation Code - when the corresponding state is valid, Read as 1)	**00:**	Power-on clearing exceeds the threshold
			. 01:	It is unstable during power-on and zero clearing
			. 02:	Clear zero out of range
			. 03:	Unstable at zero clearing
			. 04	Negative sensor overflow during

				zero clearing
			.05:	The sensor overflowed during zero clearing
			. 6:	The remote reset switch is not enabled during remote reset (Used when serial port reset switch is available)
			07:	Zero clearance is not allowed in the net weight state (For tare operation)
			. 08:	Net weight condition does not allow peeling (For tare operation)
			09:	Remote tare is not enabled when remotely operating tare Operation permit switch (For tare operation)
			, 10 ~ 15:	keep
40011	**00010**	Process status flag bit 1 (Read if the corresponding status is valid The 1)	00:	Reserved, return 0b
			. 01:	Run (including simulation run)
			. 02:	IO Test mode
			. 03:	Removing mixture model
			. 04	A Small vibrating plate test of scale
			.05:	A scale large vibration disk test
			. 6:	B Scale small vibration plate test
			07:	B scale vibration test
			. 08:	Interlock host mode
			09:	Interlock slave mode

			. 10:	Clamping bag status: clamping bag after effective, from the machine mold Type is invalid under
			. 11:	Coding status: valid when coding, from the machine model Type is invalid under
			. 12:	Lack of material state, effective when lack of material
			. 13:	Feeding state, effective when feeding
			, 14 ~ 15:	keep
40012	**00011**	A scale Process status flag bit 2 (Read if the corresponding status is valid The 1)	**00:**	A scale operation
			. 01:	A Preparation before weighing
			. 02:	A scale quickly
			. 03:	A scale to add
			. 04	A scale and slow
			.05:	A Scale feeding stops
			. 6:	A good scale
			07:	A balance result is out of tolerance
			. 08:	The result of A balance is not bad
			09:	A balance filling material
			. 10:	The discharge state
			. 11:	A scale suspension
			. 12:	A Balance overbalance and underbalance suspension state
			. 13:	Voltage self-search

			, 14 ~ 15:	keep
40013	**00012**	B scale Process status flag bit 3 (Read if the corresponding status is valid The 1)	**00:**	B scale operation
			. 01:	B Preparation before weighing
			. 02:	B scale quickly
			. 03:	B scale to add
			. 04	B scale and slow
			.05:	B The scale feeding stops
			. 6:	B a scale
			07:	B balance result is out of tolerance
			. 08:	B the balance result is poor
			09:	B scale filling material
			. 10:	The discharge state
			. 11:	B balance suspension
			. 12:	B Balance overbalance and underbalance suspension state
			. 13:	Voltage self-search
			, 14 ~ 15:	keep
40014	**00013**	keep	keep	
40015	**00014**	Workflow error code area 1 (When the corresponding state is valid, Read as 1)	**00:**	A zero clearing failure alarm before feeding
			. 01:	A Scale overbalance and underbalance alarm
			. 02:	A Unloading door is not closed when the scale is started
			. 03:	A The unloading door is not closed when the scale is powered on

			. 04	A Scale feeding timeout alarm
			.05:	A unloading timeout alarm of scale
			. 6:	B zero clearance failure alarm before feeding
			07:	B Scale overbalance and underbalance alarm
			. 08:	B The unloading door is not closed when the scale is started
			09:	B The unloading door is not closed when the scale is powered on
			. 10:	B Scale feeding timeout alarm
			. 11:	B Overload alarm for unloading of scale
			. 12:	A software error failed to start
			. 13:	The test status of the vibration disk cannot be operated
			. 14:	The OPERATION cannot be performed in the I/O test status
			. 15:	It is not allowed to operate in clear condition
40016	**00015**	Workflow error code area 2 (When the corresponding state is valid, Read as 1)	**00:**	The target value of scale A is 0 at startup
			. 01:	The target value of B balance is 0 at startup
			. 02:	The voltage parameter of A weighing vibration plate is unreasonable during startup
			. 03:	The voltage parameter of vibrator plate of B balance is unreasonable during startup

			. 04	The leading parameters of A scale are unreasonable during startup
			.05:	The leading parameters of B balance are unreasonable during startup
			. 6:	Scale A overflows during startup
			07:	Scale B overflows during startup
			. 08 ~. 15:	keep
40017-40018.	**0016-0017.**	keep	keep	
40019-40020.	**0018-0019.**	A gross weight of scale	A 4-byte signed integer	
40021-40022.	**0020-0021.**	A net weight of scale	A 4-byte signed integer	
40023-40024.	**0022-0023.**	A Tare value of scale	A 4-byte signed integer	
40025-40026.	**0024-0025.**	keep	keep	
40027-40028.	**0026-0027.**	A Scale displays the value	A 4-byte signed floating-point number	
40029-40030.	**0028-0029.**	A gross weight of scale	A 4-byte signed floating-point number	
40031-40032.	**0030-0031.**	A net weight of scale	A 4-byte signed floating-point number	
40033-40034.	**0032-0033.**	keep	keep	
40035-40036.	**0034-0035.**	keep	keep	
40037-40038.	**0036-0037.**	AD internal code after A balance filtering		

40039-40040.	**0038-0039.**	A Scale sensor voltage value	
40041-40042.	**0040-0041.**	A relative zero voltage of the scale	
40043-40044.	**0042-0043.**	B gross weight of scale	A 4-byte signed integer
40045-40046.	**0044-0045.**	B net weight of scale	A 4-byte signed integer
40047-40048.	**0046-0047.**	B Tare value of scale	A 4-byte signed integer
40049-40050.	**0048-0049.**	keep	keep
40051-40052.	**0050-0051.**	B The scale displays values	A 4-byte signed floating-point number
40053-40054.	**0052-0053.**	B The gross weight value of the scale	A 4-byte signed floating point number
40055-40056.	**0054-0055.**	B The net weight value of the scale	A 4-byte signed floating point number
40057-40060.	**0056-0059.**	keep	keep
40061-40062.	**0060-0061.**	AD internal code after B balance filtering	AD internal code after B balance filtering
40063-40064.	**0062-0063.**	B Sensor voltage of the scale	B Sensor voltage of the scale
40065-40066.	**0064-0065.**	B the relative zero voltage of the scale	B the relative zero voltage of the scale
40067-40082.	**0066-0081.**	keep	keep

40083-40084.	0082-0083.	High level data of total accumulated weight of the system	The range of 0 ~ 999999
40085-40086.	0084-0085.	Low data of total accumulated weight of the system	The range of 0 ~ 999999999
40087-40088.	0086-0087.	High level data of total accumulative times of the system	The range of 0 ~ 999999
40089-40090.	0088-0089.	Low data of total accumulative times of the system	The range of 0 ~ 999999999
40091	**00090**	keep	1: effective 0: invalid
40092	**00091**	Input status area (IN1-IN10)	1: effective 0: invalid
40093	**00092**	Output status area (OUT17-OUT20)	1: effective 0: invalid
40094	**00093**	Output status area (OUT1-OUT16)	1: effective 0: invalid
40095-40100.	0094-0099.	keep	keep
Basic transmitter parameter area (A scale, B scale common basic parameters) (read and write)			

40101-40102.	**0100-0101.**	Power-on clearance range	0-99% of the maximum range, initial value: 0 (off)
40103-40104.	**0102-0103.**	keep	keep
40105-40106.	**0104-0105.**	Reset the scope	1%-99% of the maximum range, initial value: 20%
40107-40114.	**0106-0113.**	keep	keep
40115-40116.	**0114-0115.**	Sentenced to stabilizing range	Range: 0-99D, initial value: 1
40117-40118.	**0116-0117.**	Sentenced to stabilizing time	Range: 1-5000 ms, initial value: 1000
40119-40120.	**0118-0119.**	Back to zero range	Range: 0-99D, initial value: 1
40121-40122.	**0120-0121.**	After the zero time	Range: 1-5000 ms, initial value: 1000
40123-40124.	**0122-0123.**	Digital filtering	Range: 0-9, initial value: 4
40125-40126.	**0124-0125.**	keep	keep
40127-40128.	**0126-0127.**	AD sampling speed	Range: 0-9 (corresponding to 0-50;1-60;2-100;3- 120;4-200;5-240.6-400;7-480;8-800; 9-960) Initial value: 200Hz
40129-40130.	**0128-0129.**	Signal range	Range: 0-2 (corresponding to 0:0-5MV;1-0-10 mv;2: 0-15mv,) Initial value: 1 (0-10mv)
40131-40200.	**0130-0199.**	keep	keep
Calibration parameter area (read-write)			
40201-40202.	**0200-0201.**	unit	Range: 0~3;0-t, 1-kg, 2-g, 3-lb Initial value: 1.
40203-40204.	**0202-0203.**	The decimal	Range: 0~4;0-0, 1-0.0, 2-0.00, 3-0.000,

		point	4-0.0000;Initial values: 0
40205-40206.	**0204-0205.**	Dividing the value	Range :0 to 8:0-1, 1-2, 2-5, 3-10, 4-20, 5-0 50, 6-100, 7-200, 8-500;Initial values: 0
40207-40208.	**0206-0207.**	Maximum range	Range: 0- indexing value *100000;Initial value: 10000
40209-40210.	**0208-0209.**	keep	keep
A Weighing calibration area (read-and-write)			
40211-40212.	**0210-0211.**	The zero calibration	Write non-zero data, zero calibration of the current state Read: Current millivolt of sensor.Fixed 4 decimal places.
40213-40214.	**0212-0213.**	Zero millivolt number	Read the zero millivolt of the last calibration
40215-40216.	**0214-0215.**	Gain calibration	Write the weight value to complete the weight point calibration Read: Relative millivolts
40217-40224.	**0216-0223.**	keep	keep
40225-40226.	**0224-0225.**	Sensor sensitivity	Write the actual sensitivity of the sensor used for the theoretical value scale Fixed, fixed four decimal points
40227-40228.	**0226-0227.**	Total sensor range	Write the total sensor range for the theoretical value calibration
40229-40230.	**0228-0229.**	Theoretical value effective switch	Write 1 to enable the theoretical value calibration, write 0 to use the calibration data
40231-40232.	**0230-0231.**	Weight correction factor	Write coefficient to calibrate correction, write data integer type, system System default data write data with 5 decimal point;Initial value: 100000;Parameter Range: 1 to 1000000
40233-40238.	**0232-0237.**	keep	keep

40239-40240.	**0238-0239.**	The calibration results	1- Successful calibration; 2-zero calibration is unstable; Negative overflow of 3-zero calibration sensor; 4-zero calibration sensor overflow; 5- Unstable weight calibration; 6- Negative overflow of sensor during weight calibration; 7- Sensor overflow during weight calibration; 8- Weight calibration is less than zero; 9- Weight input cannot be 0; 10- Weight input exceeds maximum range 11- Over minimum resolution (<1 AD code)
40241 ~ 40250	**0240 ~ 0249**	keep	keep
B Weighing calibration area (readable and writable)			
40251-40252.	**0250-0251.**	The zero calibration	Write non-zero data, zero calibration of the current state Read: Current millivolt of sensor.Fixed 4 decimal places.
40253-40254.	**0252-0253.**	Zero millivolt number	Read the zero millivolt of the last calibration
40255-40256.	**0254-0255.**	Gain calibration	Write the weight value to complete the weight point calibration Read: Relative millivolts
40257-40264.	**0256-0263.**	keep	keep
40265-40266.	**0264-0265.**	Sensor sensitivity	Write the actual sensitivity of the sensor used for the theoretical value scale Fixed, fixed four decimal points
40267-40268.	**0266-0267.**	Total sensor range	Write the total sensor range for the theoretical value calibration
40269-40270.	**0268-0269.**	Theoretical value effective switch	Write 1 to enable the theoretical value calibration, write 0 to use the calibration data

40271-40272.	0270-0271.	Weight correction factor	Write coefficient to calibrate correction, write data integer type, system System default data write data with 5 decimal point;Initial value: 100000;Parameter Range: 1 to 1000000
40273-40278.	0272-0277.	keep	keep
40279-40280.	0278-0279.	The calibration results	1- Successful calibration; 2-zero calibration is unstable; Negative overflow of 3-zero calibration sensor; 4-zero calibration sensor overflow; 5- Unstable weight calibration; 6- Negative overflow of sensor during weight calibration; 7- Sensor overflow during weight calibration; 8- Weight calibration is less than zero 9- Weight input cannot be 0; 10- Weight input exceeds maximum range 11- Over minimum resolution (<1 AD code)
40239 ~ 40300	0238 ~ 0299	keep	keep
Application parameter area (read-write)			
40301-40302.	0300-0301.	Working mode	Under different modes, the unloading part of the control is different, master Machine mode Manages unloading parameters in slave machine mode.Scope: 0 - 3;Default: 0 Standard mode;1- Host mode;2- Slave mode;3 - single 0- Bucket independent mode
40303-40304.	0302-0303.	Feeding vibration plate mode	Parameter range: 0-1;Default value: 1 0- Single disk mode, 1- Dual disk mode
40305-40306.	0304-0305.	Unloading mechanism	Parameter range: 0-6;Default: 0

		mode	0-pneumatic unloading;1- Motor rotating unloading;2- Motor positive and negative rotation (dual photoelectric);3-motor positive and negative rotation (single photoelectric);4 - electricity Machine positive and negative (no photoelectric);5- Stepper motor rotation;Step 6 - Feed motor positive and negative rotation
40307-40308.	**0306-0307.**	Discharge decision mode	Determine the control conditions for closing the unloading door.Parameters of the fan Circumference: 0 and 1;Default value: 0.0- time mode, 1- zero zone mode
40309-40310.	**0308-0309.**	Unloading interval time	After unloading execution is completed, the unloading interval time is not detected Whether there are new discharging requirements. Range: 0-1000ms default value: 100ms.
40311-40312.	**0310-0311.**	Delay in confirming unloading state from machine	It is used to wait for the unloading signal of the slave machine to be completely withdrawn to prevent withdrawal Abnormal discharge parameters caused by pin delay. Range: 0-1000ms default value: 100ms.
40313-40314.	**0312-0313.**	Feeding timeout time	Parameter Range: 0-30000ms Default value: 0.0 to shut down Material timeout detection
40315-40316.	**0314-0315.**	Discharging timeout time	Parameter Range: 0-30000ms Default value: 0.0 to shut down Material timeout detection
40317-40318.	**0316-0317.**	Dynamic filter switch	Parameter range: 0-1, default: 0 (off),
40319-40320.	**0318-0319.**	Feeding filter grade	Parameter Range: 0-9 Default value: 4

40321-40322.	**0320-0321.**	Constant filtering level	Parameter Range: 0-9 Default value: 7
40323-40324.	**0322-0323.**	Discharging filter grade	Parameter Range: 0-9 Default value: 3
40325-40326.	**0324-0325.**	Start condition of next feeding	Parameter range: 0-1 Default value: 0 0- Start immediately after unloading is completed, 1- return to zero after unloading is completed Zone after the launch
40327-40328.	**0326-0327.**	Constant value way	Parameter range: 0-2 Default value: 0 Judge the stability value, 1- time fixed value, 2- judge the stability plus time fixed Value (run the fixed value time after stabilization)
40329-40330.	**0328-0329.**	Start additional clearance times	Is 0, start the first packet to clear;Non-zero, the first packet is not clear Zero, subsequent zero clearance. Parameters range from 0 to 99. Default value: 0
40331-40332.	**0330-0331.**	Clear additional delay	Before feeding delay after if need to clear into this delay, time Zero clearance after arrival;Range: 0ms-5000ms, default value: 500ms
40333-40334.	**0332-0333.**	Feeding clearance timeout time	Parameter range: 1000ms to 5000ms. The default value is 3000ms Reach (this time + stable time) is not stable, skip clear Zero direct feeding
40335-40336.	**0334-0335.**	Handling method of failure to clear data	Parameter range: 0-3 Default value: 1 Just call the police;1- Alarm, and then clear the next bag;2- Alarm three in a row

			Automatic stop after failure: 3- alarm, stop immediately
40337-40338.	**0336-0337.**	Charging series	Parameter range: 0-1 Default value: 0.0: two-stage feeding, Only fast and slow, 1: three levels of feeding, fast and slow.
40339-40340.	**0338-0339.**	A scale: small vibrating plate cleaning voltage	Parameter Value range: 0-5000mV Default value: 3500
40341-40342.	**0340-0341.**	A scale: large vibration plate cleaning voltage	Parameter Value range: 0-5000mV Default value: 3500
40343-40344.	**0342-0343.**	B scale: small vibrating plate cleaning voltage	Parameter Value range: 0-5000mV Default value: 3500
40345-40346.	**0344-0345.**	B scale: large vibration plate cleaning voltage	Parameter Value range: 0-5000mV Default value: 3500
40347-40348.	**0346-0347.**	Cleaning and feeding time	When cleaning, feed the material first and then discharge the material after the time.Parameters of the fan Parameter description value range: 0ms to 10000ms, default value: 2000ms
40349-40350.	**0348-0349.**	Lead adaptive switch	The value ranges from 0 to 1. The default value is 0.0: do not modify the formula, strict Run according to the formula parameters.1: Add or slow the time according to Fine-tune the amount of advance
40351-40352.	**0350-0351.**	Adaptive level	The value ranges from 1 to 5. The default value is 2.The smaller the value, the better the lift The smaller the front value, the faster the

			speed."
40353-40354.	**0352-0353.**	Feeding voltage working mode	Parameter range: 0-1 Default value: 1 Standard mode, slow add end voltage back to 0,1 - preboost die Formula, the voltage does not return to 0 at the end of slow adding, and keeps the original value until the voltage rises back to the first material speed voltage when discharging (there is a fast increase back to the fast increase voltage, there is no fast increase back to the voltage).
40355-40356.	**0353-0354.**	Delay after bag clamping	Parameter range: 0ms to 10000ms, default value: 500ms
40357-40358.	**0355-0356.**	Delay before releasing bag	Parameter range: 0ms to 10000ms, default value: 500ms
40359-40360.	**0357-0358.**	Code delay	Parameter range: 0ms to 10000ms, default value: 500ms
40361-40362.	**0359-0360.**	Encoding output valid time	Parameter range: 0ms to 10000ms, default value: 500ms
40363-40368.	**0361-0367.**	keep	keep
40369-40370.	**0368-0369.**	Step motor open pulse number	Parameter range: 1-100000, default value: 1000, unloader For step motor positive and negative rotation, for the number of open pulse
40371-40372.	**0370-0371.**	Open the door and check the time	Motor/stepper motor rotary discharge control is used, not after opening the door Judge the time of origin position signal;Parameter range: 0ms- 3000 ms;Default value: 100ms
40373-40374.	**0372-0373.**	Discharge door opening time	Unloading mechanism mode 0 pneumatic unloading or 3 motor positive and negative (single

			Photoelectric) or 4 (motor positive and negative rotation no photoelectric), is valid The length of time given by the discharge door opening signal.Parameter range: 0- 3000 ms;Default value: 1000ms
40375-40376.	**0374-0375.**	Closing time of unloading door	It is valid in discharge mode 4 (motor positive and negative rotation without photoelectric), and is The length of time given by the closing signal of unloading door;Parameter range: 0- 3000 ms;Default value: 1000ms
40377-40378.	**0376-0377.**	Discharging motor operating frequency	Frequency of normal operation of motor;Parameter range: 100-100000Hz;Default value: 2000HZ
40379-40380.	**0378-0379.**	Starting frequency of discharging motor	Frequency when the motor starts;Parameter range: 100-100000Hz;Default value: 200HZ
40381-40382.	**0380-0381.**	Acceleration time of unloading motor	When the motor is accelerated from starting frequency to operating frequency Between;Parameter range: 0-10000ms default value: 100ms
40383-40384.	**0382-0383.**	Constant weight hold switch	Parameter range: 0-1, default value: 1 (unloading weight Keep constant weight)
40385-40386.	**0384-0385.**	Voltage self - seeking switch	Parameters range: 0-1. Default value: 0 If this parameter is enabled, the following information is displayed If the charging is at both poles (fast and slow), when the voltage is 0, Voltage is looked up on startup
40387-40388.	**0386-0387.**	Voltage rise frequency	Parameters range: 2-120. Default value: 60 The higher the frequency of voltage rise, the faster the voltage rise

40389-40390.	**0388-0389.**	Slow weight cut-off point	Parameter range: 0-10000 Default value: 120
40391-40400.	**0390-0399.**	keep	keep
IO Defines the function address			
40401-40402.	**0400-0401.**	IN1 function	Write and modify corresponding interface functions and read them as function codes.The default value of 1
40403-40404.	**0402-0403.**	IN2 function	Write and modify corresponding interface functions and read them as function codes.The default value of 3
40405-40406.	**0404-0405.**	IN3 function	Write and modify corresponding interface functions and read them as function codes.The default value of 4
40407-40408.	**0406-0407.**	IN4 function	Write and modify corresponding interface functions and read them as function codes.The default value of 5
40409-40410.	**0408-0409.**	IN5 function	Write and modify corresponding interface functions and read them as function codes.The default value of 6
40411-40412.	**0410-0411.**	IN6 function	Write and modify corresponding interface functions and read them as function codes.The default value is 9
40413-40414.	**0412-0413.**	IN7 function	Write and modify corresponding interface functions and read them as function codes.The default value of 19
40415-40416.	**0414-0415.**	IN8 function	Write and modify corresponding interface functions and read them as function codes.The default value of 20
40417-40418.	**0416-0417.**	IN9 function	Write and modify corresponding interface functions and read them as function codes.The default value of 21
40419-40420.	**0418-0419.**	IN10 function	Write and modify corresponding interface functions and read them as function codes.The default value is 22

40421-40422.	0420-0421.	The OUT1 function	Write and modify corresponding interface functions and read them as function codes.The default value of 1
40423-40424.	0422-0423.	OUT2 function	Write and modify corresponding interface functions and read them as function codes.The default value of 2
40425-40426.	0424-0425.	OUT3 function	Write and modify corresponding interface functions and read them as function codes.The default value of 3
40427-40428.	0426-0427.	OUT4 function	Write and modify corresponding interface functions and read them as function codes.The default value of 4
40429-40430.	0428-0429.	OUT5 function	Write and modify corresponding interface functions and read them as function codes.The default value is 9
40431-40432.	0430-0431.	OUT6 function	Write and modify corresponding interface functions and read them as function codes.The default value of 10
40433-40434.	0432-0433.	OUT7 function	Write and modify corresponding interface functions and read them as function codes.The default value of 11
40435-40436.	0434-0435.	OUT8 function	Write and modify corresponding interface functions and read them as function codes.The default value is 12
40437-40438.	0436-0437.	OUT9 function	Write and modify corresponding interface functions and read them as function codes.The default value of 13
40439-40440.	0438-0439.	OUT10 function	Write and modify corresponding interface functions and read them as function codes.The default value of 14
40441-40442.	0440-0441.	OUT11 function	Write and modify corresponding interface functions and read them as function codes.The default value of 17
40443-40444.	0442-0443.	OUT12 function	Write and modify corresponding interface functions and read them as function codes.The default value of 18

40445-40446.	**0444-0445.**	OUT13 function	Write and modify corresponding interface functions and read them as function codes.The default value of 23
40447-40448.	**0446-0447.**	OUT14 function	Write and modify corresponding interface functions and read them as function codes.The default value is 24
40449-40450.	**0448-0449.**	OUT15 function	High speed pulse output (PWM);Write modify corresponding interface function, read Out is the function code.The default value is 25.
40451-40452.	**0450-0451.**	OUT16 function	High speed pulse output (PWM);Write modify corresponding interface function, read Out is the function code.The default value of 26
40453-40454.	**0452-0453.**	OUT17 function	High speed pulse output (PWM);Write modify corresponding interface function, read Out is the function code.The default value of 27
40455-40456.	**0454-0455.**	OUT18 function	High speed pulse output (PWM);Write modify corresponding interface function, read Out is the function code.The default value of 28
40457-40458.	**0456-0457.**	OUT19 function	High speed pulse output (PWM);Write modify corresponding interface function, read Out is the function code.The default value of 29
40459-40460.	**0458-0459.**	OUT20 function	Write and modify corresponding interface functions and read them as function codes.The default value of 30
40461-41000.	**0460-0999.**	keep	keep
Formula and feeding control parameter area (41001~41310)			
41001-41002.	**1000-1001.**	Current Recipe Number	Parameters range from 1 to 20. Default value: 1. After local modification, the parameters following the formula number must be updated synchronously
41003-41004.	**1002-1003.**	The target	Range: < maximum range
41005-41006.	**1004-1005.**	B Scale target	

		value	
41007-41008.	1006-1007.	A scale small vibration plate quick increase voltage	Parameter Range: 0-5000mV Default value: 0
41009-41010.	1008-1009.	Add voltage to the small vibrating disk of A scale	Parameter Range: 0-5000mV Default value: 0
41011-41012.	1010-1011.	A small vibrating plate of scale slowly add voltage	Parameter Range: 0-5000mV Default value: 0
41013-41014.	1012-1013.	Fast increase of voltage on large vibrating plate of scale A	Parameter Range: 0-5000mV Default value: 0
41015-41016.	1014-1015.	Add voltage to the vibrating disk of A scale	Parameter Range: 0-5000mV Default value: 0
41017-41018.	1016-1017.	A scale large vibration plate slowly add voltage	Parameter Range: 0-5000mV Default value: 0
41019-41020.	1018-1019.	A Scale up quickly	Weight = target value - stop fast feeding when fast adding and leading quantity;Initial values: 0
41021-41022.	1020-1021.	A Add advance quantity to the scale	Weight = target value - stop medium feeding when adding advance quantity;Initial values: 0
41023-41024.	1022-1023.	A balance drop value	Stop slow feeding when weight = target value - drop value;Initial values: 0
41025-41026.	1024-1025.	"A" scale up your sentence	The value ranges from 0 to 5000ms. The default value is 500ms
41027-41028.	1026-1027.	A Add the time of prohibition	The value ranges from 0 to 5000ms. The default

		to the scale	value is 500ms
41029-41030.	1028-1029.	A scale is slow to add time to the sentence	The value ranges from 0 to 5000ms. The default value is 500ms
41031-41032.	1030-1031.	B scale small vibrator plate quick increase voltage	Parameter Range: 0-5000mV Default value: 0
41033-41034.	1032-1033.	Add voltage to the small vibrator plate of scale B	Parameter Range: 0-5000mV Default value: 0
41035-41036.	1034-1035.	B Scale small vibrator plate slowly add voltage	Parameter Range: 0-5000mV Default value: 0
41037-41038.	1036-1037.	B scale large vibration plate fast increase voltage	Parameter Range: 0-5000mV Default value: 0
41039-41040.	1038-1039.	Add voltage to the large vibrating disk of scale B	Parameter Range: 0-5000mV Default value: 0
41041-41042.	1040-1041.	B scale large vibration plate slowly add voltage	Parameter Range: 0-5000mV Default value: 0
41043-41044.	1042-1043.	B Scale up quickly	Weight = target value - stop fast feeding when fast adding and leading quantity;Initial values: 0
41045-41046.	1044-1045.	B Add advance quantity to scale	Weight = target value - stop medium feeding when adding advance quantity;Initial values: 0
41047-41048.	1046-1047.	B balance drop	Stop slow feeding when weight = target value - drop value;Initial values: 0
41049-41050.	1048-1049.	B scale up	The value ranges from 0 to 5000ms. The default

		your sentence	value is 500ms
41051-41052.	1050-1051.	B Add the time of prohibition to the scale	The value ranges from 0 to 5000ms. The default value is 500ms
41053-41054.	1052-1053.	B the scale is slow to increase the time of prohibition	The value ranges from 0 to 5000ms. The default value is 500ms
41055-41056.	1054-1055.	keep	keep
41057-41058.	1056-1057.	Delay before feeding	The value ranges from 0 to 5000ms. The default value is 0ms
41059-41060.	1058-1059.	Clear the spacing before feeding	Range: 0-99. Default value: 0
41061-41062.	1060-1061.	Setting time delay	The value ranges from 0 to 5000ms. The default value is 700ms
41063-41064.	1062-1063.	Detection of overshoot and undershoot	0 - close;1: open the
41065-41066.	1064-1065.	Ultra difference	The weighing value ≥ target value + out-of-tolerance value is judged to be out of tolerance.Initial value: 0.
41067-41068.	1066-1067.	Owing to difference	If the weighing value is greater than or equal to the target value - underdeviation value, it is judged as underdeviation.Initial value: 0.
41069-41070.	1068-1069.	keep	keep
41071-41072.	1070-1071.	Pause switch over and under difference	Initial value: 0;0 - close;1: Open.When is open, appear exceed owe Poor, the module pauses for user processing
41073-41074.	1072-1073.	Overtime and underdifference alarm pause	When there is no manual clearing alarm, the over-under-difference alarm automatically

		time	closes the alarm Between;The value ranges from 0 to 9000ms. Default value: 1000ms
41075-41076.	1074-1075.	Magnitude of fall correction	Range: 0-3;Default: 1. 0-25%;1-50%;2-75%;3-100%
41077-41078.	1076-1077.	Number of reference times for fall correction	Range: 0-99, default: 0 (off)
41079-41080.	1078-1079.	Range of fall correction	Range: 0-100%, default: 0 (percentage of target value)
41081-41082.	1080-1081.	Maximum feeding time	When feeding, if the feeding time exceeds the value, the feeding is still not finished Into, stop filling;Range: 0-10000ms, default value 3000ms
41083-41084.	1082-1083.	Minimum feeding time	The value ranges from 0 to 3000ms. The default value is 0ms
41085-41086.	1084-1085.	Click the feeding switch	After the opening, according to the minimum feeding time for point dynamic feeding, until reaching Stop feeding after reaching the target value;Range: 0: off, 1: on, silent Recognize value 0
41087-41088.	1086-1087.	Discharge delay	Discharge structure motor positive and negative rotation mode (including double photoelectric, single light Electric, no photoelectric, stepper motor positive and negative) : if the zero zone judgment After reaching the zero zone, delay this time and output the motor reversal signal In case of time determination mode, the unloading door will open and signal to close After delay the time, start output motor reversal signal (off

			The door). When discharging structure mode is pneumatic discharging: if it is judged by zero zone, After opening the door, it will arrive at zero zone. Opening the door after delaying this time is invalid. If it is time decision mode, delay the time after opening the door Opening the door is invalid;The value ranges from 0 to 5000ms. The default value is 300ms
41089-41090.	**1088-1089.**	Zero value	Range: 0- Target value, default: 0
41091-41092.	**1090-1091.**	Number of discharge	How many times does the motor rotate under the rotation mode to complete unloading (Note: The unloading structure mode is motor rotation mode and stepper motor rotation mode Valid) Range: 1-9, default value: 1
41093-41094.	**1092-1093.**	The automatic zero clearing threshold is enabled for the first time value	Is 0, the first startup does not clear zero;When it is not 0, the weight in the bucket is small At the target value * this percentage, the condition of starting zero clearance is met. Range: 0-100%, percentage of target value
41095-41096.	**1094-1095.**	Bucket number of multi-bucket combined scale	When the value is greater than 1, it means that the multi-bucket combined scale, multi-bucket can be the same When unloading;Parameters range from 1 to 99. Default value: 1.
41097-41300.	**1094-1299.**	keep	keep
41301-41302.	**1300-1301.**	The source number formula	
41303-41304.	**1302-1303.**	Target formula No.	
41305-41306.	**1304-1305.**	copy	
41307-41308.	**1306-1307.**	Current recipe	

		channel parameter complex Scale A to B	
41309-41310.	1308-1309.	Current recipe channel parameter complex Scale B to SCALE A	
41331-41400.	1330-1399.	keep	keep
Target value and Cumulative value of each formula (read only)			
41401-41402.	1400-1401.	Formula 1 target value	
41403-41404.	1402-1403.	Formula 2 target value	
41405-41406.	1404-1405.	Formula 3 target value	
41407-41408.	1406-1407.	Formula 4 target value	
41409-41410.	1408-1409.	Formula 5 target value	
41411-41412.	1410-1411.	Formula 6 target value	
41413-41414.	1412-1413.	Formula 7 target value	
41415-41416.	1414-1415.	Formula 8 target value	
41417-41418.	1416-1417.	Formula 9 target value	
41419-41420.	1418-1419.	Formula 10 target value	
41421-41422.	1420-1421.	Formula 11	

		target value	
41423-41424.	1422-1423.	Formula 12 target value	
41425-41426.	1424-1425.	Formula 13 target value	
41427-41428.	1426-1427.	Formula 14 target value	
41429-41430.	1428-1429.	Formula 15 target value	
41431-41432.	1430-1431.	Formula 16 target value	
41433-41434.	1432-1433.	Formula 17 target value	
41435-41436.	1434-1435.	Formula 18 target value	
41437-41438.	1436-1437.	Formula 19 Target value	
41439-41440.	1438-1439.	Formula 20 target value	
41441-41442.	1440-1441.	Formula 1a total weight	
41443-41444.	1442-1443.	Formula 1 A total number of scales	
41445-41446.	1444-1445.	Formula 1 B total weight	
41447-41448.	1446-1447.	Formula 1 B scale accumulative times	
41449-41450.	1448-1449.	Formula 2a total weight	
41451-41452.	1450-1451.	Formula 2a	

		scale accumulative times	
41453-41454.	1452-1453.	Formula 2 B scale accumulated weight	
41455-41456.	1454-1455.	Formula 2 B scale accumulative times	
41457-41458.	1456-1457.	Formula 3a total weight	
41459-41460.	1458-1459.	Formula 3a scale accumulative times	
41461-41462.	1460-1461.	Formula 3 B scale accumulative weight	
41463-41464.	1462-1463.	Formula 3B scale accumulative times	
41465-41466.	1464-1465.	Formula 4 A scale accumulative weight	
41467-41468.	1466-1467.	Formula 4 A total number of scales	
41469-41470.	1468-1469.	Formula 4 B total weight	
41471-41472.	1470-1471.	Formula 4B scale accumulative	

		times	
41473-41474.	1472-1473.	Formula 5 A scale accumulative weight	
41475-41476.	1474-1475.	Formula 5a scale accumulative times	
41477-41478.	1476-1477.	Formula 5 B total weight	
41479-41480.	1478-1479.	Formula 5B scale accumulative times	
41481-41482.	1480-1481.	Formula 6 A scale accumulative weight	
41483-41484.	1482-1483.	Formula 6 A scale accumulative times	
41485-41486.	1484-1485.	Formula 6 B scale accumulative weight	
41487-41488.	1486-1487.	Formula 6B scale accumulative times	
41489-41490.	1488-1489.	Formula 7A scale accumulates weight	
41491-41492.	1490-1491.	Formula 7A scale accumulative	

		times	
41493-41494.	1492-1493.	Formula 7 B total weight	
41495-41496.	1494-1495.	Formula 7B scale accumulative times	
41497-41498.	1496-1497.	Formula 8A scale accumulative weight	
41499-41500.	1498-1499.	Formula 8A scale accumulative times	
41501-41502.	1500-1501.	Formula 8 B scale accumulative weight	
41503-41504.	1502-1503.	Formula 8B scale accumulative times	
41505-41506.	1504-1505.	Formula 9 A scale accumulative weight	
41507-41508.	1506-1507.	Formula 9 A total number of scales	
41509-41510.	1508-1509.	Formula 9 B total weight	
41511-41512.	1510-1511.	Formula 9 B total number of scales	
41513-41514.	1512-1513.	Formula 10 A scale	

		accumulated weight The amount	
41515-41516.	1514-1515.	Formula 10 A scale accumulative times The number	
41517-41518.	1516-1517.	Formula 10 B scale accumulated weight The amount	
41519-41520.	1518-1519.	Formula 10 B scale accumulative times The number	
41521-41522.	1520-1521.	Formula 11A scale accumulated weight The amount	
41523-41524.	1522-1523.	Formula 11A scales accumulative times The number	
41525-41526.	1524-1525.	Formula 11B scale accumulated weight The amount	
41527-41528.	1526-1527.	Formula 11B scale accumulative times	

		The number	
41529-41530.	1528-1529.	Formula 12A scale accumulated weight The amount	
41531-41532.	1530-1531.	Formula 12A scales accumulative times The number	
41533-41534.	1532-1533.	Formula 12B scale accumulated weight The amount	
41535-41536.	1534-1535.	Formula 12B scale accumulative times The number	
41537-41538.	1536-1537.	Formula 13A scale accumulated weight The amount	
41539-41540.	1538-1539.	Formula 13A scales accumulative times The number	
41541-41542.	1540-1541.	Formula 13B scale accumulated weight The amount	

41543-41544.	**1542-1543.**	Formula 13 B scale accumulative times The number	
41545-41546.	**1544-1545.**	Formula 14A scale accumulated weight The amount	
41547-41548.	**1546-1547.**	Formula 14A scale accumulative times The number	
41549-41550.	**1548-1549.**	Formula 14B scale accumulated weight The amount	
41551-41552.	**1550-1551.**	Formula 14B scale accumulative times The number	
41553-41554.	**1552-1553.**	Formula 15A scale accumulated weight The amount	
41555-41556.	**1554-1555.**	Formula 15A scale accumulative times The number	
41557-41558.	**1556-1557.**	Formula 15B scale	

		accumulated weight The amount	
41559-41560.	1558-1559.	Formula 15 B scale accumulative times The number	
41561-41562.	1560-1561.	Formula 16A scale accumulated weight The amount	
41563-41564.	1562-1563.	Formula 16A scales accumulative times The number	
41565-41566.	1564-1565.	Formula 16B scale accumulated weight The amount	
41567-41568.	1566-1567.	Formula 16B scale accumulative times The number	
41569-41570.	1568-1569.	Formula 17A scale accumulated weight The amount	
41571-41572.	1570-1571.	Formula 17A scales accumulative times	

		The number	
41573-41574.	**1572-1573.**	Formula 17B scale accumulated weight The amount	
41575-41576.	**1574-1575.**	Formula 17 B scale accumulative times The number	
41577-41578.	**1576-1577.**	Formula 18A scale accumulated weight The amount	
41579-41580.	**1578-1579.**	Formula 18 A scale accumulative times The number	
41581-41582.	**1580-1581.**	Formula 18B scale accumulated weight The amount	
41583-41584.	**1582-1583.**	Formula 18 B scale accumulative times The number	
41585-41586.	**1584-1585.**	Formula 19 A scale accumulated weight The amount	

41587-41588.	1586-1587.	Formula 19 A scales accumulative times The number	
41589-41590.	1588-1589.	Formula 19 B scale accumulated weight The amount	
41591-41592.	1590-1591.	Formula 19 B scale accumulative times The number	
41593-41594.	1592-1593.	Formula 20A scale accumulated weight The amount	
41595-41596.	1594-1595.	Formula 20A scale accumulative times The number	
41597-41598.	1596-1597.	Formula 20B scale accumulated weight The amount	
41599-41600.	1598-1599.	Formula 20B scale accumulative times	
41601-41602.	1600-1601.	High total accumulated weight	

41603-41604.	**1602-1603.**	Low total accumulated weight	
41605-41606.	**1604-1605.**	The total accumulative number is high	
41607-41608.	**1606-1607.**	The total accumulative number is low	
41609-41610.	**1608-1609.**	A high level of total accumulated weight of scale	
41611-41612.	**1610-1611.**	A low total accumulated weight of the scale	
41613-41614.	**1612-1613.**	A The total number of scales is high	
41615-41616.	**1614-1615.**	A the total number of scales is low	
41617-41618.	**1616-1617.**	B High total accumulated weight of scale	
41619-41620.	**1618-1619.**	B low total accumulated weight of scale	
41621-41622.	**1620-1621.**	B the total number of scales is high	
41623-41624.	1622-1623.	B the total number of scales is low	
41625-41626.	**1624-1625.**	Formula 1 B	

		scale target value	
41627-41628.	1626-1627.	Formula 2 B scale target value	
41629-41630.	1628-1629.	Formula 3 B scale target value	
41631-41632.	1630-1631.	Formula 4 B scale target value	
41633-41634.	1632-1633.	Formula 5B scale target value	
41635-41636.	1634-1635.	Formula 6 B scale target value	
41637-41638.	1636-1637.	Formula 7 B scale target value	
41639-41640.	1638-1639.	Formula 8 B scale target value	
41641-41642.	1640-1641.	Formula 9 B scale target value	
41643-41644.	1642-1643.	Formula 10 B scale target value	
41645-41646.	1644-1645.	Formula 11B scale target value	
41647-41648.	1646-1647.	Formula 12B scale target value	
41649-41650.	1648-1649.	Formula 13B	

		scale target value	
41651-41652.	1650-1651.	Formula 14B scale target value	
41653-41654.	1652-1653.	Formula 15B scale target value	
41655-41656.	1654-1655.	Formula 16B scale target value	
41657-41658.	1656-1657.	Formula 17 B scale target value	
41659-41660.	1658-1659.	Formula 18 B scale target value	
41661-41662.	1660-1661.	Formula 19 B scale target value	
41663-41664.	1662-1663.	Formula 20B scale target value	
41665-42000.	1664-1999.		
42001-42002.	2000-2001.	A Scale quickly add time	
42003-42004.	2002-2003.	A Add time to the scale	
42005-42006.	2004-2005.	A the scale adds time slowly	
42007-42008.	2006-2007.	A Weighing time	
42009-42010.	2008-2009.	A Total	

		packaging time of scale	
42011-42012.	2010-2011.	A Packing weight on the scale	
42013-42014.	2012-2013.	A The scale contains the formula number	
42015-42016.	2014-2015.	A Package the target value on the scale	
42017-42018.	2016-2017.	A Package deviation value on scale	
42019-42020.	2018-2019.	A scale packaging result collection standard general	
42021-42022.	2020-2021.	A scale has accumulated out-of-tolerance times this time The number	
42023-42024.	2022-2023.	A the balance has accumulated the short difference times this time The number	
42025-42026.	2024-2025.	A The accumulated weight of the scale	

42027-42028.	**2026-2027.**	A Total number of scales this time	
42029-42040.	**2028-2039.**		
42041-42042.	**2040-2041.**	B Speed up the scale	
42043-42044.	**2042-2043.**	B Add time to the scale	
42045-42046.	**2024-2045.**	B The scale adds time slowly	
42047-42048.	**2046-2047.**	B Weighing and setting time	
42049-42050.	**2048-2049.**	B Total packaging time of scale	
42051-42052.	**2050-2051.**	B Packing weight on the scale	
42053-42054.	**2052-2053.**	B The scale contains the formula number	
42055-42056.	**2054-2055.**	B Package the target value on the scale	
42057-42058.	**2056-2057.**	B Package deviation on scale	
42059-42060.	**2058-2059.**	B Scale packaging result collection standard	

		general	
42061-42062.	**2060-2061.**	B The balance is out of tolerance this time The number	
42063-42064.	**2062-2063.**	B The balance fails to start this time The number	
42065-42066.	**2064-2065.**	B The scale is heavy for this startup The amount	
42067-42068.	**2066-2067.**	B The scale starts packing this time The number	
42069-42080.	**2068-2079.**		
42081-42082.	**2080-2081.**	Packaging results collection identification (total);The power-on and abnormal state is 3, and the weight of the package jumps between 0 and 1 when it is generated	
42083-42084.	**2082-2083.**	Loading channel number;1 - A scale;2 - B scale	

42085-42086.	2084-2085.	Package formula number	
42087-42088.	2086-2087.	Package target value	
42089-48000.	2088-7999.	keep	
Communication parameter setting area (48001~48026) (except marked readable, other readable)			
48001	8000	COM1 from immediately	COM port ID Indicates the dip switch of the external hardware. It is read as the current slave machine number.(Read only)
48002	8001	COM1 baud rate	Initial value: 2-38400, range: 0-4 Corresponding to 0- 9600, 1-19200, 2-38400, 3-57600, 4- 115200;
48003	8002	COM1 communication protocol	Initial value: 0-Modbus RTU range: 0-Modbus RTU, 1- Modbus Ascii, 2-continuous send, 3-result send
48004	8003	COM1 data format	Initial value: 1 (8E1); Range: 0-8N1, 1-8E1, 2-8O1, 3-7E1, 4-7O1
48005	8004	COM1 two-word mode	Initial value :0 (ab-cd) Range: 0-AB-cd, 1-cd-AB.
48006	8005	COM1 Continuous send interval	Initial value: 5ms. The value ranges from 0 to 1000ms
48007 ~ 48020	8006 ~ 48019	keep	keep
48021	8020	COM2 from immediately	COM port ID Indicates the dip switch of the external hardware. It is read as the current slave machine number.(Read only)
48022	8021	COM2 baud rate	Initial value: 2-38400, range: 0-4 Corresponding to 0-9600, 1-19200, 2-38400, 3-57600, 4-115200;
48023	8022	COM2	Initial value: 0-Modbus RTU range: 0-Modbus

		communication protocol	RTU, 1-Modbus Ascii, 2- continuous send, 3-Result send
48024	8023	COM2 data format	Initial value: 1 (8E1); Range: 0-8N1, 1-8E1, 2-8O1, 3-7E1, 4-7O1
48025	8024	COM2 two-word mode	Initial value :0 (ab-cd) Range: 0-AB-cd, 1-cd-AB.
48026	8025	COM2 Continuous send interval	Initial value: 5ms. The value ranges from 0 to 1000ms
48027 ~ 48160	8026 ~ 8059	keep	keep
48161	8060	Communication status	For synchronous communication, 0 just after successful communication, 1 2 seconds after successful communication.(read-only)
48162	8061	Serial no.	Serial port 1 is read as 1, and serial port 2 is read as 2.(read-only)
48163 ~ 48100	8164 ~ 8099	keep	keep
I/O test parameters			
48301	8300	I/O test mode	Parameter range: 0-1 0: Exits the I/O test mode.1: Enters the SERIAL port IO test mode. After the test is complete, the module must be shut down to enter the normal state. Reading 0 indicates no input and reading 1 indicates there is input.Writing any values is invalid, only in IO test mode
48302	8301	Input 1 test	
48303	8302	Enter 2 test	
48304	8303	Enter 3 test	
48305	8304	Enter 4 test	
48306	8305	Enter 5 test	
48307	8306	Enter 6 tests	
48308	8307	Enter 7 tests	
48309	8308	Enter 8 test	
48310	8309	Enter 9 tests	
48311	8310	Enter 10 tests	

48312 ~ 48350	8311 ~ 8349	Keep the address	
48351	8350	Output 1 Test	Range: 0-1. Write: 0: disable output, 1: enable output (valid only in I/O test mode), read the status of the CURRENT I/O port, 0: disable, 1: enable
48352	8351	Output 2 Test	
48353	8352	Output 3 Tests	
48354	8353	Output 4 Tests	
48355	8354	Output 5 Tests	
48356	8355	Output 6 Tests	
48357	8356	Output 7 Tests	
48358	8357	Output 8 Tests	
48359	8358	Output 9 Tests	
48360	8359	Output 10 Tests	
48361	8360	Output 11 Tests	
48362	8361	Output 12 Tests	
48363	8362	Output 13 Tests	
48364	8363	Output 14 Tests	
48365	8364	Output 15 Tests	
48366	8365	Output 16 Tests	
48367	8366	Output 17 Tests	
48368	8367	Output 18 Tests	

48369	8368	Output 19 Tests	
48370	8369	Output 20 tests	
48371 ~ 48400	8370 ~ 8399	keep	
Function Operation class address area (corresponding to coil function), read and write			
48601	8600	Start the	Write: 1- Start both channels Read: 0- stop;1 - run;2 - in the suspension
48602	8601	stop	Write: 1- Stop after unloading of both channels Read: 0- stop;1 - run;2 - in the suspension
48603	8602	scram	Write: 1- Two channels immediately stop the process Read: 0- stop;1 - run;2 - in the suspension
48604	8603	Clear material	Write: 1- Two channels start cleaning;0- Exit cleaning Read: 1- Clear material
48605	8604	Clear the alarm	Write: 1- Clear alarm Read: 1- alarm output;0 no alarm
48606	8605	Simulation run	Write: 1- Two channels start simulation run Read: 1- Simulation run
48607	8606	A single run	Write: 1- Two channels start a single run Read: 1- Running status
48608	8607	Save the optimal parameters	Write: 1- Save the current as the optimal parameter Read: 0
48609	8608	Restore the optimal parameters	Write: 1- Restores to the optimal parameter Read: 0
48610	8609	Remove the cumulative	Write: 1~20- Clear the cumulative corresponding formula

			0- Clears the current formula accumulation 21- Clear all formula accumulations Read: 0
48611	8610	A scale reset	Write: 1- Perform zero clearing Read: 1- at zero
48612	8611	B scale reset	Write: 1- Perform zero clearing Read: 1- at zero;0 - other
48613	8612	A scale to start	Write: 1-A scale starts Read: 0- stop;1 - run;2 - in the suspension
48614	8613	B scale start	Write: 1-B scales start Read: 0- stop;1 - run;2 - in the suspension
48615	8614	A scale to stop	Write: stop 1-A scale after unloading Read: 0- stop;1 - run;2 - in the suspension
48616	8615	B scale stop	Write: stop 1-B after unloading Read: 0- stop;1 - run;2 - in the suspension
48617	8616	A scale abrupt stop	Write: 1-A scales stop immediately Read: 0- stop;1 - run;2 - in the suspension
48618	8617	B scale abrupt stop	Write: 1-B scales stop immediately Read: 0- stop;1 - run;2 - in the suspension
48619	8618	A scale removing mixture	Write: 1-A weighing and cleaning materials Read: 1- clear material;0 - other
48620	8619	B scale removing mixture	Write: 1-B weighing and cleaning materials Read: 1- clear material;0 - other
48621	8620	A scale manual fast add	Write: 1-A scale add quickly Read: 1- fast add;0 - other
48622	8621	B Scale manual quick add	Write: 1-B scale add quickly Read: 1- fast add;0 - other

48623	8622	A Add scale manually	Write: Add to 1-A scale Reading: 1- add;0 - other
48624	8623	B Add scale manually	Write: add to 1-B scale Reading: 1- add;0 - other
48625	8624	A The scale is manually added slowly	Write: 1-a scale slowly add Reading: 1- slow;0 - other
48626	8625	B The scale is manually added slowly	Write: 1-B scale slowly add Reading: 1- slow;0 - other
48627	8626	A Scale unloading manually	Write: 1-A scale manual unloading Read: 1- Unloading;0 - other
48628	8627	B Scale unloading manually	Write: 1-B scale manual unloading Read: 1- Unloading;0 - other
48629	8628	A scale simulation operation	Write: 1-A scale starts simulation run Read: 1- Simulation running;0 - other
48630	8629	B scale simulation operation	Write: 1-B scale starts simulation run Read: 1- Simulation running;0 - other
48631	8630	A Scale clear alarm	Write: 1-A scale clear alarm Read: 1- alarm;0 - other
48632	8631	B Balance and alarm	Write: 1-B scale clear alarm Read: 1- alarm;0 - other
48633	8632	A Small vibrating plate test of scale	Write: 0~ 5000MV-a small vibrating disk output of the scale Read: 0
48634	8633	B Scale small vibration plate test	Write: 0~ 5000MV-b small vibrator plate output Read: 0
48635	8634	A scale large	Write: 0~ 5000MV-A scale large vibration disk

		vibration disk test	output Read: 0
48636	8635	B scale vibration test	Write: 0~ 5000MV-b scale large vibration disk output Read: 0
48637	8636	A scale saves the optimal parameters	Write: the 1-a scale performs the save parameter Read: 0
48638	8637	B scale saves the optimal parameters	Write: 1-b scales perform save parameters Read: 0
48639	8638	A The balance restores the optimal parameter	Write: 1-a scale restores optimal parameters Read: 0
48640	8639	B The balance restores the optimal parameter	Write: 1-b scale restores optimal parameters Read: 0
48641	8640	A Scale runs once	Write: the 1-A scale starts A single run Read: 0
48642	8641	B The scale runs once	Write: 1-b scale starts a single run Read: 0
48643	8642	A scale feeding test	Write: 1-A scale start feeding Read: 1- filling;0 - other
48644	8643	B scale feeding test	Write: 1-B scale start feeding Read: 1- filling;0 - other
48645	8644	A scale clear accumulation	Write: 1~20- Clear the cumulative corresponding formula 0- Clears the current formula accumulation 21- Clear all formula accumulations Read: 0

48646	8645	B scale clearance accumulative total	Write: 1~20- Clear the cumulative corresponding formula 0- Clears the current formula accumulation 21- Clear all formula accumulations Read: 0
48647	8646	Manual feeding	Write: 1- The material is valid 0- The feed is invalid Read: Returns the feed status
48648	8647	Loose bag	Write: 1- to clamp loose bag Read: Returns to pocket state
48649	8648	Clear total accumulation	Write: 1- Clear total system accumulations Read: 0
48650	8649	Clear the current formula voltage	Write: 1- The vibrator voltage is set to 0 Read: 0
48651	8650	The material level function is disabled	Write: 1- Forbidden material level function Read: Returns the material level disabled status
48652	8651	B Scale clamp loose bag	Write 1 to loosen the bag, read and return the bag state
48653 ~ 48699	8652 ~ 8698	keep	keep
48700	8699	Soft restart (program restart)	Write: 1- Restart Read: 0
48701 ~ 48900	8700 ~ 8899	keep	keep
Reset the parameters			
48901	8900	Reset of all parameters	1 Perform the corresponding reset operation (reset does not involve communication parameters) Both readings are 0
48902	8901	Uncalibrated parameter reset	
48903	8902	Calibration	

		parameter reset	
48904	8903	Application parameter reset	
48905	8904	Formula parameter reset	
48906	8905	The transmission parameter is reset	
48907	8906	The I/O function resets	
48908	8907	A scale calibration parameters reset	
48909	8908	B Scale calibration parameters reset	
48910	8909	A scale formula feeding parameters reset	
48911	8910	B scale formula feeding parameters reset	
48912 ~ 48920	8911 ~ 8919	keep	keep
48921	8920	Reset the results	When the reset succeeds, the readout is not 0 and lasts for 2S.(read-only) 1- Reset all parameters;

			2- Reset of non-calibration content; 3-calibration parameter reset; 4- Application parameter reset except IO function; 5- Reset all application parameters; 6- Reset current formula parameters; 7- A formula parameter reset; 8- Reset all formula parameters; 9- Reset of converter parameters; 10- Switch input defines reset 11- Switch output defines reset 12- Switch quantity all defined reset Calibration parameters of 13-A scale reset 14- channel :2 calibration parameters reset Reset the current formula feeding parameters of 15-A scale Reset current formula feeding parameters of 16-B scale 17- Current formula feeding parameters reset All formula feeding parameters of 18-A scale are reset All formula feeding parameters of 19-B scale are reset
48922-48980.	**8922-8979.**	keep	
Module System information area, read-only area			
410001	**10000**	Software Version (high type)	
410002	**10001**	Software Version (low type)	If 10000 is read, the 01.00.00 version
410003	**10002**	Compilation time (year)	
410004	**10003**	Compile time	

		(month/day)	
410005-410017.	10004-10016.	Meter serial number 13 characters	
410018-410029.	10017-10028.	Meter encoding is 12 characters	
410030	10029	keep	
410031-410040.	10030-10039.	Meter model 10 characters	
410041 ~ 410200	10040 ~ 10199	keep	
Coil address (readable and writable coil)			
0x0001	0000	Start the 1	Write: FF00H = start;0000 h = closed Read: 0001H = start;0000 h = closed
0x0002	0001	Start the 2	
0x0003	0002	stop	Write: FF00H = stop Read: 0001H = Run;0000 h = stop
0x0004	0003	scram	
0x0005	0004	Clear material	Write: FF00H = clear material;0000H= Stop cleaning Read: 0001H = clear material;0000 h = the other
0x0006	0005	Clear the alarm	Write: FF00H = clear alarm;Read: 0000 h
0x0007	0006	Simulation run	Write: FF00H = start Read: 0001H = Run;0000 h = stop
0x0008	0007	A single run	
0x0009	0008	Save the optimal parameters	Write: FF00H = execute Read: 0000 h
0x0010	0009	Restore the optimal parameters	
0x0011	0010	Remove the cumulative	

0x0012	0011	Clear all formula accumulations	
0x0013	0012	A scale reset	
0x0014	0013	B scale reset	
0x0015	0014	Scale A starts 1	Write: FF00H = start;0000 h = closed Read: 0001H = start;0000 h = closed
0x0016	0015	B The scale starts 1	
0x0017	0016	Scale A starts 2	
0x0018	0017	B The scale starts 2	
0x0019	0018	A scale to stop	Write: FF00H = stop Read: 0001H = Run;0000 h = stop
0x0020	0019	B scale stop	
0x0021	0020	A scale abrupt stop	
0x0022	0021	B scale abrupt stop	
0x0023	0022	A scale removing mixture	Write: FF00H = perform Read: During the implementation of the 0001 h = 0000 h = the other
0x0024	0023	B scale removing mixture	
0x0025	0024	A scale manual fast add	
0x0026	0025	B Scale manual quick add	
0x0027	0026	A Add scale	

		manually	
0x0028	0027	B Add scale manually	
0x0029	0028	A The scale is manually added slowly	
0x0030	0029	B The scale is manually added slowly	
0x0027	0026	A Add scale manually	
0x0028	0027	B Add scale manually	
0x0029	0028	A The scale is manually added slowly	
0x0030	0029	B The scale is manually added slowly	
0x0031	0030	A Scale unloading manually	
0x0032	0031	B Scale unloading manually	
0x0033	0032	A scale simulation operation	
0x0034	0033	B scale simulation operation	
0x0035	0034	A Scale clear alarm	
0x0036	0035	B Balance and alarm	

0x0037	0036	A scale saves the optimal parameters	
0x0038	0037	B scale saves the optimal parameters	
0x0039	0038	A The balance restores the optimal parameter	
0x0040	0039	B The balance restores the optimal parameter	
0x0041	0040	A Scale runs once	
0x0042	0041	B The scale runs once	
0x0043	0042	A scale feeding test	
0x0044	0043	B scale feeding test	
0x0045	0044	A scale to clear the current formula accumulation	
0x0046	0045	B scale clears the current formula accumulation	
0x0047	0046	A scale clears all formula accumulations	
0x0048	0047	B scale clears all formula accumulations	

0x0049	0048	Manual feeding	
0x0050	0049	Loose bag	
0x0051	0050	Clear total accumulation	
0x0052	0051	Clear the current formula voltage	
0x0053	0052	The material level function is disabled	
0x0054	0053	B Scale clamp loose bag	
0x0055~0x0300	0054 ~ 0299	keep	keep
0x0301	0300	Reset of all parameters	This area is just written Write: FF00H = Perform a reset Read: 0000 h Write: FF00H = execute Read: 0000 h
0x0302	0301	Uncalibrated contents reset	
0x0303	0302	Calibration reset	
0x0304	0303	Application parameter reset	
0x0305	0304	Non-i /O functions define a reset	
0x0306	0305	The I/O function resets	
0x0307	0306	The input port functions reset	
0x0308	0307	The output port functions reset	

0x0309	0308	Current formula feeding parameters reset	
0x0310	0309	Current recipe parameters reset	
0x0311	0310	Reset all formula parameters	
0x0312	0311	The transmission parameter is reset	
0x0313	0312	A scale calibration parameters reset	
0x0314	0313	B Scale calibration parameters reset	
0x0315	0314	Reset the current formula feeding parameters of A scale	
0x0316	0315	B scale current formula feeding parameters reset	
0x0317	0316	Reset all formula feeding parameters of A scale	

0x0318	0317	B scale all formula feeding parameters reset	
0x0319~0x0329	0318-0328.	keep	
0x0330	0329	Reset result: When the above reset succeeds, the readout returns 1 for 2S	
0x0331~0x0400	0330-0399.	keep	
0x0401	0400	Enter the IN1 state	Read-only area 0: invalid.1 effective
0x0402	0401	Enter the IN2 state	
0x0403	0402	Enter the IN3 status	
0x0404	0403	Enter the IN4 state	
0x0405	0404	Enter the IN5 status	
0x0406	0405	Enter the IN6 status	
0x0407	0406	Enter the IN7 state	
0x0408	0407	Enter the IN8 status	
0x0409	0408	Enter the IN9 state	
0x0410	0409	Enter the IN10 state	

0x0411~0x0450	0410 ~ 0449	keep	
0x0451	0450	Output the OUT1 status	Read-only area Readout returns the status bits of each output port 0: invalid.1 effective
0x0452	0451	Output the OUT2 status	
0x0453	0452	Output the OUT3 status	
0x0454	0453	Output the OUT4 status	
0x0455	0454	Output the OUT5 status	
0x0456	0455	Output the OUT6 status	
0x0457	0456	Output the OUT7 status	
0x0458	0457	Output the OUT8 status	
0x0459	0458	Output the OUT9 status	
0x0460	0459	Output the OUT10 status	
0x0461	0460	Output the OUT11 status	
0x0462	0461	Output the OUT12 status	
0x0463	0462	Output the OUT13 status	
0x0464	0463	Output the OUT14 status	
0x0465	0464	Output the OUT15 status	
0x0466	0465	Output the	

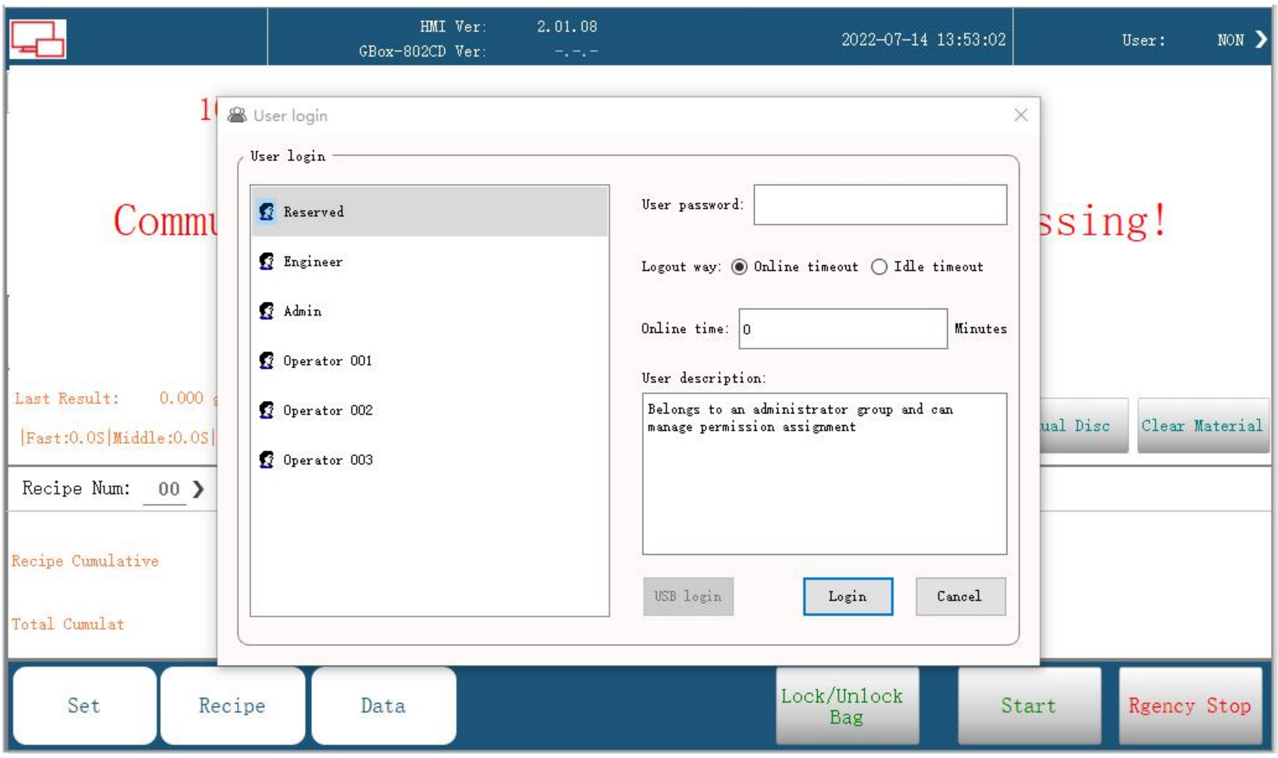
		OUT16 status	
0x0467	**0466**	Output the OUT17 status	
0x0468	**0467**	Output the OUT18 status	
0x0469	**0468**	Output the OUT19 status	
0x0470	**0469**	Output the OUT20 status	
0x0471~0x0800	**0470 ~ 0799**	keep	

7. Touch screen Operation Instructions

7.1Login screen

Interface Description: The interface is displayed after startup and before login. Click the screen to display the selection interface as shown in the picture below, select the required mode to enter (four modes are available for single scale, double scale, four scale and six scale).

7.2Touch screen login permission description



Interface description:

1: indicates the level of the current login user.

2: indicates the system date and time, indicating the current system date and time.

3: indicates the working status of the equipment.

4: Weight display area, display the current weight and weight unit, if the weight overflow or sensor overflow, there will be text prompt in this area, such as: "weight overflow", "weight overflow", etc.

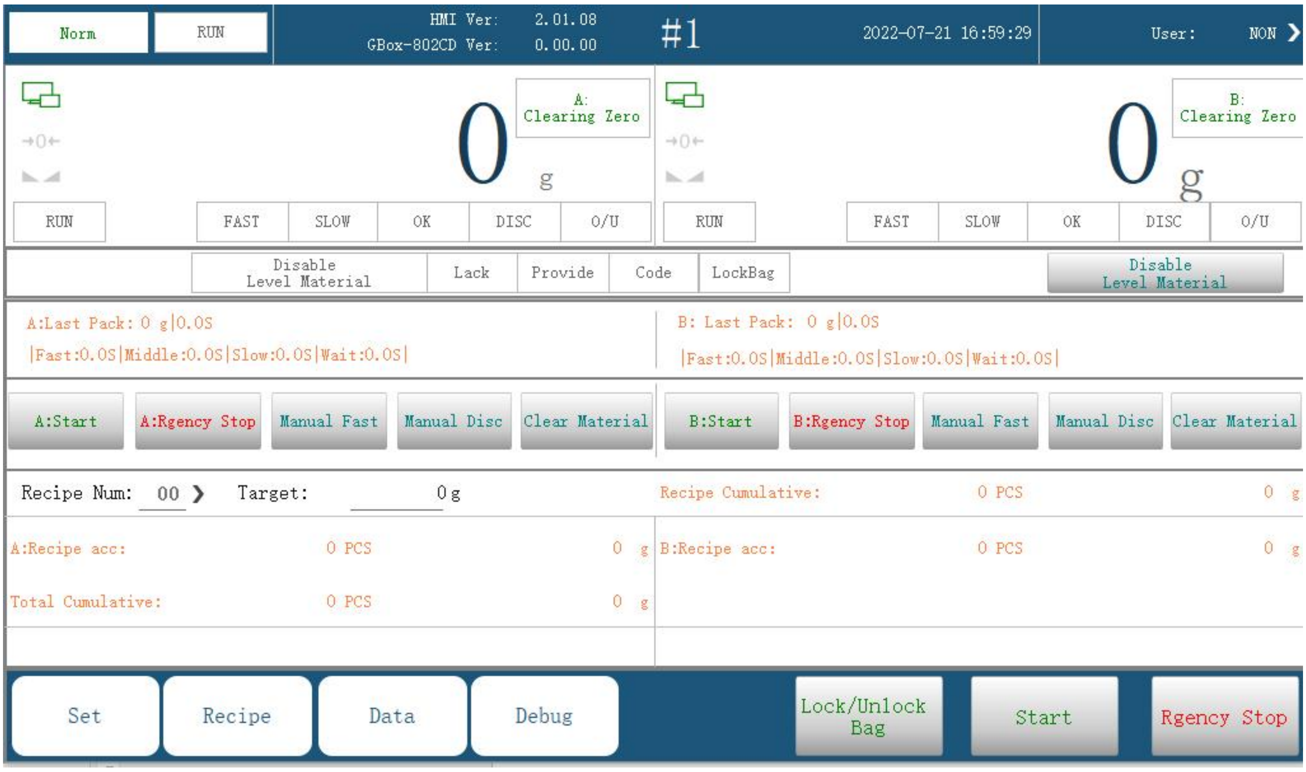
5: Login user selection area, showing all users that can be selected.

6: User password input box, select a user account and enter the corresponding user password

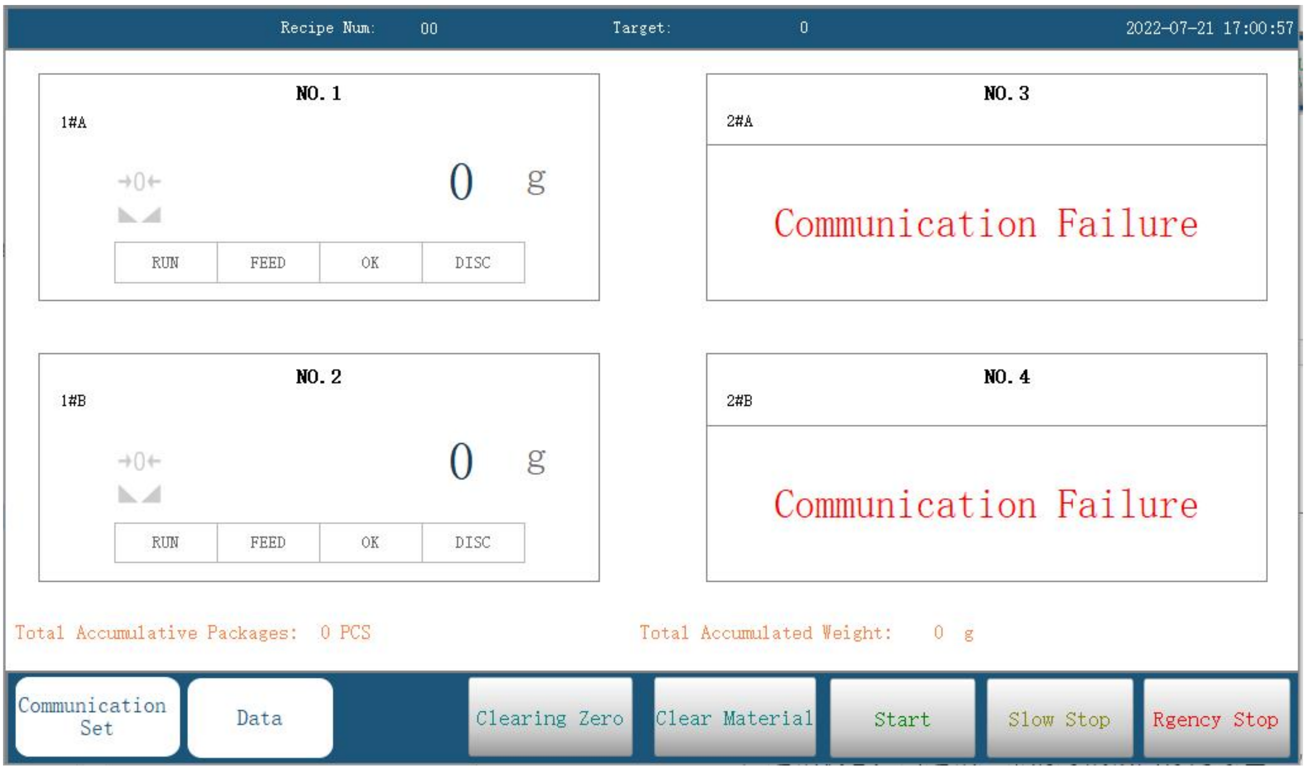
Note: As shown in the figure above, the password of the three operators is 1/2/3, the password of the administrator is 0, and the password of the engineer is the password with the highest permission provided to the customer. The reserved user is only used by the manufacturer.Different users have different operation rights. The following describes the operation rights of engineers.

7.3Main Interface description

Single scale main interface



Double scale main interface



Four scales main interface

Six scales main interface

Interface description :(the instruction takes single scale interface as an example.)

1. Current weight and equipment status, where:
   1）Communication status. When the communication is normal, the icon is green.
   2）Zero flag. When the current weight is at zero, the icon is green.
   3）Weight stability indicator. When the weight is stable, the indicator icon is green.

In addition, there are allowed feeding, allowed unloading, single completion, packaging speed, running or stop status display.

2. The current formula number can be set to replace the formula or material. Click the "formula" button at the lower left corner to modify the current formula parameters.
3. Each state of the device when it is running. When the device is in the stopped state, the corresponding manual operation can be performed (the runtime operation is invalid).
4. The result of the last quantitative process.

7.4The parameter setting page is described

Interface description:

Basic parameters: basic parameters of the product can be set, such as zero clearance range, zero clearance time and so on.

Formula parameters: can modify the current formula number, and modify the parameter values of the current formula, such as modifying the target value, lead amount, vibration plate voltage value, unloading time, etc.

Historical data: You can query previous packing records on the historical data screen and export the packing records to a USB flash drive.

Parameter reset: You can reset all parameters.

Calibration scale: zero calibration, weight calibration.

On/off I/O: users can define and set the input and output quantity according to their own requirements. The control board has 10 inputs and 20 outputs.

User management: Switch user rights.

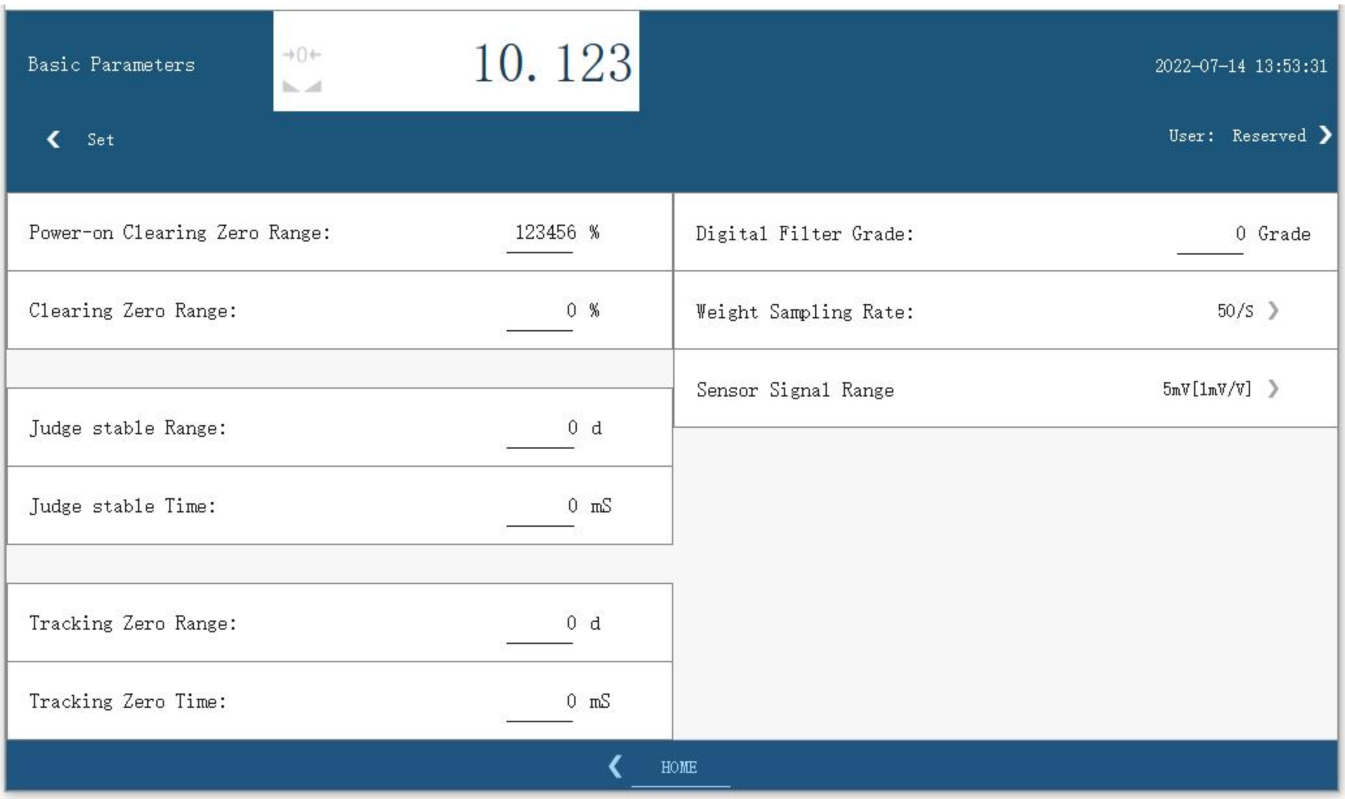
HMI configuration: You can set HMI parameters.

Application parameters: the basic parameters of the product can be set, such as zero clearance range, zero clearance time, unloading mode and so on.

Communication parameters: the communication parameters of the product can be set. Serial port 1 is used to communicate with the touch screen. The parameters cannot be modified, but can be adjusted automatically through the serial port. Serial port 2 can be used as external serial communication interface, communication parameters can be set by themselves, but it should be unified with communication equipment.

System information: display the current touch screen software version and control board software version, also can use the U disk to update the control board program.

7.5Basic Parameters screen Description



Interface description:

（1）Power-on clearing range: When the device is powered on, it is automatically cleared.

（2）Clearing range: clearing range (1%-20% of the full range).

（3）Stable range/time: the range of 0~99d is optional. If the weight change within the time does not exceed the range, it is considered stable; otherwise, it is considered unstable.

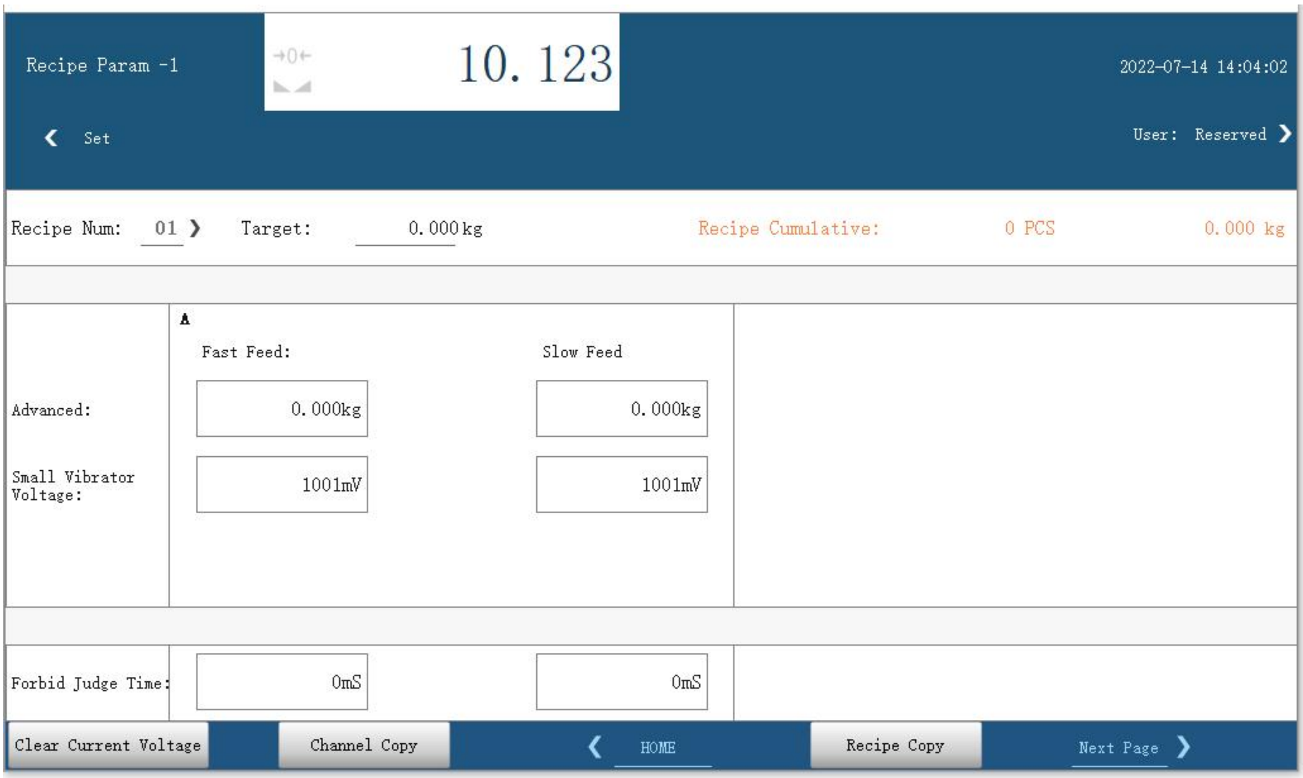
（4）Zero-point tracking range/time: zero-point tracking range 0-9D This parameter is optional. Zero-point tracking time ranges from 0.001 to 9.999.

（5）Digital filtering level: the filtering level used in the operation process, 0-9, which can be divided into three situations: feeding time, fixed value time and unloading time. The higher the value, the better the filtering effect, but the greater the lag.

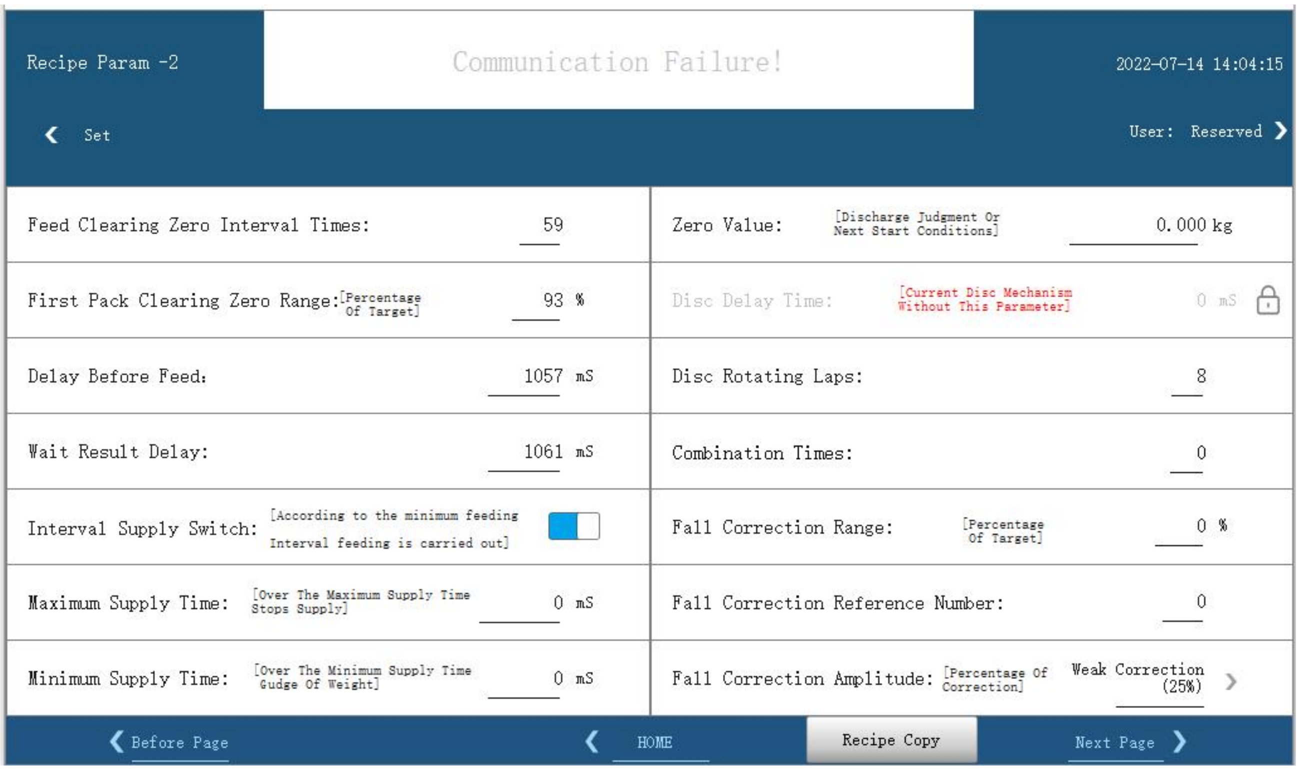
（6）Weight sampling rate: 50/S, 60/S, 100/S, 120/S, 200/S, 240/S, 400/S, 480/S, 800/S, 960/S.

（7）Sensor signal range: 5mV[1mV/V], 10mV[2mV/V], 15mV[3mV/V].

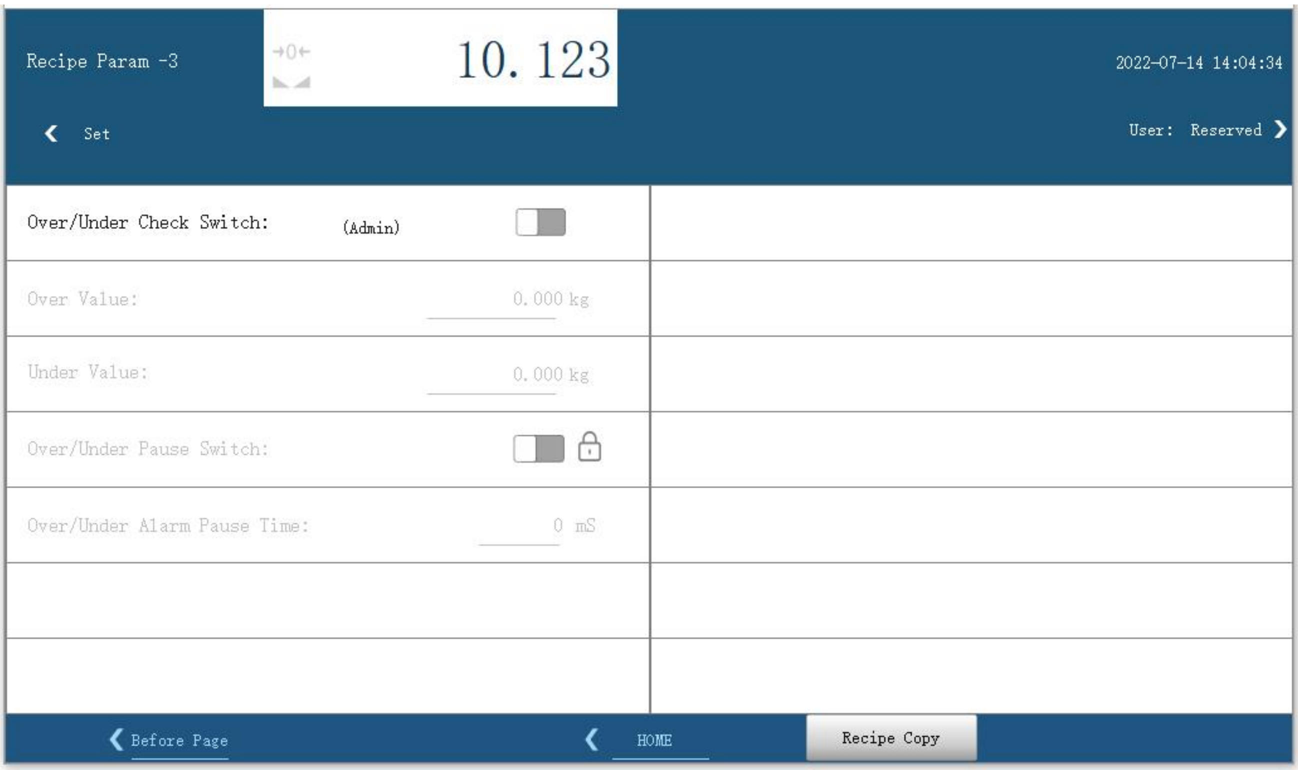
7.6Description of formula parameters



Formula parameters 1 diagram



Formula parameters 2 figure



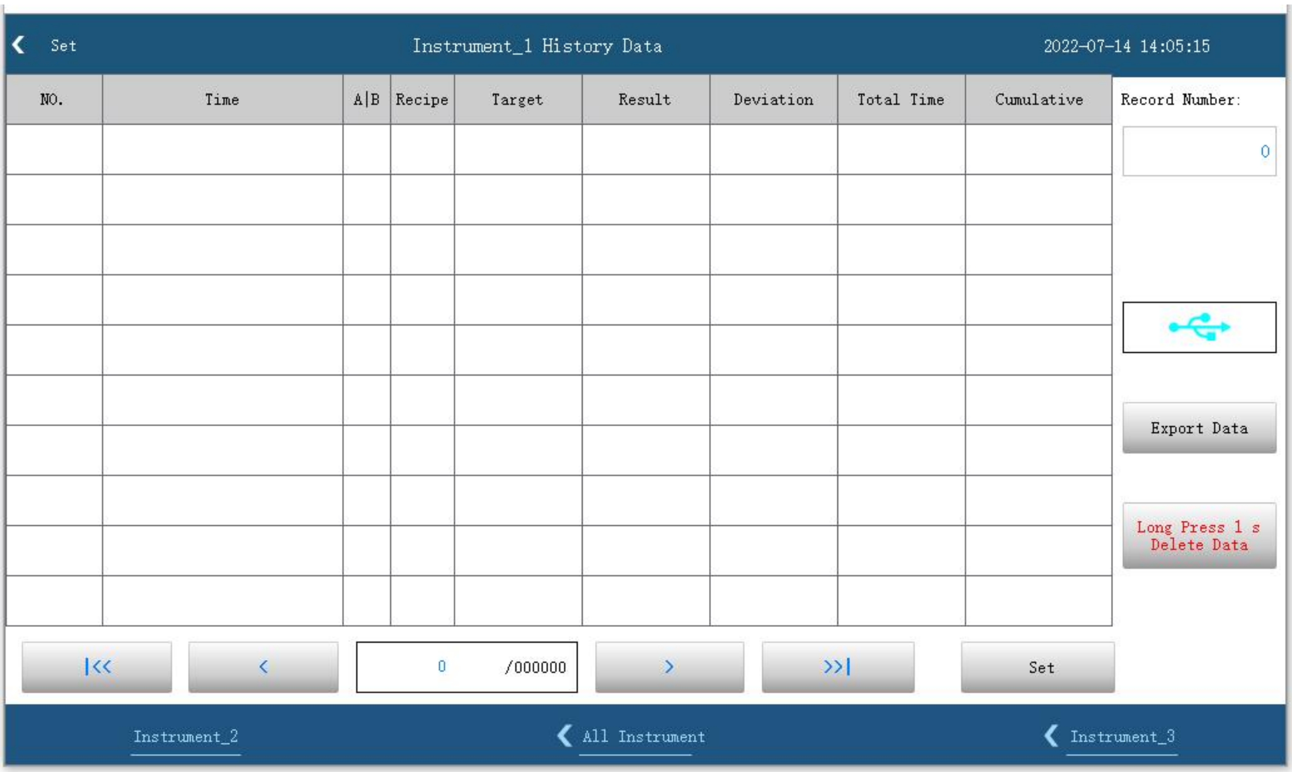
Formula parameter 3 diagram

Interface description:

（1）Target value: The weight to be quantified.
（2）Fast adding and leading quantity: in the quantitative process, if the weighing value is greater than or equal to the target value - fast adding and leading quantity, the fast adding will be closed.
（3）Drop value: In the quantitative process, if the weighing value is greater than or equal to the target value - drop value, slow add will be closed.
（4）Recipe number: indicates the number of the current recipe.
（5）Large vibrating plate voltage: large vibrating plate voltage value to control fast acceleration.
（6）Small vibrator plate voltage: small vibrator plate voltage value to control slow acceleration.
（7）Suspension time: at the beginning of quantification, in order to avoid overshooting, weight judgment is not carried out during this time, fast increase and slow increase are always effective.
（8）Feeding clearance interval: the number of feeding clearance interval, ranging from 0 to 99.
（9）Delay before feeding: at the beginning of quantitative process, delay T1 time before starting the feeding process;
（10）Fixed time: the time to determine the weight after the completion of feeding.

（11）Point dynamic feeding switch: after opening the switch, the quantitative process can point dynamic feeding.
（12）Maximum feeding time: stop feeding after this time.
（13）Minimum feeding time: judge the weight after this time.
（14）Zero zone value: In the quantitative process, if the weighing value is less than or equal to zero zone value, the discharging delay timer will be started.
（15）Discharging delay time: discharging begins after the delay time.
（16）Bucket number: the number of bucket.
（17）Fall correction range: this value is the percentage of the target value.
（18）Reference times of correction of drop value:
（19）Height correction:
（20）Overcurrent and undercurrent detection switch: Turn on the switch to enable overcurrent and undercurrent detection.
（21）Out of tolerance: in the quantitative process, if the weighing value > the target value + over tolerance value, it is judged as out of tolerance.
（22）Underdeviation value: in the quantitative process, if the weight value is less than the target value - underdeviation value, it is judged as underdeviation.
（23）Suspension switch over and under difference: when this switch is turned on, if there is over and under difference, the device will be suspended for the user to deal with, and then it can continue to run after "clear the alarm".It can also return to the stop state after "emergency stop".
（24）Pause time of alarm over and under difference:

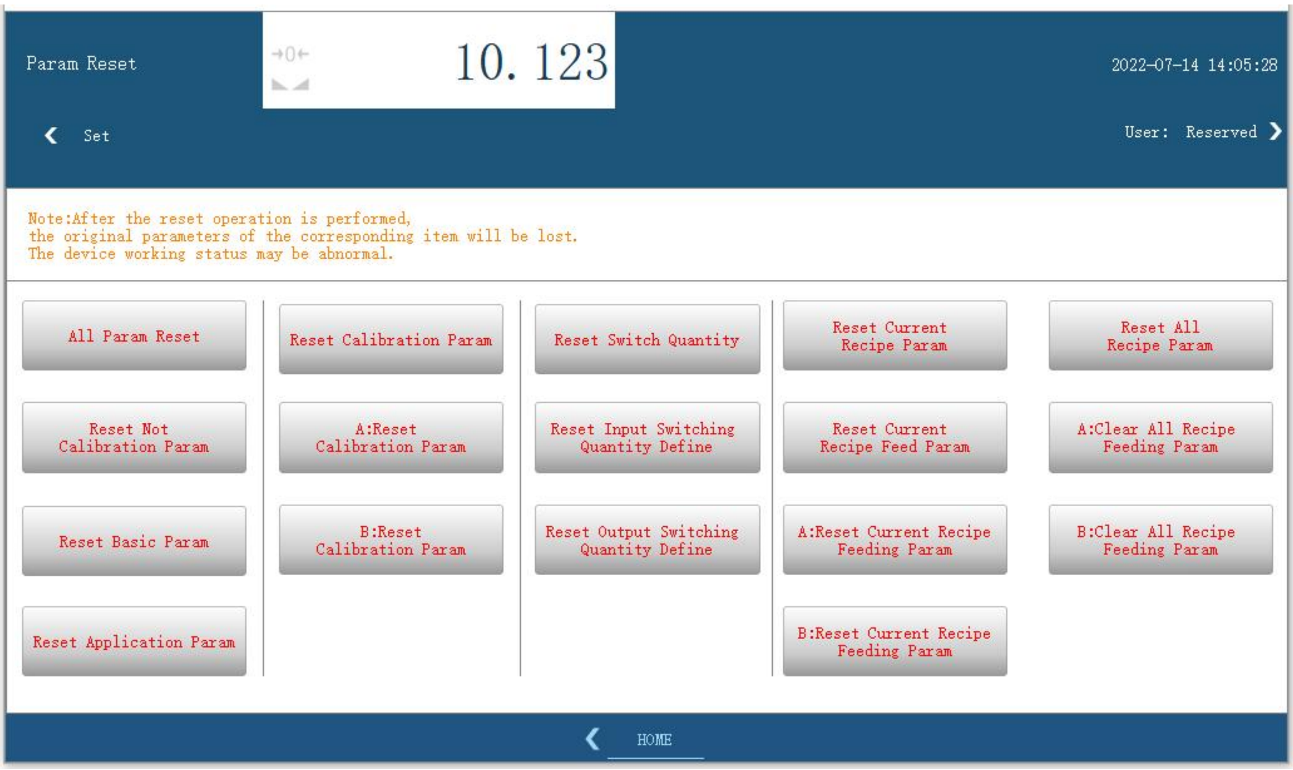
7.7Historical data page description



Interface description:

（1）Automatic refresh/Manual refresh: Refreshes data.
（2）Usb disk export: You can export historical data.
（3）Clear data: Clear historical data.

7.8Parameter Reset screen description



Reset all parameters - Reset all parameters to their default Settings.

Uncalibrated parameter reset - Resets uncalibrated parameters to their default Settings.

Reset basic parameters - Reset basic parameters to default Settings.

Application parameter Reset - Resets application parameters to their default Settings.

Calibration parameter reset - Resets the calibration parameters to their default Settings.

A scale calibration parameter reset -- reset A scale calibration parameters to default Settings.

B scale calibration parameter reset - reset B scale calibration parameters to default Settings.

Switch quantity function parameter reset - Resets the switch quantity definition to the default configuration.

Input switch function definition reset - Resets the input switch definition to default configuration.

Output switch function definition reset - Resets output switch definition to default configuration.

Reset current recipe parameters - Reset current recipe parameters to default Settings.

Resetting current recipe feeding parameters - Resets current recipe feeding parameters to their default Settings.

A scale current formula feeding parameters reset -- reset A scale current formula feeding parameters to default Settings.

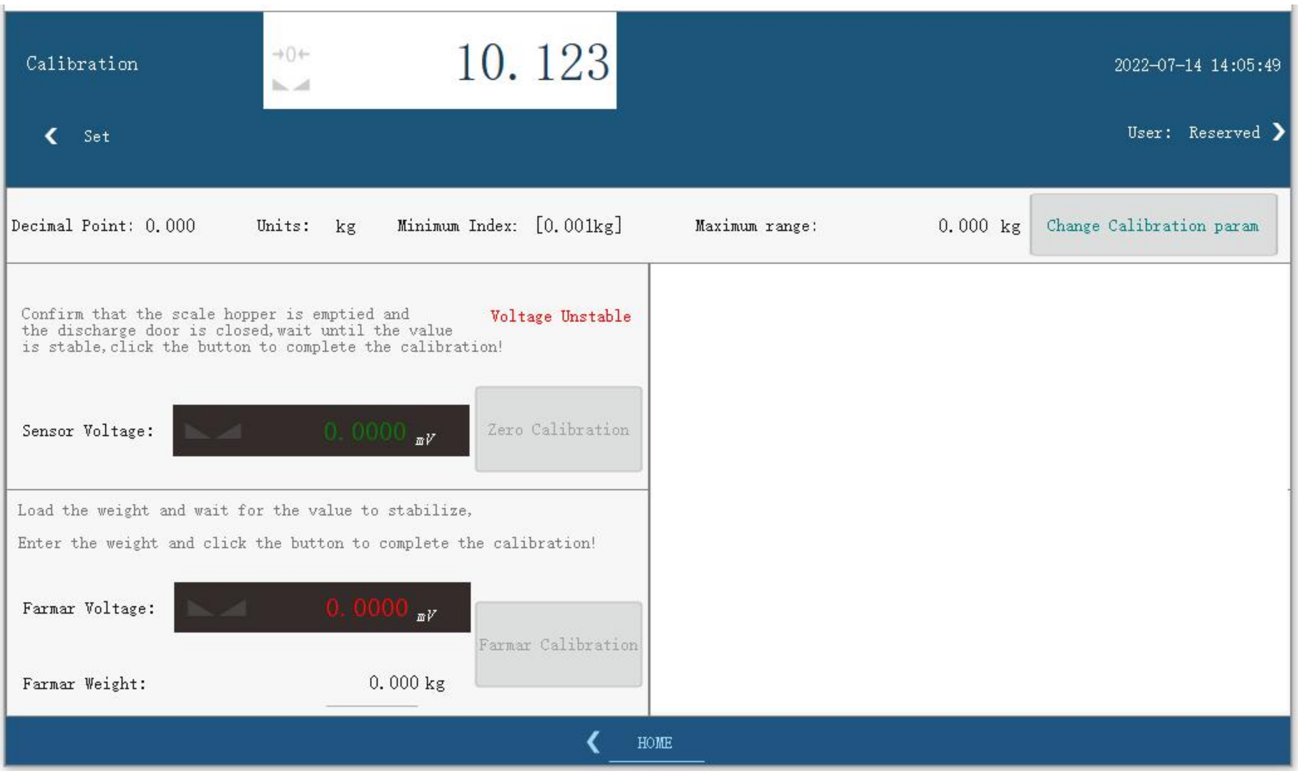
B balance current formula feeding parameter reset -- reset B balance current formula feeding parameter to default setting.

Reset all recipe parameters - Reset all parameters to default Settings.

Reset all formula parameters of scale A - Reset all parameters of scale A to their default Settings.

Reset all formula parameters of scale B - Reset all parameters of scale B to their default Settings.

7.9Calibration interface description



Interface specification

（1）Unit: The fixed value is kg

（2）Minimum score: 1 2 5 10 20 50 Optional.

（3）Display mode of overrange: there are three options: when the current weight is greater than: maximum range + 9D, maximum range *120%, and maximum range *150%, the device will prompt weight overflow.

（4）Decimal point: fixed value 0.000, that is, three decimal places after the decimal point.

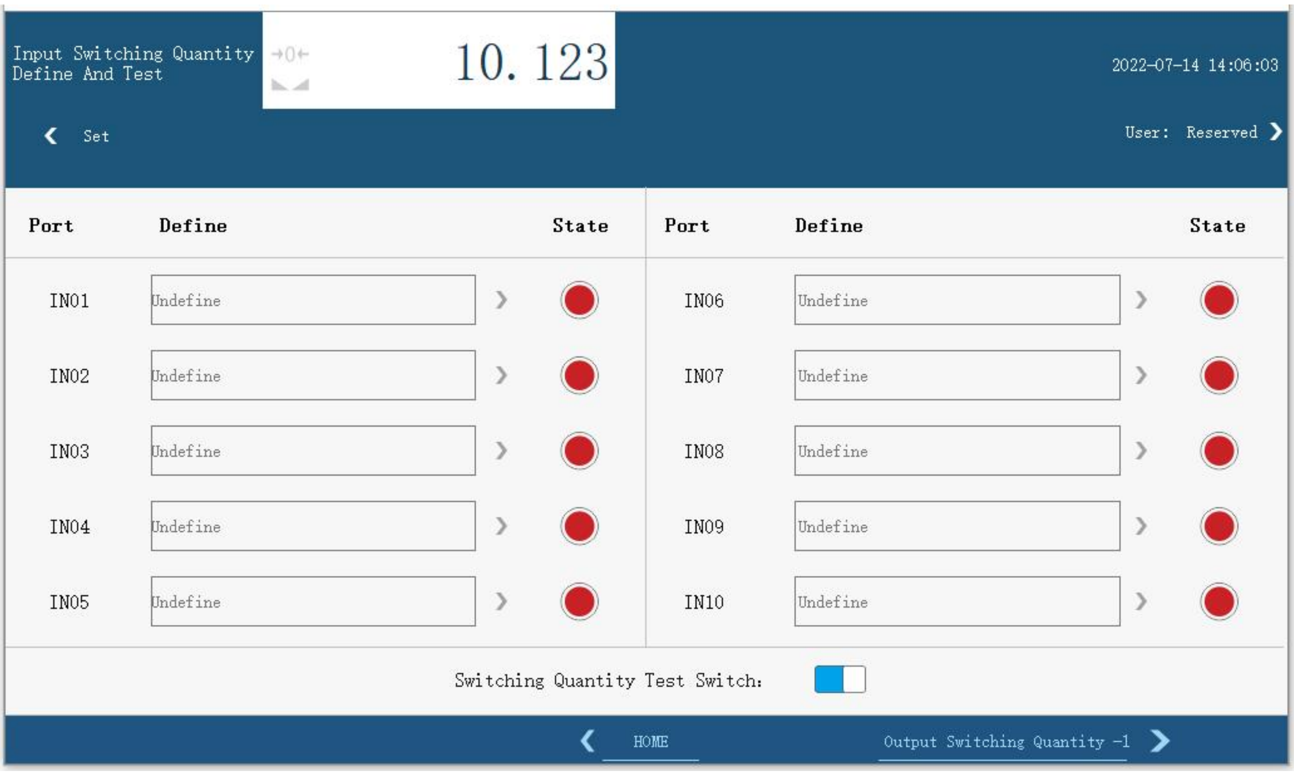
（5）Maximum range: maximum range of the device (do not set it to more than 10.00kg).

Calibration steps:

1. Zero point calibration: empty the hopper and close the discharge door.Click "Zero point Calibration" after the weight is stabilized. During the calibration process, the weight display area above will display the calibration result, and stability will be displayed after successful calibration.

2. Gain calibration: Add weights to the weighing mechanism, click the weight input box after the weight is stable, input the weight of the weight, click "weight Calibration", the weight display area above the calibration process will also display the calibration result.After successful calibration, the weight displayed in the weight display area is the input weight.Otherwise gain calibration fails. Try again.

7.10 Description of switch quantity interface



Switching quantity 1 diagram

Switching quantity 2 diagram

Switching quantity 3 figure

（1）Input ports (IN01 to IN10) Customizable:
（2）Output ports (OUT01 to OUT20) Customizable:
（3）Switching test: After this function is enabled, it can test whether the corresponding switching signal is normal
（4）The IP address range of the I/O test area ranges from 8300 to 8369(PLC IP address 48301 to 48371). You can check whether the input and output ports are properly connected by using this IP address.
（5）Input port test:
（6）First of all, write "1" to 8300 (PLC address 48301) to enter the IO test mode. When the input port is valid (effective input can be realized through short GND port and input signal port), the corresponding input port address register value should be "1". When the input becomes invalid, the read data should be "0", otherwise, the input port is faulty.
（7）Output port test:
（8）First of all to 8300 (PLC address 48301) write "1" into the IO test mode, output port address write "1", measure the voltage between the and 24V, if the voltage is far less than 24V coil failure;If the voltage is equal to or close to 24V, write "0" to the coil address, and the voltage of the output port is no longer close to or equal to 24V, it indicates that the output port works normally.

The default switch value is defined as follows:

Input port number	define	Output port number	define
IN1	Always run	OUT1	Always run
IN2	Always stop	OUT2	Always stop
IN3	Total discharge allowed	OUT3	General good
IN4	Total unloading request from machine	OUT4	Total unloading state from the machine
IN5	Total unloading state from the machine	OUT5	A scale quickly
IN6	Always clear alarm	OUT6	B scale quickly
IN7	A Scale unloading door closed in place	OUT7	A scale to add
IN8	B Scale unloading door closed in place	OUT8	B scale to add
IN9	A Scale unloading door open in place	OUT9	A scale and slow
IN10	B Scale unloading door open in place	OUT10	B scale and slow

		OUT11	A balance is out of balance
		OUT12	B balance is out of balance
		OUT13	A Scale unloading door open
		OUT14	B Scale unloading door open
		OUT15 (PWM)	A Unloading door of scale is closed
		OUT16 (PWM)	B Scale unloading door closed
		OUT17 (PWM)	A unloading state of scale
		OUT18 (PWM)	B unloading state of scale
		OUT19 (PWM)	A loading/unloading time out of scale
		OUT20	B Loading/unloading time out of scale

List of definable switching quantities:

Input switching quantity:

Serial number	The name of the	Functional specifications
I00	No definition	If you select this item, it has no function.
I01	R: run	Signal received both channels simultaneously start feeding
I02	R: suspension	Stop after finishing this feeding and unloading
I03	R: stop	Immediately stop
I04	General: discharging is allowed	When this signal is effective, it means that the external conditions have been achieved and the material can be discharged. If the working mode is single bucket independent, only channel 1 is controlled
I05	Total: Unloading request of slave machine 1 (valid in host mode)	In the master control, the signal effectively indicates that slave machine 1 has finished feeding and setting value, waiting for the host to give the allowable unloading signal
I06	Total: Unloading request from machine (valid in host mode)	When the master control, the signal effectively indicates that the slave is unloading
I07	Total: clear material input	Effective signal to start cleaning, give stop or emergency stop signal to stop cleaning
I08	Total: Simulation test	Run the entire process on time, regardless of weight, as long as it is used for equipment action testing
I09	General: Clear alarm	When valid, clear all current alarms
I10	Total: Switch formula	With each pulse received, switch to the next recipe with a target value
I11	Channel 1: Clear	When valid, the channel is cleared
I12	Channel 2: Clear	When valid, the channel is cleared
I13	1 channel:	Copy signal channel start feeding

	running	
I14	Channel 2: running	Copy signal channel start feeding
I15	Channel 1: slow stop	Stop after receiving the signal and finishing the feeding
I16	Channel 2: Slow stop	Stop after receiving the signal and finishing the feeding
I17	Channel 1: emergency stop	Stop at the signal
I18	Channel 2: Emergency stop	Stop at the signal
I19	Channel 1: Discharge door closed in place	Unloading door closed in place and effective
I20	Channel 2: Unloading door closed in place	Unloading door closed in place and effective
I21	Channel 1: discharge door open in place	Motor positive and negative mode (double photoelectric), discharge door open in place effective
I22	Channel 2: Discharge door open in place	Motor positive and negative mode (double photoelectric), discharge door open in place effective
I23	1 channel: manual fast add	Under stop state, when effective, start manual fast feeding, stop feeding to stop or emergency stop signal
I24	2 channels: manual fast add	Under stop state, when effective, start manual fast feeding, stop feeding to stop or emergency stop signal
I25	Channel 1: Add it manually	Stop state, when effective, start manual feeding, to stop or emergency stop signal stop feeding
I26	Channel 2: Manually add	Stop state, when effective, start manual feeding, to stop or emergency stop signal stop feeding
I27	Channel 1: Manually add slowly	Under stop state, when effective, start manual slow feeding, stop feeding to stop or emergency stop signal
I28	Channel 2:	Under stop state, when effective, start manual slow feeding,

	Manually add slowly	stop feeding to stop or emergency stop signal
I29	1 channel: manual unloading	In the stop state, when valid, a complete unloading process is performed
I30	2 channel: manual unloading	In the stop state, when valid, a complete unloading process is performed
I31	1 channel: single run	In the stop state, when valid, perform a complete feeding action
I32	2 channels: single run	In the stop state, when valid, perform a complete feeding action
I33	1 channel: simulation run	Run the entire process on time, regardless of weight, as long as it is used for equipment action testing
I34	2 channels: simulation run	Run the entire process on time, regardless of weight, as long as it is used for equipment action testing
I35	1 channel: clear material	Effective signal to start cleaning, give stop or emergency stop signal to stop cleaning
I36	Channel 2: clear material	Effective signal to start cleaning, give stop or emergency stop signal to stop cleaning
I37	Channel 1: clear alarm	If valid, clear all current alarms of the corresponding channel
I38	Channel 2: clear alarm	If valid, clear all current alarms of the corresponding channel
I39	Total: clip loose bag	When receiving the signal, clamp and loosen the bag.If the working mode is single bucket independent, only channel 1 is controlled
I40	Total: Unloading request from slave 2 (valid in host mode)	When the master control, the signal effectively indicates that the slave machine 2 has finished feeding and setting value, waiting for the host to give the allowable unloading signal
I41	On the material level	For connecting the feeding level device of the material hopper,
I42	The material level	It is used to connect the feeding level device of the material hopper. The feeding level input is invalid or suspended, indicating the lack of material.The feeding level input effectively indicates that there is no shortage of material.

I43	1 channel: motor shaft in place	Used to judge motor shaft in place when stepping motor is rotating unloading
I44	2 channels: motor shaft in place	Used to judge motor shaft in place when stepping motor is rotating unloading
I45	Channel 2: clip loose bag	When receiving the signal, clamp and loosen the bag.Working mode is effective when single bucket is independent
I46	Channel 2: Unloading is allowed	When the signal is effective, it indicates that the external conditions have been reached and the material can be discharged. The working mode is effective when the single bucket is independent

Output switching quantity:

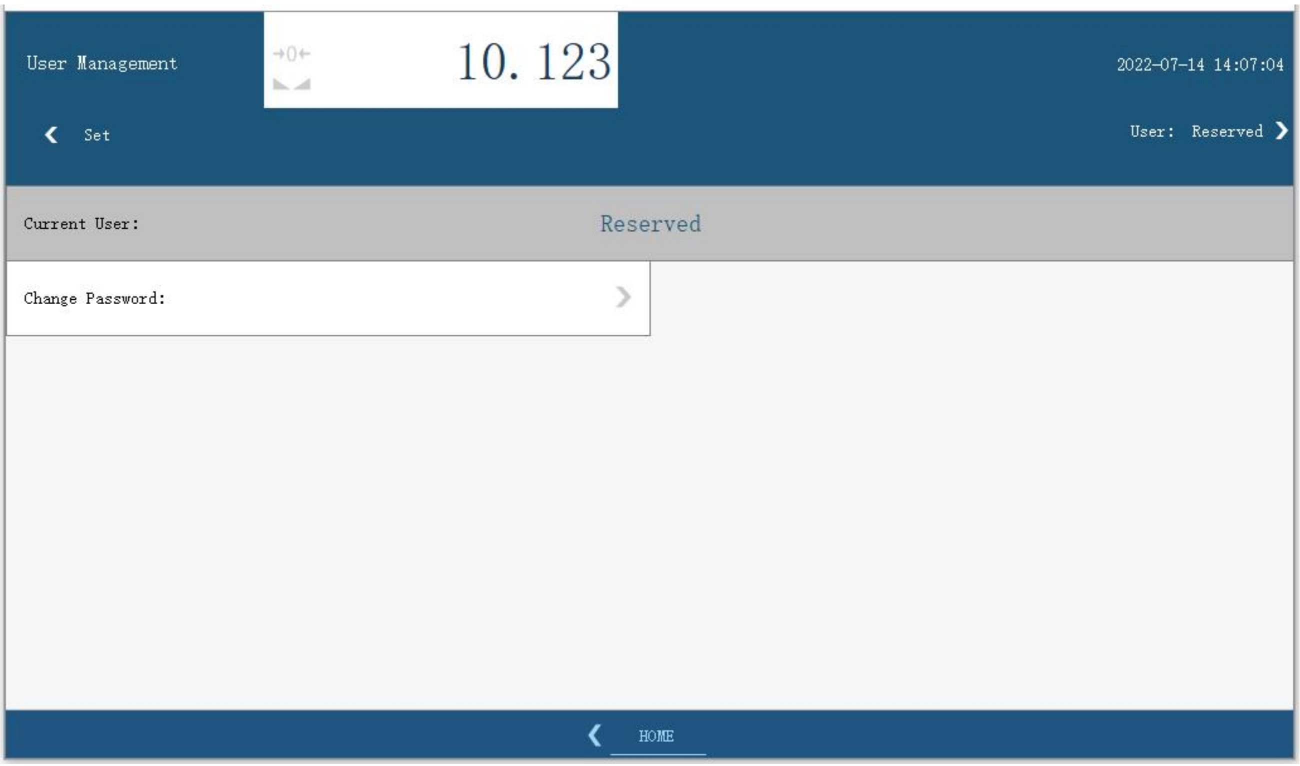
Serial number	The name of the	Functional specifications
O00	No definition	There is no function
O01	R: run	It is valid as long as one scale is in operation
O02	R: stop	Only when both scales are stopped
O03	Total: say good	As long as one of the scales has a good signal is effective
O04	Total: unloading state	As long as there is a scale in unloading is effective, when the unloading state input from the machine is effective, the host unloading state output is also effective
O05	1 channel: running	Valid while the channel is running
O06	Channel 2: running	Valid while the channel is running
O07	Channel 1: Stop	Valid when the channel stops
O08	Channel 2: Stop	Valid when the channel stops
O09	Channel 1: Fast add	Channel fast overtime is valid
O10	Channel 2: Fast add	Channel fast overtime is valid
O11	Channel 1: China and Canada	The channel is valid for adding time

O12	Channel 2: China and Canada	The channel is valid for adding time
O13	Channel 1: Slow down	Channel slow overtime is valid
O14	Channel 2: Slow down	Channel slow overtime is valid
O15	1 channel: feeding completed	It is valid when slow feeding is completed and invalid when unloading is started
O16	Channel 2: feeding completed	It is valid when slow feeding is completed and invalid when unloading is started
O17	1 channel: over and under difference	When the channel overruns and underruns, the output time is: overruns and underruns alarm pause time
O18	2 channels: over and under difference	When the channel overruns and underruns, the output time is: overruns and underruns alarm pause time
O19	Channel 1: feeding	Effective when channel feeding
O20	Channel 2: feeding	Effective when channel feeding
O21	Channel 1: Weigh well	Channel setting is valid after completion
O22	Channel 2: Weigh well	Channel setting is valid after completion
O23	Channel 1: unloading door open	Control unloading door opening output when unloading
O24	Channel 2: Unloading door open	Control unloading door opening output when unloading
O25	Channel 1: unloading door closed	Control the output of unloading door when unloading, only in motor positive and negative mode need to be used

O26	Channel 2: unloading door closed	Control the output of unloading door when unloading, only in motor positive and negative mode need to be used
O27	Channel 1: unloading state	Effective in the unloading process, until the unloading process is completed after the invalid
O28	2 channel: unloading state	Effective in the unloading process, until the unloading process is completed after the invalid
O29	1 channel: loading/unloading time out	When loading/unloading time out, stop and output effective
O30	2 channels: loading/unloading time out	When loading/unloading time out, stop and output effective
O31	Discharging from machine 1 is allowed	Valid in host mode
O32	General: unloading request	It is valid when unloading is required, but invalid after receiving the discharge permission (connect to the port of "unloading request from machine" of the host when unloading) (connect to external unloading scale PLC or readiness judgment equipment when the host is connected). If the working mode is single bucket independent, only channel 1 is controlled
O33	R: clip bag	If the working mode is single bucket independent, only channel 1 is controlled
O34	R: code	If the working mode is single bucket independent, only channel 1 is controlled
O35	Discharging from machine 2 is allowed	Valid in host mode
O36	1 channel: discharge pulse	Discharge stepper motor pulse output (can only be defined on PWM port of OUT15-OUT19)
O37	2 channel: discharge pulse	Discharge stepper motor pulse output (can only be defined on PWM port of OUT15-OUT19)
O38	feed	Used to control the front end of the packaging scale feeding mechanism, when the material hopper feeding level input (feeding level input is defined) is invalid, the output is effective;When the hopper feeding level (feeding level input is

		defined) is valid, the meter invalidates the output
O39	Lack of material	When the feeding level input is defined, and the input is invalid, the defined output port is valid;When the hopper feeding level (feeding level input is defined) is valid, the meter invalidates the output
O40	Channel 2: unloading request	Valid when unloading is required, invalid after receiving the discharge, valid when working mode is single bucket independent
O41	Channel 2: bag clamping	Effective when clamping bag, working mode is single bucket independent effective
O42	Channel 2: coding	Valid when coding, working mode is single bucket independent

7.11 Describes the user management interface



Interface description:

Displays the current logged-in user, can change password and set automatic logged-in.

The user level of this system is divided into four levels, from high to low: reserved user (used by manufacturers), engineer, administrator and operator.

The cancellation

After a user logs in, to log out or switch to another user, click User Logout→
To switch a user, log out of the user management page and enter the user ID and password on the login page

Change the password

Path: Parameter Settings User Management Modify password Click the password input box as prompted→→→→

7.12 Description of the HMI setting interface

No operation Automatic screen off switch: Turn on or off touch screen delay automatic screen off After the delay time, the screen automatically shuts down.

Automatic screen off delay: The screen automatically closes after the delay. Initial value: 15.Range: 15 to 1800 (seconds).

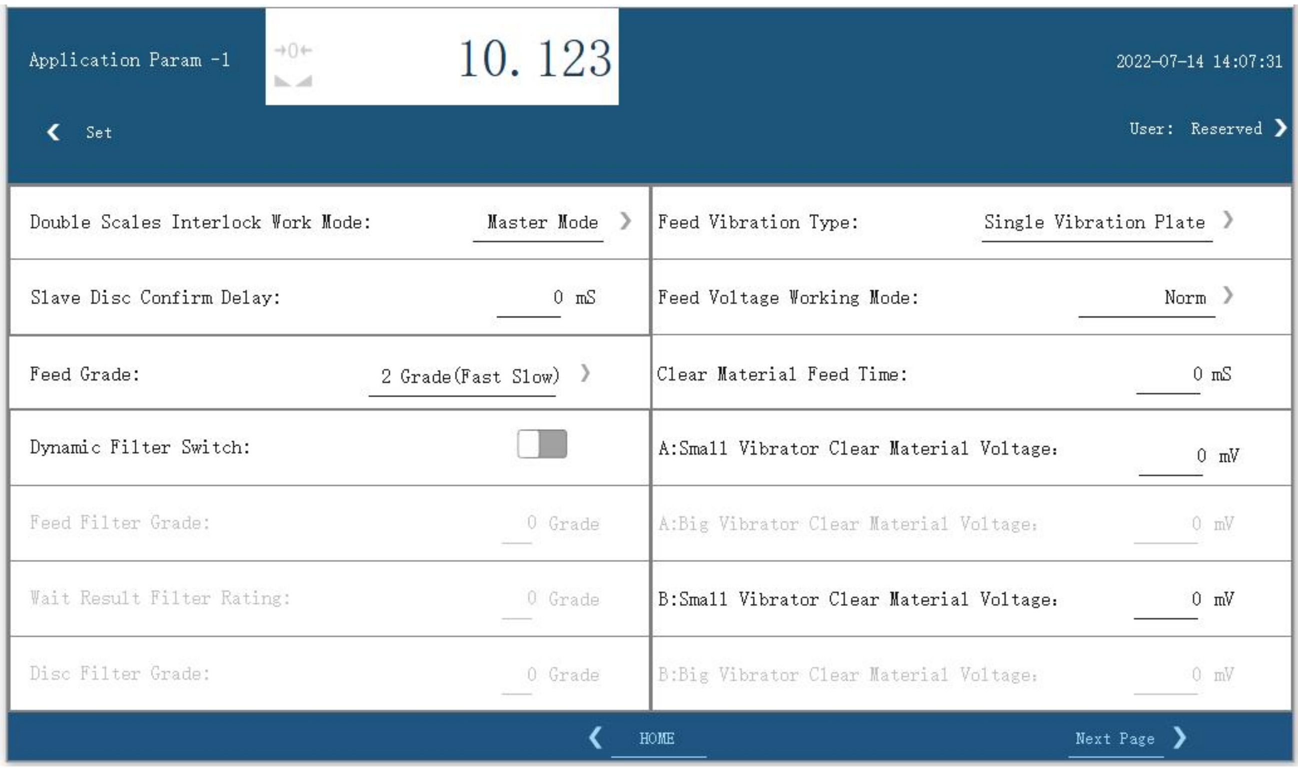
Not forcibly Turn off the screen during running: Turn on the switch to force turn off the screen during running.

Automatic screen saver switch: Turn on the switch touch screen to start automatic screen shutdown.

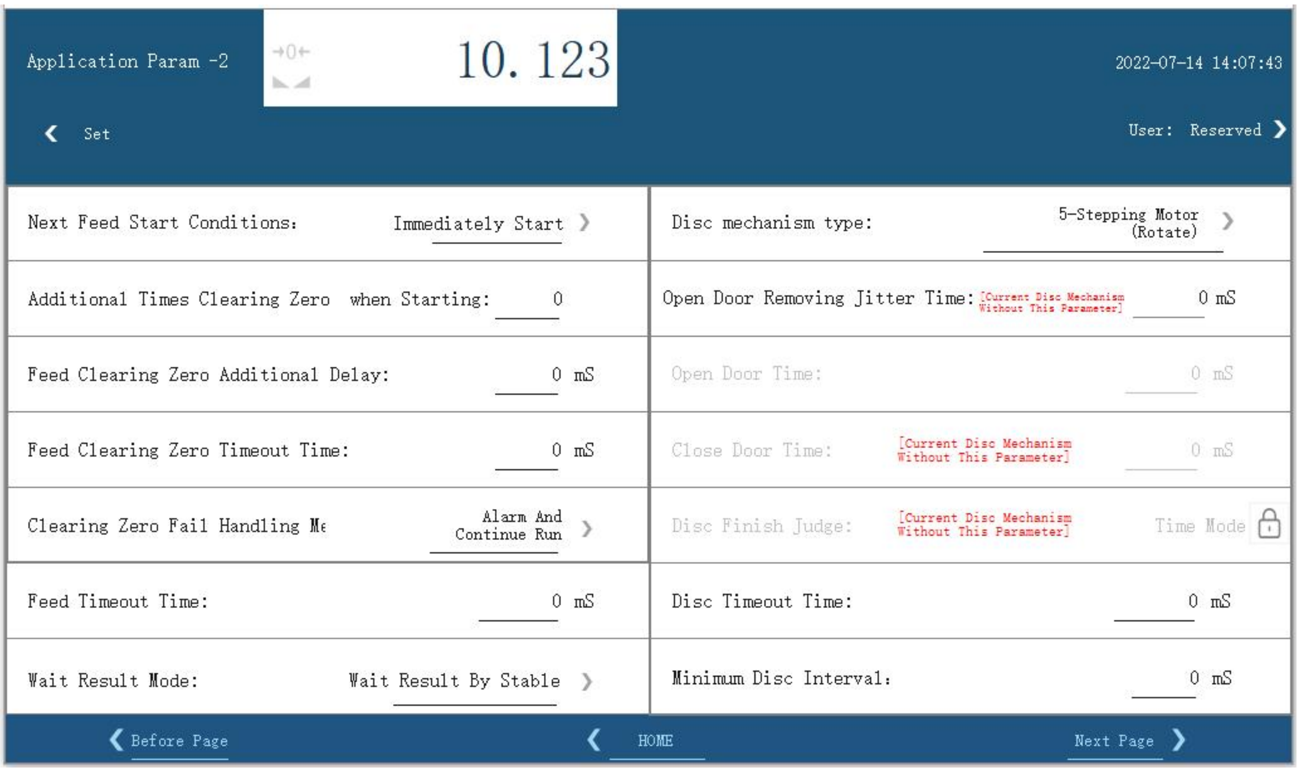
Automatic screen saver time: automatic screen saver after the delay. Initial value: 15.Range: 15~1800 (s)

HMI Time setting: Set the time and date on the touch screen.

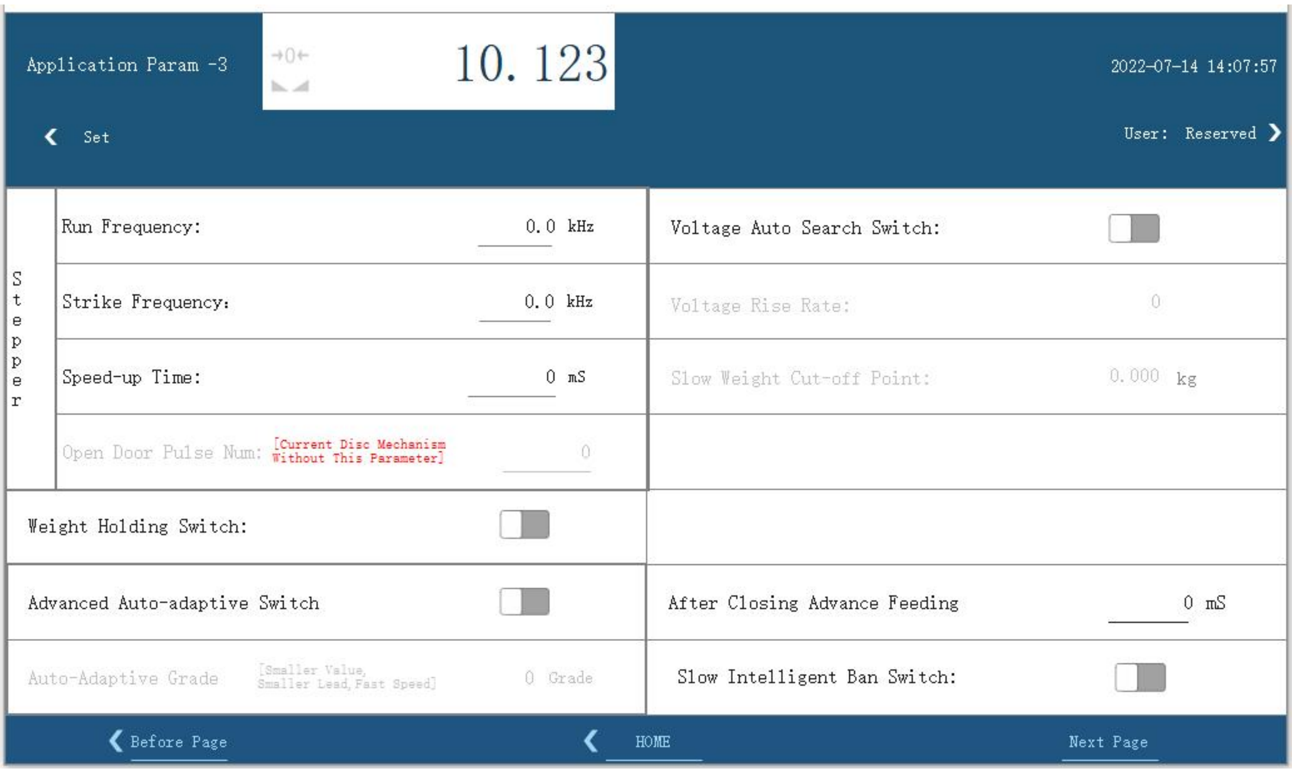
7.13 Application Parameters page Description



Application Parameter 1



Application Parameter 2



Application Parameter 3

Application Parameter 4

Interface specification

（1）Double scale interlock mode: the four modes are standard mode, host mode, slave mode and single bucket independent mode.

（2）Confirmation delay of unloading from machine: initial value 0, range 0-1000, unit: ms.

（3）Feeding level: two ways to choose are two (fast slow) and three (fast medium slow).

（4）Dynamic filtering switch: On Switch Enables dynamic filtering.

（5）Feeding filter level: initial value 0, range 0-9.

（6）Constant filtering grade: initial value 0, range 0-9.

（7）Discharging filtering level: initial value 0, range 0-9.

（8）Feeding plate type: two modes are available: single plate and double plate.

（9）Feeding voltage working mode: two options are standard and pre-boost voltage.

（10）Feeding time: initial value 0, range 0-10000, unit: ms.

（11）A Small vibrating plate cleaning voltage of scale: initial value 0, range 0-5000, unit: MV.

（12）A Large vibration plate cleaning voltage of scale: initial value 0, range 0-5000, unit: MV.

（13）B Small vibration plate cleaning voltage of scale: initial value 0, range 0-5000, unit: mV.

（14）B Scale large vibration plate cleaning voltage: initial value 0, range 0-5000, unit: MV.

（15）Starting conditions for next feeding: two options are immediate starting and returning to zero zone.

（16）Additional zeroing times at startup: initial value 0, range 0-99.

（17）Additional delay: initial value 0, range 0-5000, unit: ms.

（18）Feeding and clearing timeout time: initial value 1000, range 1000-5000, unit: ms.

（19）Zero-clearing failure processing mode: four modes are optional: alarm and continue operation, alarm and re-clearing, automatic stop after three consecutive times, and alarm and immediate stop.

（20）Feeding timeout time: feeding clear additional delay: initial value 0, range 0-30000, unit: ms.

（21）Fixed value mode: the three modes can be selected as stable value, time fixed value and stable + time.

（22）Unloading mechanism type: the scale is fixed for 0- pneumatic.

（23）Judgment of unloading completion: The two modes are time mode and zero zone mode respectively.

（24）Unloading timeout time: initial value 0, range 0-30000, unit: ms.

（25）Minimum interval between two discharges: initial value 0, range 0-1000, unit: ms.

（26）Constant value hold switch: On switch Enables the constant value hold function.

（27）Advance self-adaptive switch: Turn on The switch Enables the advance self-adaptive switch.

（28）Adaptive level: initial value 1, range 1-5.

（29）Voltage self-search switch: Turn on the switch to enable the voltage self-search function.

（30）Voltage rise rate: initial value 2, range 2-160.

（31）Slow weight cut-off point: initial value 0, range 0-10000, unit: g.

（32）Slow plus intelligent ban switch: Turn on the switch to enable slow plus intelligent ban function.

（33）Delay after bag clamping: initial value 0, range 0-10000, unit: ms.

（34）Delay before bagging: initial value 0, range 0-10000, unit: ms.

（35）Delay before coding: initial value 0, range 0-10000, unit: ms.

（36）Effective time of coding output: initial value 0, range 0-10000, unit: ms.

（37）Analog operation no feeding switch: open the switch to open the analog operation no feeding function.

7.14 Communication Parameters screen description

Interface description:

1、 Initial value: 1;Optional 1 ~ 99.

2、 Baud rate: initial value: 38400;9600/19200/38400/57600/115200 is optional.

3、 Communication protocol: Initial value: Modbus-RTU.Modbus-rtu/modbus-ASCII/Continuous sending mode/Result sending Optional.

4、 Data format: Initial value: 8-E-1 (8-bit data bit - parity check -1 bit stop bit);8 - N - 1/8 - E - 1/8-1/7-1/7 - E - O - O - 1 is optional.

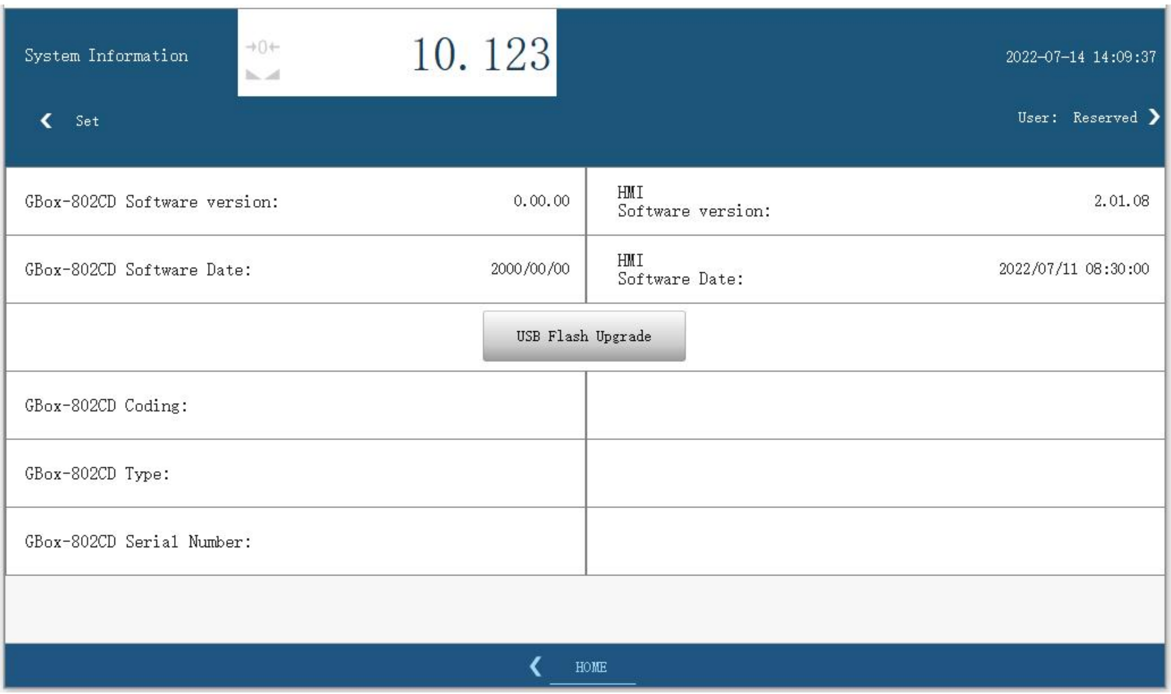
5、 Dual-word mode: Modbus communication display mode: initial value: AB-CD (high word first);Ab-cd (high word first)/cd-ab (low word first) Optional.

6、 Send interval: this parameter is valid only in the continuous send protocol. Initial value: 5ms.Range: 0-1000ms.

7、 Communication status: used for synchronous communication, 0 just after successful communication, 1 2S after successful communication.

8、 Serial port NUMBER: Identifies the serial port number. Serial port 1 is read as 1 and serial port 2 is read as 2.

7.15 System information interface description



System information 1 figure

Interface description:

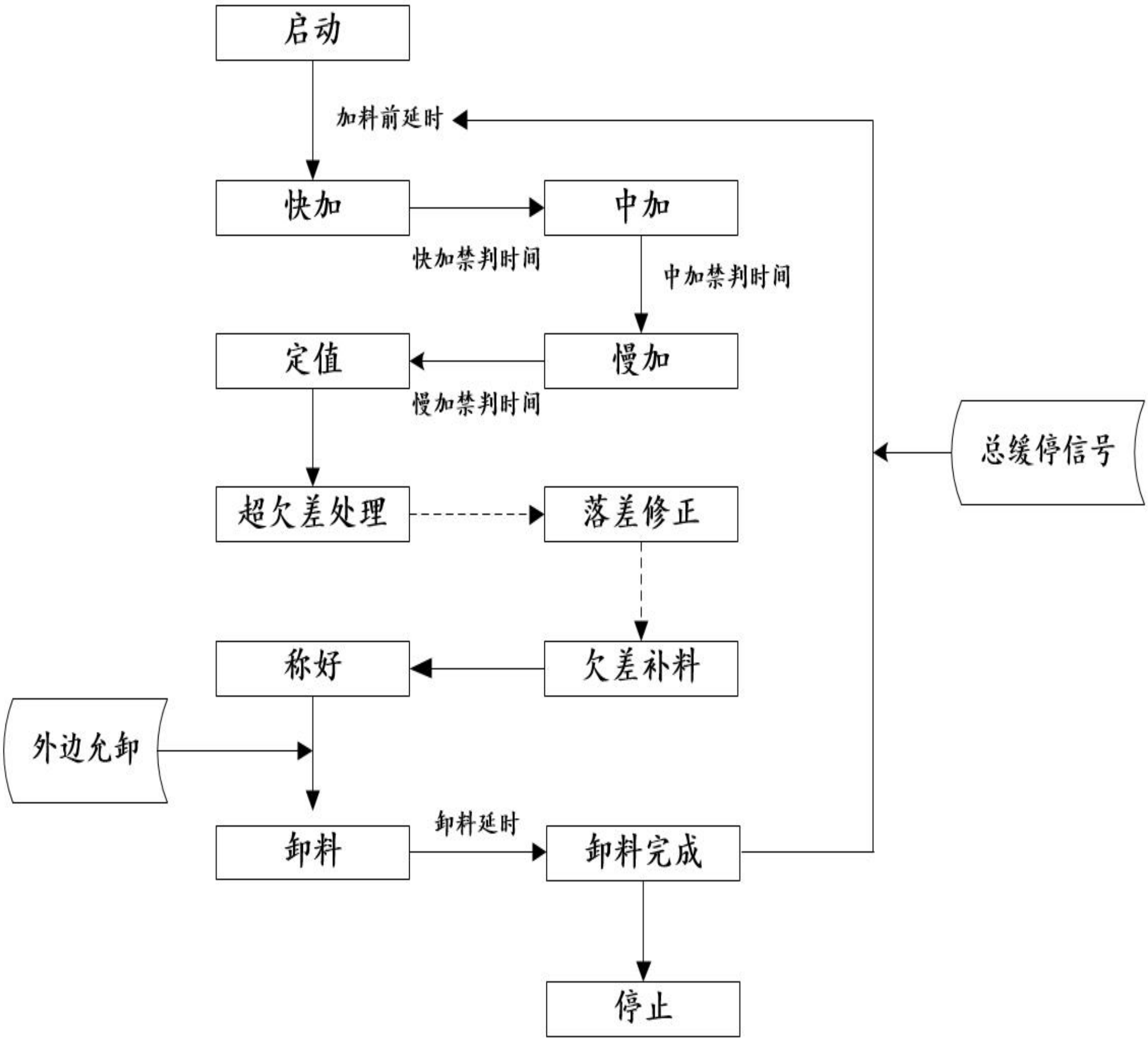
System info 1 The software versions of the mainboard and touch screen are displayed.

Usb disk upgrade system:

This operation is very important and cannot be performed unless necessary.If the operation is necessary, please contact the company and complete under the guidance of professional personnel.

8. Basic Function description

8.1 Basic running process



1） Start: in the stop state, the "start" signal is effective, and the module enters the running state. It will run according to the formula parameters. First, it will enter the delay before feeding.

2） Delay before feeding: the module is used to wait for the scale platform to stabilize or clear, etc., and enter the feeding process when the time arrives.

3） Fast increase: the large and small vibrators output according to the set fast increase voltage. At this time, fast increase, add, slow increase three signals are effective. In order to avoid overshoot, the weight is not judged during the "fast increase cut-off time".If the current weight is greater than the fast add stop weight (target value - the fast add and advance amount), it enters the add.

4） Add: The large and small vibrators output according to the set add voltage. At this time, add and slow add two signals are effective. In order to avoid overshoot, the weight is not judged in "Add stop time".If the current weight is greater than add stop weight (target value - add advance), then enter slow add.

5） Slow increase: the large and small vibrators output according to the set slow increase voltage. At this time, only the slow increase signal is effective. In order to avoid overshoot, the weight is not judged during the "slow increase cut-off time".If the current weight is greater than the slow stop weight (target value - drop value), then enter the fixed value.

6） Fixed value: at this time feeding signal is invalid, feeding stop signal is effective.There are three ways to fix the value, namely time, stability and time + stability.After meeting the corresponding requirements, enter the weighing.

7） Over difference detection, drop correction and point dynamic feeding: auxiliary functions of packaging. If the function switch is not opened, packaging will not go through the corresponding process and directly enter the next process.

Note: the overage and underdifference detection switch is closed, and the moving feeding switch is opened, and the feeding is not carried out.

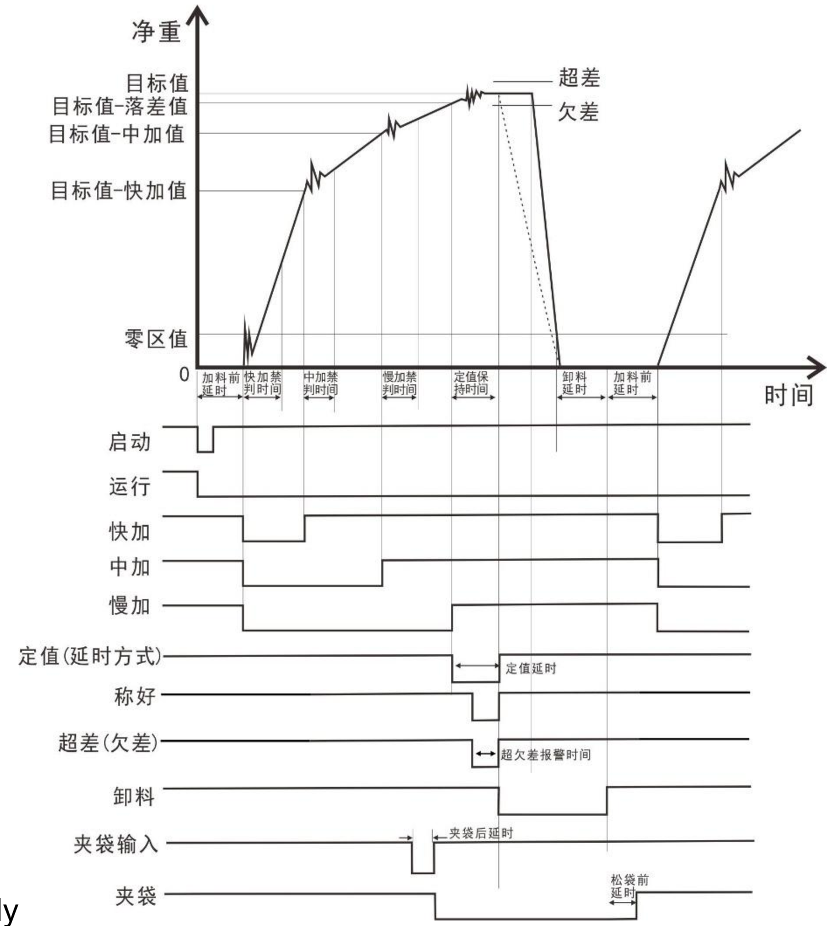
8） Weigh well: at this time, weigh well signal is valid, discharge request signal is valid, wait for the input of external equipment to allow discharge signal, after receiving the discharge signal, weigh well signal, discharge request signal, feeding stop and other signals are invalid, the module enters discharge.

9） Discharging: the discharging state signal is effective at this time, and the discharging mode of the module is pneumatic discharging.When the corresponding unloading is completed, the feeding is completed.

10） Unloading completed: after one pack is completed, the accumulated treatment is carried out.

11） Total slow stop: if the "total slow stop" signal is valid during the operation, it will enter the stop; otherwise, the packaging process of the next package will continue.

12） Emergency stop: when the module is running or cleaning, the "emergency stop" signal input is effective, and it will stop



immediately

Note: The MODBUS address of formula parameters and accumulative formula parameters in feeding process is 41001-48000.

9. Common failure analysis and troubleshooting

Common faults in use, causes and handling methods.

The serial number	The fault phenomenon	why	To deal with
1	Equipment start does not fall material	1. No material in storage bin 2. Storage bin stop door is not opened 3. Air source leakage connection	1. Add material to storage bin 2. Open the storage bin stop door 3. Connect the air source 4. Increase air pressure or turn on air pressure switch

		4. Air source pressure is too low or no pressure	
2	No unloading after weighing	1. The device cannot receive the bagging signal 2. The number of combinations of single scales is not set to 0	1. Check and eliminate 2. Set the corresponding combination times as required
3	The actual weighing has been out of tolerance	1.Equipment not calibrated 2. Fast increase the time limit setting is too large	1. To a scale 2. Fast increase the time limit appropriately reduced
4	The value is unstable	1.Strong winds or strong vibrations in the surrounding environment 2.Weight sensor failure	1.Check and eliminate 2.Check the sensor and replace if necessary
5	The weight is not up to standard	1.Weight sensor failure 2.Not cleared before use 3.Equipment not calibrated 4.Incomplete unloading	1.Check the sensor and replace if necessary 2.Stop reset 3.recalibrate 4.Increase discharge time appropriately
6	Data cannot be exported	1.U disk is damaged 2.The USB interface of the electrical control box is damaged	1.Replace the U disk 2.Check the interface

10. Maintenance and warranty

To ensure the weighing accuracy of the equipment, do not place the equipment in a cold and damp environment. Clean the dust generated by materials inside the equipment regularly according to the use condition. Remember to close the door of the electric control cabinet after daily use or maintenance.

● Warranty principle

In principle, the first installation and debugging should be carried out by our professional and technical personnel or companies entrusted by our company.

Equipment failure caused by the following conditions is not covered by our warranty:

- Do not follow the operation instructions
- Installation without professional guidance
- Make structural changes to the equipment
- Unauthorized damage to equipment
- Programming and operation errors
- Natural equipment damage