GENERAL MEASURE

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GMC-X802

Communication Manual

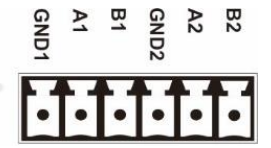
110612120004
V01.00.02

Content

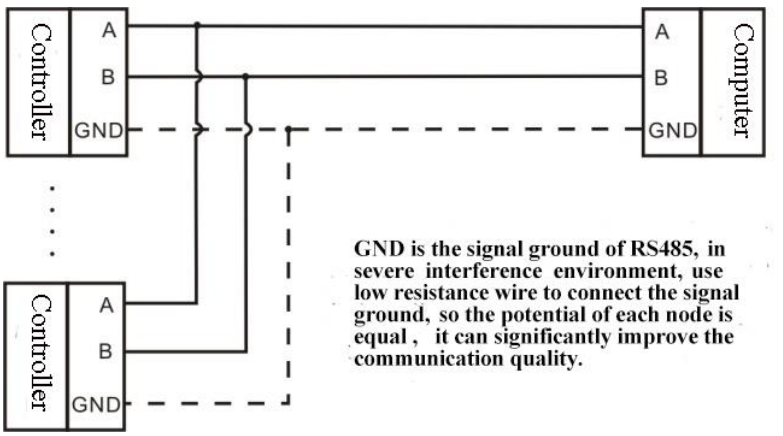
1. Serial port connection

GMC-X802 can provide two RS485 serial communication interfaces, the serial interface supports MODBUS (RTU/ASCII) protocol, continuous transmission and result transmission protocol.

The interface is shown in the following figure：



RS485 connection mode：



Serial port troubleshooting：

If the serial port fails to communicate, check it：

○ Check the connection according to the above connection method; Make sure the connection is correct

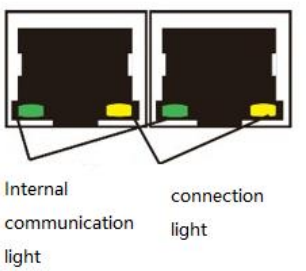
The RS485 port must be connected to cables A and B.

○ Ensure that the parameters of the connection port are consistent with those of the host computer.

Slave number, baud rate, data format and communication protocol must be consistent with the host computer and PLC.

2. Network port connection(Optional)

The product supports single/dual network port communication and supports Modbus TCP network port protocol. Dual network ports are configured with built-in switches for easy expansion.



Internal communication light：The hardware connection is normal, and the internal communication light is steady on.

Connection indicator：The network cable is properly connected and the connection indicator is blinking.

2.1 Network port troubleshooting

If the network port fails to communicate, check it：

○ Checking network port Indicators.

The hardware connection is normal, and the internal communication light is steady on.

The network cable is properly connected and the connection indicator is blinking.

○ Check whether the communication protocol is consistent with the host computer and PLC.

○ Verify that the instrument can be pinged from the network. If not, check the hardware interface.

○ Check whether IP conflict occurs.

○ Restart instrument.

3. Serial port parameter

Serial port 1 parameters：

No.	Parameter	Initial value	Instrument
3.1	Address id	1	Range：0~99。
3.2	Baud rate (buad)	38400	Range：9600、19200、38400、57600、115200
3.3	Communication mode	Modbus-RTU	Range：Modbus-RTU、Modbus-ASCII、continuous transmission、result sending
3.4	Data format	8-E-1	Range：8-N-1、8-E-1、8-O-1、7-E-1、7-O-1 (8 bit data bit-Even Check bit-1bit stop bit)。
3.5	Hi-Low Byte (hi-low)	AB-CD	Modbus Communication display mode： Range：AB-CD(High in front)、CD-AB(low in front)
3.6	Send interval (interv)	5	Valid only under the continuous Send protocol Range：0~1000ms

Serial port 2 parameters：

No.	Parameter	Initial value	Instrument
4.1	Address id	1	Range：0~99。
4.2	Baud rate (buad)	38400	Range：9600、19200、38400、57600、115200
4.3	Communication (mode)	Modbus-RTU	Range：Modbus-RTU、Modbus-ASCII、Continous send、result sending
4.4	Data format	8-E-1	Range：8-N-1、8-E-1、8-O-1、7-E-1、7-O-1 (8 bit data bit-even check-1bit stop bit).
4.5	Hi-Lo Byte(hi-low)	AB-CD	Modbus communication display mode： Range：AB-CD(high in front)、CD-AB(low in font)
4.6	Send interval (interv)	5	Only valid in continuous transmission protocol Range：0~1000ms

4. Network paramter

No.	Parameter	Initial value	introduction
5.1	IP address part 1 ip_1	192	Range：0~255
5.2	IP address part 2 ip_2	168	Range：0~255
5.3	IP address part 3 ip_3	80	Range：0~255
5.4	IP address part 4 ip_4	125	Range：0~255
5.5	Socket (Port)	502	Range：0~60000 Network communication port number settings，0 indicates closing the connection.
5.6	Protocol Mode	Modbus-Tcp	Range:Modbus-Tcp,Cont continuous send, result send
5.7	Hi-low word	AB-CD	Modbus communication display mode: Range: AB-CD(high byte in front),CD-AB(low byte in front)
5.8	Send interval (interv)	5	Valid only under Continuous Send protocol. The value ranges from 0 to 1000ms.

GMC-X802 have Optional network communication interface, connected with RJ-45 crystal head to realize communication with host computer or PLC.

1）When the single network port is selected, TCP protocol is supported. LAN1 can communicate with the network port, and LAN2 (marked N/A) is unavailable.

2）With dual network ports (1 IP group), built-in switch, supports up to 4 TCP connections.

3）Using Modbus-TCP communication protocol, the network port IP address should be set in working parameter 5 NET. For example, if the network port IP address is 192.168.101.106, then 5.1 ip_1 should be entered as 192, 5.2 ip_2 as 168, 5.3 ip_3 as 101, and 5.4 ip_4 as 106; the port number is set in 5.5 port.

4）MAC address view range：10100~10111 (PLC address: 410101~410112).

5. Protocol Description

5.1 MODBUS Protocol

5.1.1 function code&Exception code

◆ Function codes supported by the instrument：

Function code	name	introduction
03	Read register	A maximum of 125 registers can be read at a time.
06	Write single register	Use this function code to write a single holding register.
10	Writing multiple registers	Only supports writing to dual registers. The address must be aligned when writing. It is not allowed to write only part of the dual register. It is allowed to read only part when reading.
01	Read coil	Note that this length is in bits.
05	Write coil	

Note: This instrument only supports the above MODBUS function codes. When sending commands with other function codes to this instrument, the instrument will not respond.

◆ MODBUS exception code

code	name	introduction
02	Illegal data address	The address in the receiving frame is unreasonable, such as misalignment when writing to a double-word register.
03	Illegal data value	The data value written exceeds the allowable range.
04	Slave Failure	An unrecoverable error occurred while the instrument was attempting to perform the requested operation.
07	Unsuccessful programming request	The received command cannot be executed under the current conditions.

5.1.2 MODBUS Transmission Mode

RTU Mode

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

Data format： **8 data bit，1 stop bit**，even check(**8-E-1**)
8 data bit，1 stop bit，odd check(**8-O-1**)
8 data bit，1 stop bit，no check(**8-n-1**)
8 data bit，2 stop bit，no check(**8-n-2**)

Baud rate：**9600/19200/38400/57600/115200**(Choose one)

Code：Binary

ASCII mode

When ASCII mode is selected for communication, each 8-bit byte in a message is transmitted as 2 ASCII characters.

Data format： **8 data bit，1stop bit**，even check(**8-E-1**)
8 data bit，1 stop bit，odd check(**8-O-1**)
8 data bit，1 stop bit，no check(**8-n-1**)
8 data bit，2 stop bit，no check(**8-n-2**)
7 data bit，1 stop bit，even check(**7-E-1**)
7 data bit，1 stop bit，odd check(**7-O-1**)
7 data bit，2 stop bit，no check(**7-n-2**)

Baud rate： **9600/19200/38400/57600/115200** (Choose one)

Code：**ASCII**

5.1.3 MODBUS Communication address sheet

<table>
<tr><th>PLC address</th><th>Display address</th><th>Meaning</th><th colspan="3">Introduction</th></tr>
<tr><td colspan="6">Weight status information parameters(Read-only）</td></tr>
<tr><td>40001-40002</td><td>0000-0001</td><td>A scale weight value (4-byte signed integer)</td><td colspan="3">Net weight value</td></tr>
<tr><td>40003-40004</td><td>0002-0003</td><td>B scale weight value (4-byte signed integer)</td><td colspan="3">Net weight value</td></tr>
<tr><td rowspan="17">40005</td><td rowspan="17">0004</td><td rowspan="17">A scale weight status flag</td><td>Bit</td><td colspan="2">Introduction</td></tr>
<tr><td>.13-15</td><td>Reserve</td><td rowspan="16">※Indicates the weight status of the module. The status bit is "1" when it is the current status.
If the current weight is zero and stable, the D0D1 status bit of the address is "1".</td></tr>
<tr><td>.12</td><td>Bipolar</td></tr>
<tr><td>.11</td><td>Calculate weight by using theoretical values</td></tr>
<tr><td>.10</td><td>ADC failure</td></tr>
<tr><td>.09</td><td>Display net weight currently</td></tr>
<tr><td>.08</td><td>Millivolt is stable</td></tr>
<tr><td>.07</td><td>Loadcell negative overflow</td></tr>
<tr><td>.06</td><td>Loadcell positive overflow</td></tr>
<tr><td>.05</td><td>Weight negative overflow</td></tr>
<tr><td>.04</td><td>Weight positive overflow</td></tr>
<tr><td>.03</td><td>Overflow status</td></tr>
<tr><td>.02</td><td>Display weight is negative</td></tr>
<tr><td>.01</td><td>Zero</td></tr>
<tr><td>.00</td><td>Stable</td></tr>
<tr><td rowspan="7">40006</td><td rowspan="7">0005</td><td rowspan="7">A scale error code 1 (Calibration class error)</td><td>.13-15</td><td colspan="2">reserve</td></tr>
<tr><td>.12</td><td colspan="2">Remote calibration When forbidden (used when serial port calibration switch is available)</td></tr>
<tr><td>.11</td><td colspan="2">Under hardware protection during calibration (when hardware calibration switch is available)</td></tr>
<tr><td>.10</td><td colspan="2">Previous weight point uncalibrated (only use for multi-point calibration)</td></tr>
<tr><td>.09</td><td colspan="2">Beyond minimum resolution</td></tr>
<tr><td>.08</td><td colspan="2">The weight input exceeds the maximum range</td></tr>
<tr><td>.07</td><td colspan="2">The weight input cannot be</td></tr>
</table>

				zero
			.06	The weight is marked to be less than zero or the previous marked point
			.05	The loadcell is positive overflow during weight calibration
			.04	The Loadcell is negative overflow during weight calibration
			.03	Weight calibration is unstable
			.02	Loadcell overflow during zero calibration
			.01	Loadcell negative overflow during zero calibration
			.00	Zero calibration is unstable
40007	**0006**	A scale error code 2 (zero tare operation error code)	**.10-15**	Reserve
			.09	Remote tare operation permit switch is not enabled during remote tare operation (used when tare operation is available)
			.08	Taring is not allowed in the net weight state (for tare operation)
			.07	Net weight status is not allowed to zero (used when tare is used)
			.06	Remote zero switch is not enabled during remote zero (used when serial port zero switch is available)
			.05	The loadcell positive overflows when zeroing
			.04	The loadcell negative overflows when zeroing
			.03	Unstable when zeroing
			.02	Zero out of range
			.01	The zero is unstable during power-on
			.00	The power-on zero exceeds the range
40008	**0007**	B Weight status flag	Refer to A scale	
40009	**0008**	B scale error code 1- Calibration class error code	Refer to A scale	
40010	**0009**	B scale error code 2- Zero tare operation error code	Refer to A scale	
40011	**0010**	Flow status flag bit 1	**.15**	USB connected
			.14	Reserve

			.13	Supply material status, valid when supplying material
			.12	Lack material status，valid when lacking material
			.11	Coding status,valid when coding，invalid in slave status
			.10	Clip bag status：valid after cliping bag，invalid in slave mode
			.09	Interlock slave mode
			.08	Interlock master mode
			.07	B scale big vibrator test
			.06	B scale small vibrator test
			.05	A scale big vibrator test
			.04	A scale small vibrator test
			.03	Empty material mode（Any of the empty material signal will work）
			.02	**IO** test mode
			.01	Run (Any run feed is valid, including simulation runs）
			.00	Reserve，return **0b**
40012	**0011**	A scale Flow status flag bit 2	**.13-15**	Reserve
			.12	A scale over/under suspension state: When the over/under suspension switch is turned on, over /under error occurs, the instrument is suspended, and this state is effective. When the clear alarm, stop, or emergency stop signal is received, this state is invalid.
			.11	A scale stopping....
			.10	Discharge status: effective after discharge starts, invalid after discharge is completed, invalid after stopping
			.09	A scale material replenishment: effective when running replenish material, invalid after completion of material replenishment, invalid after stopping
			.08	A scale result over/under: the waiting value exceeds the target value - the over/under value is valid, invalid after discharging or replenishing material, and invalid after stopping
			.07	A scale result over: it is

				valid when the waiting value exceeds the target value + the over value, invalid after discharging, invalid after stopping
			.06	A scale weigh ok：Valid after waiting, invalid when discharging, invalid after stopping
			.05	A scale feeding stop: effective at the end of slow feeding, invalid when discharging, invalid after stopping
			.04	A scale slow-feed：It is valid after the fast feed starts, invalid after the fast feed ends, and invalid after the stop
			.03	A scale mid feed：It is valid after the fast feeding starts, invalid after the fast feeding ends, and invalid after the stop
			.02	A scale fast feed：It is valid after the fast feeding starts, invalid after the fast feeding ends, and invalid after the stop
			.01	Preparation before feeding, effective after feeding and discharging, invalid after starting feeding, invalid after stopping
			.00	A scale running
40013	**0012**	B scale flow status mark bit 3(refet to A scale）		
40014	**0013**	Reserve		
40015	**0014**	Work flow error code area 1	**.15**	Empty material state does not allow operation, effective 2 seconds after disappearing, at the same time the buzzer sounds
			.14	The I/O test status does not allow the operation. the status disappears after 2 seconds, and the buzzer will sound
			.13	Does not allow the operation in the vibrator test status. After 2 seconds, it disappears and the buzzer will sound
			.12	Software error, can not be started, the status disappears after 2 seconds, at the same time the buzzer will sound
			.11	B scale discharging timeout alarm
			.10	B scale discharging timeout

				alarm
			.09	When B scale is powered on, the discharge gate is not closed, and the status disappears after 2 seconds, the buzzer rings at the same time
			.08	When B scale is started, the discharge gate is not closed, the status disappears after 2 seconds, and the buzzer will sound
			.07	B scale: over/ under alarm
			.06	B scale: the zero before feeding failure alarm, the status disappears after 2 seconds, the buzzer will sound at the same time
			.05	A scale discharging timeout alarm
			.04	A scale feeding timeout alarm
			.03	When A scale is powered on, the discharge gate is not closed, and the status disappears after 2 seconds, and the buzzer will sound
			.02	When A scale is started, the discharge gate is not closed, and the status disappear after 2 seconds, and the buzzer will sound
			.01	A scale over/under alarm
			.00	A scale before the feeding of zero failure alarm, effective 2 seconds after disappearing, while the buzzer will sound
40016	**0015**	Workflow error code area 2	**.14-15**	Reserve
			.13	Clamping bag motor timeout alarm
			.12	Feeding gate not closed properly
			.11	Motor feeding gate closing timeout
			.10	Batches completed
			.09	Failed to import parameters by USB.
			.08	Failed to export parameters by USB.
			.07	B scale OFL overflowed during startup and could not be started
			.06	A scale OFL overflowed during startup and could not be started

			.05	When starting, the reserve parameter of B scale is unreasonable and cannot be started
			.04	When starting, the reserve parameter of A scale is unreasonable and cannot be started
			.03	Reserve
			.02	Reserve
			.01	The target value of B scale is 0 and cannot be started
			.00	The target value of A scale is 0 and cannot be started
40017-40018	**0016-0017**	Reserve		
40019-40020	**0018-0019**	A scale gross weight, signed number, integral type	If the tare function is not available, the weight value is returned	
40021-40022	**0020-0021**	A scale net weight，signed number, integral type	If the tare function is not available, the weight value is returned	
40023-40024	**0022-0023**	A scale gross weight, signed number, integral type	If tare function is not available, 0 is returned	
40025-40026	**0024-0025**	A scale flow，signed number, integral type	If tare function is not available, 0 is returned	
40027-40028	**0026-0027**	A scale display value，signed number, float type	Returns the weight value when no screen is displayed	
40029-40030	**0028-0029**	A scale gross weigt，signed number, float type	If the tare function is not available, the weight value is returned	
40031-40032	**0030-0031**	A scale net weight，signed number, float type	If the tare function is not available, the weight value is returned	
40033-40034	**0032-0033**	A scale tare weight, signed number, float type	If tare function is not available, 0 is returned	
40035-40036	**0034-0035**	A scale flow, signed number, float type	If flow function is not available, 0 is returned	
40037-40038	**0036-0037**	A scale the AD code after filtering	The instrument uses the ADC's 21bit data for filtering, weight calculation, and mV voltage calculation	
40039-40040	**0038-0039**	A scale loadcell voltage value	Read back "Loadcell input voltage" (absolute mV voltage cor-	

			rected by correction factor), 4 decimal points
40041-40042	**0040-0041**	A scale relative to zero voltage value	Read return "Loadcell input voltage value - calibration zero voltage value" (the relative mV voltage corrected by the correction factor), 4 decimal points
40043-40044	**0042-0043**	B scale gross weight, signed number, integral type	If tare function is not available, 0 is returned
40045-40046	**0044-0045**	B scale net weight，signed number, integral type	If the tare function is not available, the weight value is returned
40047-40048	**0046-0047**	B scale tare weight , signed number, integral type	If no tare function is available, 0 is returned
40049-40050	**0048-0049**	B scale flow, signed number, integral type	If no flow function is available, 0 is returned
40051-40052	**0050-0051**	B scale displayed value，signed number, float type	When the screen is not displayed, return the weight value
40053-40054	**0052-0053**	B scale gross weight, signed number, float type	When there is no tare function, the weight value is returned
40055-40056	**0054-0055**	B scale net weight、signed number, float type	When there is no tare function, the weight value is returned
40057-40058	**0056-0057**	B scale tare weight，signed number, float type	When there is no tare function, it returns 0
40059-40060	**0058-0059**	B scale flow，signed number, float type	When there is no flow function, it returns 0
40061-40062	**0060-0061**	B scale AD code after filtering	The instrument uses 21-bit data from the ADC for filtering, weight calculation, and mV calculation.
40063-40064	**0062-0063**	B scale loadcell voltage value	Read and return "loadcell input voltage" (absolute mV voltage value corrected by the correction factor), 4 decimal points
40065-40066	**0064-0065**	B scale relative zero voltage value	Read and return "loadcell input voltage value - calibration zero voltage value" (relative mV voltage value corrected by correction coefficient), 4 decimal points
40067-40068	**0066-0067**	A scale small vibrator real output analog value	Read out real-time output analog value

40069-40070	**0068-0069**	A scale big vibrator real output analog value	Read out real-time output analog value
40071-40072	**0070-0071**	B scale small vibrator real output analog value	Read out real-time output analog value
40073-40074	**0072-0073**	B scale big vibrator real output analog value	Read out real-time output analog value
40075	**0074**	Time: Year	Range:0~99
40076	**0075**	Time: Month	Range:1~12
40077	**0076**	Time: Day	Range:1~31
40078	**0077**	Time: hour	Range:0~23
40079	**0078**	Time: Minutes	Range:0~59
40080	**0079**	Time: Second	Range:0~59
40081-40082	**0080-0081**	reserve	
40083-40084	**0082-0083**	High byte of system total accumulated weight	Range:0~999999
40085-40086	**0084-0085**	Low byte of system total accumulated weight	Range:0~999999999
40087-40088	**0086-0087**	High byte system total accumulated batches	Range:0~999999
40089-40090	**0088-0089**	Low byte system total accumulated batches	Range:0~999999999
40091	**0090**	Reserve	
40092	**0091**	Input status zone（IN1-IN10）	Query the status of the instrument input port.1：valid，0：invalid
40093	**0092**	Output status zone(OUT17-OUT20)	Query the output port status of the instrument 1：valid，0：invalid
40094	**0093**	Out status zone(OUT1-OUT16)	Query the output port status of the instrument 1：valid，0：invalid
40095~40100	**0094~0099**	Reserve	
Basic transmitter parameter area (basic parameters shared by scale A and scale B) (readable-writable)			
40101-40102	**0100-0101**	Power-on zero range	Range: 0-99 (0%-99% of max capacity) Default: 0 0 indicates that the power-on zero function is disabled (power-on zero timeout is fixed at 3 seconds).
40103-40104	**0102-0103**	Remote zero switch	There is a display of the instrument control can use the serial port to zero, the instrument does not show, the double word retained, writable, write meaningless, read back 0
40105-40106	**0104-0105**	Zero range	Range: 1-99 (1%-99% of maximum range) Default: 20
40107~40114	**0106~0113**	Reserve	

40115-40116	**0114-0115**	Stable range	Range: 0-99d, default: 1
40117-40118	**0116-0117**	Stable time	Range: 1-5000ms, default: 1000ms
40119-40120	**0118-0119**	Zero track range	The value ranges from 0 to 99d. Default value: 1
40121-40122	**0120-0121**	Zero track time	Range: 1-5000ms, default: 1000ms
40123-40124	**0122-0123**	Digital filtering	Range: 0-9, default: 7
40125-40126	**0124-0125**	Reserve	
40127-40128	**0126-0127**	**AD** sampling speed	Range: 0-9, default: 7 0:50; 1:60; 2:100; 3:120; 4:200; 5:240; 6:400; 7:480,000; 8:8,000; 9:960
40129-40130	**0128-0129**	loadcell signal range	Range: 0-2, default: 1 0:0-5mV; 1:0-10mV; 2:0-15mV
40131~40200	**0130~0199**	Reserve	
Calibration parameter area (readable-writable)			
40201-40202	**0200-0201**	Unit	Range: 0 to 3, default: 1 0-t, 1-kg, 2-g, 3-lb
40203-40204	**0202-0203**	Weight decimal point	Range: 0 to 4, default: 0 0-0, 1-0.0, 2-0.00, 3-0.000, 4-0.0000
40205-40206	**0204-0205**	Division	Range :0 to 8. Default value :0 0-1, 1-2, 2-5, 3-5, 4-20, 5-50, 6-100, 7-200, 8-500
40207-40208	**0206-0207**	Capacity	Range: 0- division *100000, default: 10000
40209-40210	**0208-0209**	Reserve	
A scale weight calibration area (readable-writable)			
40211-40212	**0210-0211**	Automatic zero calibration	Write non-0 data, perform zero calibration operation for the current state. Read: Current millivolts of the loadcell. Fixed: **4** decimal points.
40213-40214	**0212-0213**	Manual zero calibration	Read the zero millivolts of the last calibration
40215-40216	**0214-0215**	Weight calibration	Write weight value to complete weight calibration. Read: relative millivolts
40217-40218	**0216-0217**	Gain weight	The weight of the weight at the time of calibration
40219-40220	**0218-0219**	Zero calibration	Write 1 to perform zero calibration, read as 0
40221-40222	**0220-0221**	Gain calibration	Write 1to calibrate according to the input weight of the weight, read as 0
40223-40224	**0222-0223**	Reserve	
40225-40226	**0224-0225**	Loadcell sensitivity calibration	Write using the actual sensitivity of the loadcell for theoretical value calibration, fixed:4 decimal points

40227-40228	**0226-0227**	Total loadcell range	Write the total loadcell range for theoretical calibration	
40229-40230	**0228-0229**	Theoretical value effective switch	Range: 0-1. 0: Close the theoretical weight calculation, using the last weight calibration results for weight calculation. 1: Turn on the theoretical value calibration calculation and calculate the weight with the theoretical value.	
40231-40232	**0230-0231**	Weight calibration correction factor	Range: 1~1000000,; Default: 100000; The weight calculated by the AD code is multiplied by this factor and divided by 100,000	
40233-40234	**0232-0233**	Material calibration displayed weight	When there are no weights, you can calibrate through the material, after manually feeding, Write 1 to obtain the current display weight value.	
40235-40236	**0234-0235**	Material calibration of the actual weight	After manual discharging, weigh the material on a standard scale and then enter the actual weight of the material	
40237-40238	**0236-0237**	Material calibration	Write 1 Calibrate according to the displayed weight of the input and the actual weight. Read this as 0	
40239-40240	**0238-0239**	Calibration results	**11**	Exceeding minimum resolution (less than 1 AD code per division)
			10	Weight input exceeding the maximum range
			09	The weight input cannot be zero
			08	Weight calibration less than zero or the previous calibration point (single point calibration weight point below zero)
			07	Positive loadcell overflow during weight calibration (greater than maximum loadcell voltage)
			06	Negative loadcell overflow during weight calibration (less than zero voltage)
			05	Weight calibration is unstable
			04	Positive loadcell overflow at zero calibration (greater than 80% of maximum loacell voltage)
			03	Negative loadcell overflow during zero calibration (less than 20uv)
			02	Zero calibration is unstable
			01	Calibration success
			00	No operation

40241~40250	**0240~0249**	Reserve		
B Scale weight calibration area (readable-writable)				
40251-40252	**0250-0251**	Automatic zero calibration	Write non-0 data, zero calibration of the current state. Read: Current millivolts of the loadcell. Fixed: **4** decimal points.	
40253-40254	**0252-0253**	Manual zero calibration	Read out the zero millivolts of the last calibration	
40255-40256	**0254-0255**	Weight calibration	Write the weight value to complete the weight calibration. Read: Relative millivolts	
40257-40258	**0256-0257**	the weight of the weights when calibraion	The weight of the weights at the time of calibration	
40259-40260	**0258-0259**	Zero calibration	Write 1 to perform zero calibration, read as 0	
40261-40262	**0260-0261**	Weight calibration	Write 1 according to the input weight of the weight calibration, read as 0	
40263-40264	**0262-0263**	Retain		
40265-40266	**0264-0265**	Loadcell sensitivity calibration	Write using the actual sensitivity of the loadcell for theoretical value calibration, fixed:4 decimal points	
40267-40268	**0266-0267**	Total loadcell range	Write the total loadcell range for theoretical calibration	
40269-40270	**0268-0269**	Theoretical value effective switch	Range: 0-1. 0: Close the theoretical weight calculation, using the last weight calibration results for weight calculation. 1: Turn on the theoretical value calibration and calculate the weight with the theoretical value.	
40271-40272	**0270-0271**	Weight calibration correction factor	Range: 1~1000000. Default: 10000 The weight calculated by the AD code is multiplied by this factor and divided by 100,000.	
40273-40274	**0272-0273**	Material calibration displayed weight	When there are no weights, you can calibrate through the material, after manually feeding, Write 1 to obtain the current display weight value.	
40275-40276	**0274-0275**	Material calibration of the actual weight	After manual discharging, weigh the material on a standard scale and then enter the actual weight of the material	
40277-40278	**0276-0277**	Material calibration	Write 1to calibrate according to the displayed weight of the input and the actual weight. Read this as 0	
40279-40280	**0278-0279**	Calibration results	**11**	Exceeding minimum resolution (less than 1 AD code per division)
			10	Weight input exceeding the maximum range
			09	The weight input cannot be zero

			08	Weight calibration less than zero or the previous calibration point (single point calibration weight value below zero)
			07	Positive loadcell overflow during weight calibration (greater than maximum loadcell voltage)
			06	Negative loadcell overflow during weight calibration (less than zero voltage)
			05	Weight calibration is unstable
			04	Positive loadcell overflow at zero calibration (greater than 80% of maximum loadcell voltage)
			03	Negative loadcell overflow during zero calibration (less than 20uv)
			02	Zero calibration is unstable
			01	Successful calibration
			00	No operation
40281~40300	**0280 ~ 0299**	Reserve		
Apply parameters area (readable-writable)				
40301-40302	**0300-0301**	Working mode	Range: 0-3; Default: 0 0- Standard mode; 1- Host mode; 2- Slave mode; 3- Single hopper independent mode	
40303-40304	**0302-0303**	Analog vibrator control mode	Range: 0-3; Default: 1 0- Analog single vibrator mode, feeding mechanism for instrument output analog control single vibrator for feeding, no cylinder, etc. 1- Analog double vibrator mode, feeding mechanism: Analog output from the instrument controls two vibrators for feeding, no cylinder, etc. 2- Analog Fine Feed vibrator mode, feeding mechanism is the analog output of the instrument to control fine feed, Coarse feed and middle feed may be other mechanisms such as cylinders or motors; 3- No analog, feeding relies entirely on other mechanisms such as cylinders or motors, no need to use the analog output of the instrument.	
40305-40306	**0304-0305**	Discharge mechanism mode	Range: 0-6; Default: 0 0- Pneumatic discharge; 1- motor rotary discharge; 2- positive and negative motor rotation (dual photoelectric); 3- motor positive and	

			negative rotation (single photoelectric); 4- motor positive and negative rotation (no photoelectric); 5-stepper motor rotation (photoelectric); 6-forward and reverse stepper motor rotation;
40307-40308	**0306-0307**	Discharge judgment mode	Range: 0-1; Default: 1 0- Time mode, 1-zero zone mode Determine the control condition for closing the discharge gate after completion of discharge.
40309-40310	**0308-0309**	Time between discharges	Range: 0-10000ms, default: 100ms. After the discharge execution is completed, no new discharge requirements are detected during the discharge interval.
40311-40312	**0310-0311**	Confirmation delay of discharge status from the machine	Range: 0-10000ms, default: 100ms. The host mode is used to prevent the continuous discharge request when scanning the slave, and the time is used to wait for the complete withdrawal of the discharge status signal from the slave to prevent the abnormal discharge caused by the withdrawal delay
40313-40314	**0312-0313**	Feeding timeout time	Range: 0-30000ms, default: 0 0- Turn off feed timeout detection When the feeding timeout time is not 0, it means that the feeding monitoring is turned on, the feeding time exceeds the parameter time, the stop alarm (buzzer), the alarm output is effective, and the corresponding marker is effective
40315-40316	**0314-0315**	Discharge timeout time	Range: 0-30000ms, default: 0 0- Turn off feed timeout detection. When the time of discharge and feeding is not 0, it means that the feeding monitoring is turned on. When the discharging time exceeds the time, the alarm will be stopped.
40317-40318	**0316-0317**	Dynamic filter switch	Range: 0-1, Default value: 1 (on),
40319-40320	**0318-0319**	Feed filter level	Range: 0-9, default: 3
40321-40322	**0320-0321**	wait filter level	Range: 0-9, default: 7
40323-40324	**0322-0323**	Filter level of discharge	Range: 0-9, default: 3
40325-40326	**0324-0325**	Start condition for next feeding	Range: 0-1, default: 0. 0: Start immediately after discharging, 1: Start after returning to zero zone after discharging (no judgment is made on the first start)
40327-40328	**0326-0327**	waiting value mode	Range: 0-2, default: 1 0- wait until stable, 1- wait by time, 2-wait by time and be stable (stable

			and then go through the waiting time)
40329-40330	**0328-0329**	Start additional zero times	Range: 0-99, default: 0 If it is 0, start the first packet to zero; When it is not 0, the first package is not zeroed, and the next bag are zeroed.
40331-40332	**0330-0331**	Zero additional delay	The value ranges from 0ms to 5000ms. Default value: 500ms After delay before feeding if you need to zero, entering this delay, zero after the time is up
40333-40334	**0332-0333**	Feeding zero timeout time	Range: 1000ms-5000ms, default: 3000ms. Reach (the time + stable time) and it is still not stable, skip zero operation and feeding directly.
40335-40336	**0334-0335**	Zero failure treatment method	Range: 0-3, default: 1 0- alarm only; 1- alarm, zero next bag ; 2- alarm automatically stops after three consecutive zero failures: 3- alarm, stop immediately
40337-40338	**0336-0337**	Feed level	Range: 0-1, default: 1. 0: two-level feed, only mid feed and slow feed, 1: three-level feed, there is fast feed, mid feed and slow feed.
40339-40340	**0338-0339**	A scale small vibrator empty material analog value	Range: 0-24000, default: 3500
40341-40342	**0340-0341**	A scale the large vibrator empty material analog value	Range: 0-24000, default: 3500
40343-40344	**0342-0343**	B Scale small vibrator empty material analog value	Range: 0-24000, default: 3500
40345-40346	**0344-0345**	B scale large vibrator empty material analog value	Range: 0-24000, default: 3500
40347-40348	**0346-0347**	Zero and feed time	Range: 0-10000ms, default: 2000ms. When emptying the material, fill the material at this time and then discharge the material. When it is 0, both the feeding door and the discharging door are open, and the materials pass directly
40349-40352	**0348-0351**	Reserve	
40353-40354	**0352-0353**	Feeding voltage working mode	Range: 0-1, default: 1 0- Standard mode, slow feed ends then voltage back to 0, 1- pre-boost mode, slow feed ends the voltage does not return to 0, maintain the original value, until the voltage

			rises back to the first speed voltage when discharging (with fast feed back to fast feed voltage, no fast feed back to the mid feed voltage)
40355-40356	**0354-0355**	Delay after bag clamping	Range: 0ms-10000ms, default: 500ms
40357-40358	**0356-0357**	Delay before bag release	Range: 0ms-10000ms, default: 500ms (Compatible with the old mode address, modified is the current formula delay before loosening bag)
40359-40360	**0358-0359**	Coding delay	Range: 0ms-10000ms, default: 500ms
40361-40362	**0360-0361**	Code output valid time	Range: 0ms-10000ms, default: 500ms
40363-40364	**0362-0363**	Valid time without feed and analog switch	Range: 0-1, default: 0. 0: analog run time Parameter :1: analog run directly weigh ok.
40365-40366	**0364-0365**	Manual loose bag switch	Range: 0-1, default: 0. 0: Automatic loosening bag after discharging :1: manual loosening bag is required after discharging completed before discharging next time.
40367-40368	**0366-0367**	Manual separate feed switch	Range: 0-1, default: 0. 0: 'fast feed, medium feed and slow feed' are valid when manually fast feeding, 'medium feed and slow feed' are valid when manually mid feed, manual slow time only 'slow' is effective. 1: Manual operation is only effective for each
40369-40370	**0368-0369**	Number of stepper motor gate opening pulse	Range: 1-100000, default: 1000 The number of open gate pulses when the discharge mechanism is the positive and negative rotation of the stepper motor
40371-40372	**0370-0371**	Open gate shake time	Range: 0ms-3000ms; Default: 100ms Motor/stepper motor rotary discharge control is used, and the time of origin position signal is not judged after opening the gate
40373-40374	**0372-0373**	The time of opening the discharging gate	Range: 0-3000ms; Default: 1000ms Discharge mechanism 3 motor positive and negative rotation (single photoelectric) or 4 (motor positive and negative rotation without photoelectric) valid for the length of time given by the discharge gate open signal
40375-40376	**0374-0375**	The closing gate time of the discharging gate	Range: 0-3000ms; Default: 1000ms Discharge mode 4 (motor positive

			and negative rotation without photoelectric) is valid for the length of time given by the discharge gate closing signal
40377-40378	**0376-0377**	Discharge motor operating frequency	Range: 100-100000HZ; Default: 2000HZ
40379-40380	**0378-0379**	Discharge motor start frequency	Range: 100-100000HZ; Default: 200HZ The frequency at which the motor starts
40381-40382	**0380-0381**	Acceleration time of the discharging motor	Range: 0-10000ms, default: 100ms The time of acceleration from the starting frequency to the running frequency when the motor is running
40383-40384	**0382-0383**	waiting weight hold switch	Range: 0-1, default: 0(off) After opening and the weight stays the same after the scale is done and does not refresh the weight until the discharging is complete
40385~40390	**0384-0389**	Reserve	
40391-40392	**0390-0391**	Advance feed delay after closing gate	Range: 0-3000, default: 0 If it is not 0, start the delay when closing the gate. After the delay time, do not judge that the discharge gate has been in place, and directly proceed to the next step in order to improve the speed. The discharge mechanism is invalid under the pneumatic mode
40393-40394	**0392-0393**	Separate feed switch	Range: 0-1, default: 0; 0: fast feed, mid feed, slow feed signal output is effective when fast feeding; mid feed, slow feed signal output is effective when mid feeding . 1: only fast feed signal output is effective when fast feeding. only mid feed signal output is effective when mid feed, only slow feed signal output is effective when slow feeding
40395-40396	**0394-0395**	Analog mode	Range: 0-3, default: 0 0:0 ~5V; 1:0 ~10V; 2:4 ~20mA; 3:0 ~24mA;
40397-40398	**0396-0397**	Rotary motor feeding frequency conversion time	Range: 0-1000ms, default: 100ms The time for switching between different frequencies when the rotary motor is feeding materials.
40399-40400	**0398-0399**	Feeding mechanism mode	0- Pneumatic 1- Stepper motor 2- Rotating motor
IO definition function address (specific function number definition, see 110612120003 GMC-X802 Standard Operation Instructions IO definition comparison table)			

40401-40402	**0400-0401**	IN1 function	default 1	The input port Function code: 0- undefined 1- Run(Total) 2- Stop(Total) 3- E-Stop(Total) 4- discharge allowed(Total) 5- slave discharge request(Total) 6- slave discharge status(Total) 7- empty material (Total) 8- simulation test(Total) 9- clear alarm(Total) 10- switch recipe(Total) 11- Zero(A) 12- Zero(B) 13- run(A) 14- run(B) 15- stop(A) 16- stop(B) 17- E-Stop(A) 18 E-stop(B) 19- discharge gate closed in place(A) 20- discharge gate closed in place(B) 21- discharge gate open in place(A) 22- discharge gate open in place(B) 23- manual fast feed(A) 24- manual fast feed(B) 25- manual mid feed(A) 26- manual mid feed(B) 27- manual slow feed(A) 28- manual slow feed(B) 29- Manual discharge (A)
40403-40404	**0402-0403**	IN2 function	default 3	
40405-40406	**0404-0405**	IN3 function	default 39	
40407-40408	**0406-0407**	IN4 function	default 5	
40409-40410	**0408-0409**	IN5 function	default 6	
40411-40412	**0410-0411**	IN6 function	default 9	
40413-40414	**0412-0413**	IN7 function	default 19	
40415-40416	**0414-0415**	IN8 function	default 20	

40417-40418	**0416-0417**	IN9 function	default 21	30- Manual discharge(B) 31- single run(A) 32- single run(B) 33- simulation test(A) 34- simulation test(B) 35- empty material(A) 36- Empty material(B) 37- Clear alarm(A) 38- Clear alarm(B) 39- clip/loose bag(Total) 40- slave 2 discharge request(Total)(valid in host mode) 41- Upper level 42- Lower level 43- Reserved 44- Reserved 45- Clip/loose bag(B) 46- Allow discharge(B) 47- Photoelectric sewing machine 48- E-stop sew machine 49- feed gate closed in place(A) 50- feed gate closed in place(B) 51- A Bag Released 52- B Bag Released 53- A scale manual fast feed (Level Signal) 54- B scale manual fast feed (Level Signal) 55- A scale manual discharge (Level Signal) 56- B scale manual discharge (Level Signal)
40419-40420	**0418-0419**	IN10 function	default 22	
40421-40422	**0420-0421**	OUT1 function	default 1	The output port Function code: 0- Undefined 1- Run(Total) 2- Stop(Total) 3- Weigh OK(Total) 4- Slave machine discharge condition(Total) 5- Run(A)
40423-40424	**0422-0423**	OUT2 function	default 2	

40425-40426	**0424-0425**	OUT3 function	default 3	6- Run(B) 7- Stop(A) 8- Stop(B) 9- Fast feed(A) 10- Fast feed(B) 11- Mid feed(A) 12- Mid feed(B) 13- Slow feed(A) 14- Slow feed(B) 15- Feed complete(A) 16- Feed complete(B) 17- Over/under(A) 18- Over/under(B) 19- replenishing material(A) 20- replenishing material(B) 21- Weigh OK(A) 22- Weigh OK(B) 23- A scale discharge gate open 24- B scale discharge gate open 25- A scale discharge gate closed 26- B scale discharge gate closed 27- A scale discharge status 28- B scale discharge status 29- A feed/discharge timeout 30- B feed/discharge timeout 31- Allow salve 1 discharge 32- discharge request(Total) 33- Clip Bag(Total) 34- Coding(Total) 35- Allow slave 2 discharge 36- discharge pulse(A) 37- discharge pulse(B) 38- Supply material 39- Lack Material 40- discharge request(B) 41- Clip bag(B) 42- Coding(B) 43- Sew machine 44- Cutter
40427-40428	**0426-0427**	OUT4 function	default 4	
40429-40430	**0428-0429**	OUT5 function	default 9	
40431-40432	**0430-0431**	OUT6 function	default 10	
40433-40434	**0432-0433**	OUT7 function	default 11	
40435-40436	**0434-0435**	OUT8 function	default 12	
40437-40438	**0436-0437**	OUT9 function	default 13	
40439-40440	**0438-0439**	OUT10 function	default 14	
40441-40442	**0440-0441**	OUT11 function	default 17	
40443-40444	**0442-0443**	OUT12 function	default 18	
40445-40446	**0444-0445**	OUT13 function	default 23	
40447-40448	**0446-0447**	OUT14 function	default 24	

40449-40450	**0448-0449**	PW1(PWM) function	default 25	45- Custom feed 1(A) 46- Custom feed 2(A) 47- Custom feed 1(B) 48- Custom feed 2(B) 49- Feeding pulse of the small rotating motor (A) 50- Feeding pulse of the large rotating motor(A) 51- Feeding pulse of the small rotating motor (B) 52- Feeding pulse of the large rotating motor (B) 53- feed stepper motor pulse output(A) 54- feed stepper motor direction signal(A) 55- feed stepper motor pulse output(B) 56- feed stepper motor direction signal(B) 57- Clip pocket stepper motor pulse output(A) 58- Loose bag direction signal(A) 59- Clip pocket stepper motor pulse output(B) 60- Loose bag direction signal(B)
40451-40452	**0450-0451**	PW2(PWM) function	default 26	
40453-40454	**0452-0453**	PW3(PWM) function	default 27	
40455-40456	**0454-0455**	PW4(PWM) function	default 28	
40457-40458	**0456-0457**	PW5(PWM) function	default 29	
40459-40460	**0458-0459**	PW6(PWM) function	default 30	
40461-40500	**0460-0499**	Retain		
40501	**40500**	Defined or not (total clip/loose bag)	Readout is 1 if defined, read out is 0 if not defined	
40502	**40501**	Defined or not (lower level)	Readout is 1 if defined, read out is 0 if not defined	
40503 ~ 40600	**0502 ~ 0599**	Reserve		
40601-40602	**0600-0601**	Sewing switch	Turn on the sewing machine function Range: 0-1, default: 0 0: off; 1: on.	
40603-40604	**0602-0603**	The shake time when sewing machine starts	Range: 0-30000ms, default: 300ms. To prevent the start of the sewing machine photoelectric jitter resulting in abnormal work of the sewing machine. In the shaking time, the sewing machine photoelectric jitter, but at this time the output of the sewing machine is still valid	
40605-40606	**0604-0605**	Startup delay of	Range: 0-3000ms, default: 500ms.	

		the sewing machine	After the start switch of the sewing machine is effective, the delay time of starting the sewing machine
40607-40608	**0606-0607**	Output time of the sewing machine	Range: 0-30000ms, default value: 4000ms. After the delay time reaches, start the output of the sewing machine and continue to output the output time of the sewing machine
40609-40610	**0608-0609**	Cutting machine start delay time	Range: 0-30000ms, default: 500ms. After the end of the output time of the sewing machine, start the cutting machine start delay time, and continue the cutting machine start delay time.
40611-40612	**0610-0611**	Output time of the cutting machine	Range: 0-30000ms, default: 500ms. After the end of the startup delay of the cutter, start the output of the cutter and continue the output time of the cutter
40613-40614	**0612-0613**	delay before stoping of sewing machine	Range: 0-30000ms, default: 500ms. After the cutting machine is finished, the sewing machine will continue to work, and the sewing machine will stop when the delay before stoping time reaches
40615-40616	**0614-0615**	Code switch	Enable the coding function. Range: 0-1, default: 0 0: Off; 1: On
40617~40800	**0616~0800**	Reserve	
40801-40802	**0800-0801**	Quick Weight Waiting switch	Range: 0-1， default: 0(off); enable quick get weight function, after enabling quick mode, greatly shorten the weight waiting time.
40803-40804	**0802-0803**	Quick Weight Waiting time	Range: 0-9999ms， default: 200ms; after enabling the quick mode, wait for this time after the fine feeding ends to predict the final result weight..
40805-40806	**0804-0805**	Quick Weight Waiting Sample numbers	Range: 1-9 ， default: 4; start with the waiting time in the formula for waiting sampling, and then start with quick weight waiting sampling when the number of samples is reached.
40807-40808	**0806-0807**	Quick Weight Waiting Resampling Interval	Range: 0-9999， default: 100; Run the quick weight waiting function for how many times before re-sampling,0: No re-sampling .

40809-40810	**0808-0809**	Quick Weight Waiting Allowed error	Range: 0-9999，default: 0; when quick weight waiting function is enabled, resample when the predicted structure exceeds the allowable error from the target value,0: no judgment error.
40811~41000	**0810~9999**	Reserve	
Formula with feed control parameter area			
41001-41002	**1000-1001**	Current recipe number	Range: 1-20, default: 1. After local modification, the parameters that follow the recipe number need to be refreshed simultaneously
41003-41004	**1002-1003**	Target Value	Not set, not allowed to start.
41005-41006	**1004-1005**	B Scale the target value	The target value of B scale and A scale is the same when it is 0. When it is not 0, it is the target value of B scale
41007-41008	**1006-1007**	A scale small vibrator fast feed analog value	Range: 0-24000, default: 0
41009-41010	**1008-1009**	A scale small vibrator mid feed analog value	Range: 0-24000, default: 0
41011-41012	**1010-1011**	A scale small vibrator slow feed analog value	Range: 0-24000, default: 0
41013-41014	**1012-1013**	A scale large vibrator fast feed analog value	Range: 0-24000, default: 0
41015-41016	**1014-1015**	A scale large vibrator mid feed analog value	Range: 0-24000, default: 0
41017-41018	**1016-1017**	A scale large vibrator slow feed analog value	Range: 0-24000, default: 0
41019-41020	**1018-1019**	A scale fast feed reserve	Weight = stop fast feeding when (target value - fast feed reserve) is reached; Default value: 0
41021-41022	**1020-1021**	A scale mid feed reserve	Weight = stop mid feeding when (target value - mid feed reserve) is reached; Default value: 0
41023-41024	**1022-1023**	A scale free fall value	Weight = stop slow feeding when (target value - mid feed reserve) is reached;Default value: 0
41025-41026	**1024-1025**	A scale fast feed prohibit judgement time	Range: 0-5000ms, default: 300ms
41027-41028	**1026-1027**	A scale mid feed prohibit judgement time	Range: 0-5000ms, default: 600ms
41029-41030	**1028-1029**	A scale slow feed prohibit judgement time	Range: 0-5000ms, default: 800ms

41031-41032	**1030-1031**	B scale small vibrator fast feed analog	Range: 0-24000, default: 0
41033-41034	**1032-1033**	B scale small vibrator mid feed analog	Range: 0-24000, default: 0
41035-41036	**1034-1035**	B scale small vibrator slow feed analog	Range: 0-24000, default: 0
41037-41038	**1036-1037**	B scale large vibrator fast feed analog	Range: 0-24000, default: 0
41039-41040	**1038-1039**	B scale large vibrator mid feed analog	Range: 0-24000, default: 0
41041-41042	**1040-1041**	B scale large vibrator slow feed analog	Range: 0-24000, default: 0
41043-41044	**1042-1043**	B scale fast feed reserve	Weight = (target value - fast feed reserve) , stop fast feeding, Default value: 0
41045-41046	**1044-1045**	B scale mid feed reseve	Weight = (target value - mid feed reserve) , stop mid feeding, Default value: 0
41047-41048	**1046-1047**	B scale free fall	Weight = (target value - slow feed reserve), stop slow feeding, Default value: 0
41049-41050	**1048-1049**	B scale fast feed prohibit judgement time	Range: 0-5000ms, default: 300ms
41051-41052	**1050-1051**	B scale mid feed prohibit judgement time	Range: 0-5000ms, default: 600ms
41053-41054	**1052-1053**	B scale slow feed prohibit judgement time	Range: 0-5000ms, default: 800ms
41055-41056	**1054-1055**	Reserve	
41057-41058	**1056-1057**	Delay before feeding	The value ranges from 0 to 5000ms. Default value: 0ms. Each feeding need to go through this delay before starting to check the stability of the zero (if it is turned on), feeding and other processes
41059-41060	**01058-1059**	Feeding zero interval	Range: 0-99, default: 0. 0: Does not zero before zeroing, 1: zero before each feeding, 2: zero once every 2 bags (interval:1 bag)
41061-41062	**01060-1061**	wait delay	Range: 0-5000ms, default: 800ms
41063-41064	**01062-1063**	Overs/under detection	Range: 0-1, default: 0. 0: disables the over/under function. 1: enables the over/under function
41065-41066	**01064-1065**	Over value	If the weighing value is ≥ the target value + the over value, it is judged as over. Default value: 0

41067-41068	**01066-1067**	Under value	If the Weighing value≤ target value - under value, then judged as under. Default value: 0
41069-41070	**01068-1069**	Over/Under refeed ON/OFF	Range: 0-1, default: 0; When the switch is turned on and an Over/Under difference occurs, wait for the Over/Under difference alarm to end, wait for the unloading delay, and then directly re-enter the feeding process. .
41071-41072	**01070-1071**	Over pause switch	Range: 0-1, default: 0. 0: disables the over/under pause function. 1: disables the over/under pause function
41073-41074	**01072-1073**	Over/under error alarm pause time	Range: 0-9000ms, default value: 1000ms, specifies the time when the buzzer rings and the alarm signal output time
41075-41076	**01074-1075**	Correction range of free fall	Range: 0-3, default: 1. 0: Weak correction(25%), 1: Standard correction(50%); 2: Strong correction (75%); 3: Full correction (100%).
41077-41078	**01076-1077**	Free Fall correction reference times	Range: 0-99, default: 0. 0 indicates that the drop correction is turned off, and non-0 indicates how many times the instrument is weighed as a reference for the free fall correction to correct the free fall.
41079-41080	**01078-1079**	Free Fall correction range	Range: 0-100%, Default: 0, target value percentage. When the parameter is 0, no matter how much the deviation is corrected, otherwise the deviation value exceeds the target value * the percent of this parameter, it is considered that the mechanism is abnormal, and the free fall is not corrected
41081-41082	**01080-1081**	Maximum Material compensation time	Range: 0-10000ms, default: 3000ms. When feeding, if the material compensation time exceeds the value and still does not complete the material compensation , then stop the material compensation Condition of stoping material compensation: the weight reaches the target value, or the material compensation time exceeds this parameter"
41083-41084	**01082-1083**	Minimum feeding time	Range: 0 to 3000ms. Default value: 0ms. 0 indicates that the feeding function is disabled. Since there is some vibrator starting time of the vibrator feeding, this parameter specifies the minimum material compensation time, that is, the feeding time can not be less than

			this time after the material compensation start
41085-41086	**01084-1085**	Inching feed switch	Range: 0-1, default value: 0, after opening, the minimum feeding time is performed, until the target value is reached after the stop feeding
41087-41088	**01086-1087**	discharging delay	Range: 0-5000ms, default: 300ms. When discharging mode is 2, 3, 4, 6, if it is zero zone judgment, then reach the zero zone delay time and then give the motor reversal signal, if it is time judgment mode, then after the discharging gate open signal is closed, delay this parameter time, start to give the motor reversal signal (close the gate). When discharging mode 0, if it is a zero zone judgment，the gate is effective after reaching the zero zone, delay the time to open the gate is invalid, if it is a time determination mode, delay the time to open the gate after the effective time is invalid."
41089-41090	**1088-1089**	Zone Zero value	Range: 0 to Maximum range, default value: 0, when the discharging determination mode is zero zone mode, when the discharging weight is less than zero zone, it indicates that the discharging is completed, and the discharging gate is closed.
41091-41092	**1090-1091**	Discharge times	Range: 1-9, default: 1. Control how many times to rotate the motor rotation mode to complete the discharge (only valid if the discharge mode is the motor/stepper motor rotation mode)
41093-41094	**1092-1093**	Automatic zero threshold for the first start	Range: 0-100%, percentage of target value. When the parameter is 0, the first start is not zero. When the weight in the hopper is less than the target value * this value, the condition of starting zero is met.
41095-41096	**1094-1095**	The number of multi-hopper combination scale bags	Range: 1-99, default: 1. When the value is greater than 1, it means that the multi-hopper combination scale can be discharge at the same time.
41097-41098	**1096-1097**	Fast feed custom ports	Range :0 to 2, default :0. 0: overtime custom feed 1 is valid when fast feed; 1: custom feed 2 is valid when mid feed; 2: custom feed 1 and custom feed 2 both valid when mid feed

41099-41100	**1098-1099**	Mid feed custom ports	Range :0 to 2, default :1. 0: custom feed 1 is valid when mid feeding; 1: custom feed 2 is valid when mid feeding; 2: custom feed 1 and custom feed 2 both valid when mid feed
41101-41102	**1100-1101**	Delay before loosening the bag	Range: 0-10000ms, default: 500ms.
41103-41104	**1102-1103**	A scale small rotating motor fast frequency	Range: 0-60000, default: 0 Used for rotating motor feeding, switching output defines "A scale: small rotating motor feeding pulse ", when feeding, the switching output of the corresponding frequency pulse.
41105-41106	**1104-1105**	A scale small rotating motor mid frequency	
41107-41108	**1106-1107**	A scale small rotating motor slow frequency	
41109-41110	**1108-1109**	A scale large rotating motor fast frequency	Range: 0-60000, default: 0 Used for rotating motor feeding, switching output defines "A scale: large rotating motor feeding pulse ", when feeding, the switching output of the corresponding frequency pulse.
41111-41112	**1110-1111**	A scale large rotating motor mid frequency	
41113-41114	**1112-1113**	A scale large belt slow feed frequency	
41115-41116	**1114-1115**	B scale small rotating motor fast frequency	Range: 0-60000, default: 0 Used for rotating motor feeding, switching output defines "B scale: small rotating motor feeding pulse ", when feeding, the switching output of the corresponding frequency pulse. .
41117-41118	**1116-1117**	B scale small rotating motor mid frequency	
41119-41120	**1118-1119**	B scale small rotating motor slow frequency	
41121-41122	**1120-1121**	B scale large rotating motor fast frequency	Range: 0-60000, default: 0 Used for rotating motor feeding, switching output defines "B scale: large rotating motor feeding pulse ", when feeding, the switching output of the corresponding frequency pulse.
41123-41124	**1122-1123**	B scale large rotating motor mid frequency	
41125-41126	**1124-1125**	B scale large belt slow feed frequency	
41127~41128	**1126~1127**	the motor group ID used in the current recipe	Range: 0 to 4, default: 0.
41129-41130	**1128-1129**	A scale fast adding time feeding	Range:0-5000ms, default:0; When it is 0, the time feeding is not enabled. When it is not 0, the current feeding ends after the fixed feeding time.
41131-41132	**1130-1131**	A scale Mid adding time feeding	
41133-41134	**1132-1133**	B scale fast adding time feeding	
41135-41136	**1134-1135**	B scale Mid adding time feeding	

41137~41300	**1136~1299**	Reserve	
41301-41302	**1300-1301**	Source recipe number	/
41303-41304	**1302-1303**	Target recipe number	/
41305-41306	**1304-1305**	Perform copy operation	/
41307-41308	**1306-1307**	Copy current recipe channel parameters, from A scale to B scale	/
41309-41310	**1308-1309**	Copy current formula channel parameters, from B scale to A scale	/
41311-41312	**1310-1311**	Batches	/
41313-41314	**1312-1313**	Accumulative batches	/
41315-41316	**1314-1315**	Accumulative batches weight	/
41317 ~ 41400	**1316 ~ 1399**	Reserve	
Target values and cumulative values for each recipe (read only)			
41401-41402	**1400-1401**	Recipe 1 Target value	/
41403-41404	**1402-1403**	Recipe 2 Target value	/
41405-41406	**1404-1405**	Formula 3 Target value	/
41407-41408	**1406-1407**	Recipe 4 Target value	/
41409-41410	**1408-1409**	Recipe 5 Target value	/
41411-41412	**1410-1411**	Recipe 6 Target value	/
41413-41414	**1412-1413**	Recipe 7 Target value	/
41415-41416	**1414-1415**	Recipe 8 Target value	/
41417-41418	**1416-1417**	Recipe 9 Target value	/
41419-41420	**1418-1419**	Recipe 10 Target value	/
41421-41422	**1420-1421**	Recipe 11 Target value	/
41423-41424	**1422-1423**	Recipe 12 Target value	/
41425-41426	**1424-1425**	Recipe 13 Target value	/
41427-41428	**1426-1427**	Recipe 14 Target value	/
41429-41430	**1428-1429**	Recipe 15 Target value	/
41431-41432	**1430-1431**	Formula 16 target value	/

41433-41434	**1432-1433**	Recipe 17 Target value	/
41435-41436	**1434-1435**	Recipe 18 Target value	/
41437-41438	**1436-1437**	Recipe 19 Target value	/
41439-41440	**1438-1439**	Formula 20 Target value	/
41441-41442	**1440-1441**	Formula 1 A scale cumulative weight	Currently read only cumulative low byte, maximum value to 999999999, and then increase overflow starting from 0.
41443-41444	**1442-1443**	Formula 1 A scale cumulative times	
41445-41446	**1444-1445**	Formula 1 B scale cumulative weight	
41447-41448	**1446-1447**	Formula 1 B scale cumulative weight	
41449-41450	**1448-1449**	Formula 2 A scale cumulative weight	
41451-41452	**1450-1451**	Formula 2 A scale cumulative times	
41453-41454	**1452-1453**	Formula 2 B scale cumulative weight	
41455-41456	**1454-1455**	Formula 2 B scale cumulative times	
41457-41458	**1456-1457**	Formula 3 A scale cumulative weight	
41459-41460	**1458-1459**	Formula 3 A scale cumulative times	
41461-41462	**1460-1461**	Formula 3 B scale cumulative weight	
41463-41464	**1462-1463**	Formula 3 B scale cumulative times	
41465-41466	**1464-1465**	Formula 4 A scales cumulative weight	
41467-41468	**1466-1467**	Formula 4 A scale cumulative times	
41469-41470	**1468-1469**	Formula 4 B scale cumulative weight	
41471-41472	**1470-1471**	Formula 4 B scale cumulative times	
41473-41474	**1472-1473**	Formula 5 A scale cumulative weight	
41475-41476	**1474-1475**	Formula 5 A scale cumulative times	
41477-41478	**1476-1477**	Formula 5 B scale cumulative weight	
41479-41480	**1478-1479**	Formula 5 B scale cumulative weight	
41481-41482	**1480-1481**	Formula 6 A scale cumulative weight	
41483-41484	**1482-1483**	Formula 6 A scale cumulative times	
41485-41486	**1484-1485**	Formula 6 B scale cumulative weight	
41487-41488	**1486-1487**	Formula 6 B scale	

		cumulative times	
41489-41490	**1488-1489**	Formula 7 A scale cumulative weight	
41491-41492	**1490-1491**	Formula 7 A scale cumulative times	
41493-41494	**1492-1493**	Formula 7 B scale cumulative weight	
41495-41496	**1494-1495**	Formula 7 B scale cumulative times	
41497-41498	**1496-1497**	Formula 8 A scale cumulative weight	
41499-41500	**1498-1499**	Formula 8 A scale cumulative times	
41501-41502	**1500-1501**	Formula 8 B scale cumulative weight	
41503-41504	**1502-1503**	Formula 8 B scale cumulative times	
41505-41506	**1504-1505**	Formula 9 A scale cumulative weight	
41507-41508	**1506-1507**	Formula 9 A scale cumulative times	
41509-41510	**1508-1509**	Formula 9 B scale cumulative weight	
41511-41512	**1510-1511**	Formula 9 B scale cumulative times	
41513-41514	**1512-1513**	Formula 10 A scale cumulative weight	
41515-41516	**1514-1515**	Formula 10 A scale cumulative times	
41517-41518	**1516-1517**	Formula 10 B scale cumulative weight	
41519-41520	**1518-1519**	Formula 10 B scale cumulative times	
41521-41522	**1520-1521**	Formula 11 A scale cumulative weight	
41523-41524	**1522-1523**	Formula 11 A scale cumulative times	
41525-41526	**1524-1525**	Formula 11 B scale cumulative weight	
41527-41528	**1526-1527**	Formula 11 B scale cumulative weight	
41529-41530	**1528-1529**	Formula 12 A scale cumulative weight	
41531-41532	**1530-1531**	Formula 12 A scale cumulative times	
41533-41534	**1532-1533**	Formula 12 B scale cumulative	

		weight	
41535-41536	**1534-1535**	Formula 12 B scale cumulative times	
41537-41538	**1536-1537**	Formula 13 A scale cumulative weight	
41539-41540	**1538-1539**	Formula 13 A scale cumulative times	
41541-41542	**1540-1541**	Formula 13 B scale cumulative weight	
41543-41544	**1542-1543**	Formula 13 B scale cumulative times	
41545-41546	**1544-1545**	Formula 14 A scale cumulative weight	
41547-41548	**1546-1547**	Formula 14 A scale cumulative times	
41549-41550	**1548-1549**	Formula 14 B scale cumulative weight	
41551-41552	**1550-1551**	Formula 14 B scale cumulative times	
41553-41554	**1552-1553**	Formula 15 A scale cumulative weight	
41555-41556	**1554-1555**	Formula 15 A scale cumulative times	
41557-41558	**1556-1557**	Formula 15 B scale cumulative weight	
41559-41560	**1558-1559**	Formula 15 B scale cumulative times	
41561-41562	**1560-1561**	Formula 16 A scale cumulative weight	
41563-41564	**1562-1563**	Formula 16A scale cumulative times	
41565-41566	**1564-1565**	Formula 16 B scales cumulative weight	
41567-41568	**1566-1567**	Formula 16 B scale cumulative times	
41569-41570	**1568-1569**	Formula 17 A scales cumulative weight	
41571-41572	**1570-1571**	Formula 17A scales cumulative	

		times	
41573-41574	**1572-1573**	Formula 17 B scales cumulative weight	
41575-41576	**1574-1575**	Formula 17 B scale cumulative times	
41577-41578	**1576-1577**	Formula 18 A scales cumulative weight	
41579-41580	**1578-1579**	Formula 18A weighs cumula-tive times	
41581-41582	**1580-1581**	Formula 18 B scales cumulative weight	
41583-41584	**1582-1583**	Formula 18 B scale cumulative times	
41585-41586	**1584-1585**	Formula 19 A scales cumulative weight	
41587-41588	**1586-1587**	Formula 19A scales cumulative times	
41589-41590	**1588-1589**	Formula 19 B scale cumulative weight	
41591-41592	**1590-1591**	Formula 19 B scale cumulative times	
41593-41594	**1592-1593**	Formula 20 A scales cumulative weight	
41595-41596	**1594-1595**	Formula 20A scales cumulative times	
41597-41598	**1596-1597**	Formula 20 B scales cumulative weight	
41599-41600	**1598-1599**	Formula 20 B scale cumulative times	
41601-41602	**1600-1601**	Total cumulative weight high byte	/
41603-41604	**1602-1603**	Total cumulative weight low byte	/
41605-41606	**1604-1605**	Total cumulative batches high byte	/
41607-41608	**1606-1607**	Total cumulative batches low byte	/
41609-41610	**1608-1609**	A scale total cu-mulative weight high byte	/
41611-41612	**1610-1611**	A scale total cu-mulative weight low byte	/

41613-41614	**1612-1613**	A scale total cumulative batches high byte	/
41615-41616	**1614-1615**	A scale total cumulative batches low byte	/
41617-41618	**1616-1617**	B scale total cumulated weight high byte	/
41619-41620	**1618-1619**	B scale total cumulated weight low byte	/
41621-41622	**1620-1621**	B scale total cumulated batches high byte	/
41623-41624	**1622-1623**	B scale total cumulated batches low byte	/
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 5 B 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 11 B scale target value	/
41647-41648	**1646-1647**	Formula 12 B scale target value	/
41649-41650	**1648-1649**	Formula 13 B scale target value	/
41651-41652	**1650-1651**	Formula 14 B scale target value	/
41653-41654	**1652-1653**	Formula 15 B scale target value	/
41655-41656	**1654-1655**	Formula 16 B 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 20 B scale target value	/
41665 ~ 42000	**1664 ~ 1999**	Reserve	
42001-42002	**2000-2001**	A scale fast feed time	When starting again after stopping, wait for the next fast feed to complete the update, which is 0 when powered on
42003-42004	**2002-2003**	A scale mid feed time	When starting again after stopping, wait for the next fast/mid feed to complete the update, and it is 0 when powered on
42005-42006	**2004-2005**	A scale slow feed time	When starting again after stopping, wait for the next fast/mid/slow feed to complete the update, which is 0 when powered on
42007-42008	**2006-2007**	A scale wait time	When the system restarts after stopping, wait for the next waiting value to be updated. The value is 0 when the system is powered on
42009-42010	**2008-2009**	A scale packaging total time	When starting up again after stopping, wait for the next completion of a packaging completion to update, which is 0 when powered on
42011-42012	**2010-2011**	A scale weight of previous bag	When starting up again after stopping, wait for the update after the next weighing ok, 0 when powered on
42013-42014	**2012-2013**	A scale formula number of previous bag	The formula used when the previous bag weight is generated
42015-42016	**2014-2015**	A scale the target value of the previous bag	The target value used when the previous bag weight is generated
42017-42018	**2016-2017**	A scale the deviation value of the previous bag	The deviation value between the actual weight and the target value
42019-42020	**2018-2019**	A scale packaging results sample identification	It is 3 when powered on, change to 2 when stopped after running, and jumps between 0 and 1 when the weight of the previous package generated, which is used for external HMI sample identification
42021-42022	**2020-2021**	A scale current cumulative over batches	After stopping, starting again or powering on again, the parameter will automatically change to 0 and start recording again
42023-42024	**2022-2023**	A scale current cumulative under batches	After the system stops, starts again, or powers on again, the parameter automatically changes to 0, and the system starts recording again
42025-42026	**2024-2025**	A scale current	After stopping, starting again or

		cumulative weight	powering on again, the parameter will automatically change to 0 and start recording again
42027-42028	**2026-2027**	A scale current cumulative batches	After stopping, starting again or powering on again, the parameter automatically changes to 0 and starts recording again
42029-42030	**2028-2029**	A scale current packing speed	How many packs per hour on average
42031~42040	**2030~2039**	Reserve	
42041-42042	**2040-2041**	B scale fast feed time	When starting again after stopping, wait for the next fast feed to complete the update, and it is 0 when powered on
42043-42044	**2042-2043**	B scale mid feed time	When starting again after stopping, wait for the next fast/mid feed to complete the update, and it is 0 when powered on
42045-42046	**2044-2045**	B scale slow feed time	When starting again after stopping, wait for the next fast/mid/slow feed to complete the update, and it is 0 when powered on
42047-42048	**2046-2047**	B scale waiting time	When starting again after stopping, wait for the next waiting to complete the update, which is 0 when powered on
42049-42050	**2048-2049**	B scale packing total time	When starting again after stopping, wait for the next packaging completion to update, which is 0 when powered on
42051-42052	**2050-2051**	B scale previous bag weight	When starting up again after stopping, wait for the update after the next weighing, 0 when powered on
42053-42054	**2052-2053**	B scale formula number of previous bag	The formula used when the previous bag weight is generated
42055-42056	**2054-2055**	B scale the target value of the previous bag	The target value used when the previous bag weight is generated
42057-42058	**2056-2057**	B scale the deviation value of the previous bag	The deviation value between the actual weight and the target value
42059-42060	**2058-2059**	B scale packaging results sample identification	It is 3 when powered on, change to 2 when stopped after running, and jumps between 0 and 1 when the weight of the previous package generated, which is used for external HMI sample identification
42061-42062	**2060-2061**	B scale current cumulative over batches	After stopping, starting again or powering on again, the parameter will automatically change to 0 and start recording again

42063-42064	**2062-2063**	B scale current cumulative under batches	After the system stops, starts again, or powers on again, the parameter automatically changes to 0, and the system starts recording again
42065-42066	**2064-2065**	B scale current cumulative weight	After stopping, starting again or powering on again, the parameter will automatically change to 0 and start recording again
42067-42068	**2066-2067**	B scale current cumulative batches	After stopping, starting again or powering on again, the parameter automatically changes to 0 and starts recording again
42069-42070	**2068-2069**	B scale current packing speed	How many packs per hour on average
42071~42080	**2070~2079**	Reserve	
42081-42082	**2080-2081**	packaging results acquisition identification (total)	It is 3 when powered on, change to 2 when stopped after running, and jumps between 0 and 1 when the weight of the previous package generated, which is used for external HMI sample identification
42083-42084	**2082-2083**	Previous bag channel number	when the previous bag weight is generated:1-A scale, 2-B scale
42085-42086	**2084-2085**	Previous bag recipe number	The recipe used when the weight of the previous bag is generated
42087-42088	**2086-2087**	Previous bag target value	The target value used when the weight of previous bag is generated
42089-42090	**2088-2089**	Current packaging speed	Double scale 1 hour together average how many bags
42091~43000	**2090~2999**	Reserve	
43001-43002	**3000-3001**	Adaptive switch	Range: 0~1, default: 0 0: Off; 1: Turn on the adaptive master switch
43003-43004	**3002-3003**	Coarse correction switch	Range: 0~1, default: 1 0: Off; 1: On, turn on and correct coarse filling
43005-43006	**3004-3005**	Middle correction switch	Range: 0~1, default: 1 0: Close; 1: On, turn on and then correct middle filling
43007-43008	**3006-3007**	Fine Correction switch	Range: 0~1, default: 1 0: Off; 1: Turn on, turn on and then correct slow add
43009-43010	**3008-3009**	Adaptive Method	Range: 0~1, default: 0 0: Automatic: Time calculated based on the time fluctuation of feeding time. 1: Manual: Adjust according to the set optimal time.
43011-43012	**3010-3011**	Adaptive speed	Range: 0~4, default: 2

			When the adaptive mode is automatic, the smaller the value, the greater the self-lookup voltage, the shorter the standard feeding time, and the faster the speed. When the feeding is unstable, the feeding time fluctuates greatly, resulting in frequency correction, at which point the adaptive speed level should be increased.
43013-43014	**3012-3013**	Middle Feed shortest additional time (default :100)	Range: 100-9999ms when the adaptive mode is manual, these two time parameters are used to modify the reserve to obtain the middle feed standard time, forbidden Judge time + shortest extra time <=Middle feed standard time <= Forbidden judge time + shortest extra time + error time
43015-43016	**3014-3015**	Fine feed error time (default :300)	
43017-43018	**3016-3017**	Fine feed shortest extra time(default :300)	Range: 100-9999ms when the adaptive mode is manual, these two time parameters are used to modify the reserve parameters to obtain the fine feed standard time, forbidden judge time + shortest extra time <= Fine feed standard time <= Forbidden judge time + shortest extra time + error time.
43019-43020	**3018-3019**	Fine feed error time (default :500)	
43021-43022	**3020-3021**	Fine Feed Track Free Fall reference value	Range: 0-9999ms, default: 0 When the feeding mechanism requires the instrument to output analog control, the instrument will perform analog search during its self- search , trying to keep the free fall within the free fall reference range. Look for the default free fall when set to 0.
43023-43024	**3022-3023**	Free Fall Allow fluctuation weight	Range: 0-9999ms, default: 0 (Free Fall reference - fluctuation weight) to (Free Fall reference + fluctuation weight) is the Free Fall reference range. When set to 0, the fluctuation weight is 50% of the free fall reference value.
43025-43026	**3024-3025**	Fine Feed Track the feeding time	Range: 1000-9999ms, default: 3000 For finding the feeding time of fine feeding.
43027-43028	**3026-3027**	Analog Increase	Range: 10-9999mv , default: 300 increase speed during analog self-search. The higher the value, the greater the self-search voltage,

			which needs to be modified according to the characteristics of the feeding mechanism
43029-43030	**3028-3029**	Coarse Feed buffer ratio	Range: 0%-99%, default: 5% 0%-99% target value, the increase reserve when speed slowing down
43031-43032	**3030-3031**	Middle Feed buffer ratio	Range: 0%-99%, default: 2% 0%-99% target value, the increase reserve when speed slowing down
43033-43034	**3032-3033**	Start Deceleration Switch	Range: 0~1, default: 0 0: OFF; 1: ON, increase reserve when starting, reduce speed, prevent overshoot
43035-43036	**3034-3035**	Material Shortage Decelerate switch	Range: 0~1, default: 0 0:OFF; 1:ON, increase reserve when material shortage is detected, reduce speed, prevent overshoot
43037-43038	**3036-3037**	Empty the gate open test data	Clear the previously tested gate opening data, write 1 to clear the A scale, write 2 to clear the B scale, and the next self-search will retest the coarse feeding, the middle feeding gate opening size, generally without changing the gate opening size, without changing the material, there is no need to clear the gate opening data every time a self-search is performed.
43039 ~ 44000	**3038 ~ 3999**	Reserve	
44001 ~ 44002	**4000 ~ 4001**	Motor group ID used in the current recipe	Range: 0 to 4, default: 0.
44003 ~ 44004	**4002 ~ 4003**	Reserve	
44005 ~ 44006	**4004 ~ 4005**	Feed gate closes overtime	Range: 0~99.9s, default: 4.0s.
44007 ~ 44008	**4006 ~ 4007**	Feed gate in place type	Range: 0 to 1. Default value: 0. 0: in place when the signal is valid; 1: in place when signal is invalid.
44009 ~ 44010	**4008 ~ 4009**	Generator number	Range: 0 to 4, default value: 0.
44011 ~ 44012	**4010 ~ 4011**	A scale feeding frequency	Range: 1~65000Hz, default: 12000Hz.
44013 ~ 44014	**4012 ~ 4013**	A scale feeding slow feed pulse number	Range: 1~999999, default: 1800.
44015 ~ 44016	**4014 ~ 4015**	A scale feeding mid feed pulse number	Range: 1~999999, default: 4300.
44017 ~ 44018	**4016 ~ 4017**	A scale feeding fast feed pulse number	Range: 1~999999, default: 7750.
44019 ~ 44020	**4018 ~ 4019**	A scale feed	Range: 0~1, default: 0;

		opening gate direction signal status	0: it is the direction of opening gate when the signal is invalid. 1: it is the direction of opening gate when the signal is valid;
44021 ~ 44022	**4020 ~ 4021**	A scale feed motor start frequency	Range: 1 to 65000Hz. Default value: 2000Hz. (This value is preferably not greater than the feeding frequency)
44023 ~ 44024	**4022 ~ 4023**	A scale feed motor acceleration time	Acceleration time of feeding motor. Range: 0~9999ms, default: 200ms.
44025 ~ 44026	**4024 ~ 4025**	A scale feed motor deceleration time	Deceleration time of feeding motor. Range: 0~9999ms, default: 50ms.
44027 ~ 44028	**4026 ~ 4027**	A scale power-on back to zero frequency	Range: 1 to 65000Hz, default: 2000 Hz.
44029 ~ 44030	**4028 ~ 4029**	B scale feed frequency	Range: 1~65000Hz, default: 12000 Hz.
44031 ~ 44032	**4030 ~ 4031**	B scale feeding slow feed pulse number	Range: 1~999999, default: 1800.
44033 ~ 44034	**4032 ~ 4033**	B scale feeding mid feed pulse number	Range: 1~999999, default: 4300.
44035 ~ 44036	**4034 ~ 4035**	B scale feeding fast feed pulse number	Range: 1~999999, default: 7750.
44037 ~ 44038	**4036 ~ 4037**	B scale feeding gate direction signal status	Range: 0~1, default: 0; 0: the direction of opening the door when the signal is invalid. 1: open the door when the signal is valid;
44039 ~ 44040	**4038 ~ 4039**	B scale feed motor start frequency	Range: 1~65000Hz, default value: 2000Hz; (This value is preferably not greater than the feeding frequency)
44041 ~ 44042	**4040 ~ 4041**	B scale feed motor acceleration time	Feed motor acceleration time. Range: 0~9999ms, default: 200ms.
44043 ~ 44044	**4042 ~ 4043**	B scale feed motor deceleration time	Feed motor deceleration time. Range: 0~9999ms, default: 50ms.
44045 ~ 44046	**4044 ~ 4045**	B scale power-on back to zero frequency	Range: 1 to 65000Hz, default: 2000Hz.
44047~44048	**4046~4047**	Reserve	
44049~44050	**4048~4049**	Bag unlocked timeout	Range:0.0~99.9, default: 3.0（Unit:s）
44051~44052	**4050~4051**	Clamper position signal type	0:When the signal is valid, it is in place (when the input is valid, it is considered that the door is closed

			in place). 1:When the signal is invalid, the door is in place (when the input is invalid, the door is considered to be in place).
44053~44054	**4052~4053**	Motor frequency of scale A bag locked	Range:1~65000 , default:30000 (Unit:Hz)
44055~44056	**4054~4055**	Motor frequency scale A bag unlocked	Range:1~65000 , default: 20000 （Unit:Hz）
44057~44058	**4056~4057**	Pulses quantity required that state of bag unlocked state turns to bag locked state of scale A motor	Range:1~999999 , default: 12000
44059~44060	**4058~4059**	The bag clamping direction logic of Scale A	The state of the motor direction signal during the bag clamping action of the bag-loosening mechanism 0: The direction signal output during bag clamping is invalid: When the bag clamping and loosening mechanism performs the bag clamping action, the rotation direction signal output of the bag clamping and loosening stepping motor is invalid, while the direction signal output during the bag loosening action is valid. 1: When the bag is clamped, the direction signal output is valid: When the bag clamping and loosening mechanism performs the bag clamping action, the rotation direction signal output of the bag clamping and loosening stepping motor is valid; when the bag loosening action is performed, the direction signal output is invalid.
44061~44062	**4060~4061**	Scale A bag locked motor start frequency	Range:1~65000 , default: 2000 （Unit:Hz）（ It should not exceed the frequency of bag clamping ）
44063~44064	**4062~4063**	Scale A bag locked motor acceleration time	Range:0~9999 , default: 200 （Unit:ms）
44065~44066	**4064~4065**	Scale A bag locked motor deceleration time	Range:0~9999 , default: 50 （Unit:ms）

44067~44068	**4066~4067**	The frequency of power-on return to zero for the bag of Scale A	When the power is cut off and re-started, the bag-clamping motor returns to the origin at this frequency. Range:1~65000 , default: 2000（Unit:Hz）
44069~44070	**4068~4069**	Motor frequency of scale B bag locked	Range:1~65000 , default: 30000（Unit:Hz）
44071~44072	**4070~4071**	Motor frequency scale B bag unlocked	Range:1~65000 , default: 20000（Unit:Hz）
44073~44074	**4072~4073**	Pulses quantity required that state of bag unlocked state turns to bag locked state of scale B motor	Range:1~999999 , default: 12000
44075~44076	**4074~4075**	The bag clamping direction logic of Scale B	The state of the motor direction signal during the bag clamping action of the bag-loosening mechanism 0: The direction signal output during bag clamping is invalid: When the bag clamping and loosening mechanism performs the bag clamping action, the rotation direction signal output of the bag clamping and loosening stepping motor is invalid, while the direction signal output during the bag loosening action is valid. 1: When the bag is clamped, the direction signal output is valid: When the bag clamping and loosening mechanism performs the bag clamping action, the rotation direction signal output of the bag clamping and loosening stepping motor is valid; when the bag loosening action is performed, the direction signal output is invalid.
44077~44078	**4076~4077**	Scale B bag locked motor start frequency	Range:1~65000 , default: 2000（Unit:Hz）（ It should not exceed the frequency of bag clamping）
44079~44080	**4078~4079**	Scale B bag locked motor acceleration time	Range:0~9999 , default: 200（Unit:ms）
44081~44082	**4080~4081**	Scale B bag locked motor deceleration time	Range:0~9999 , default: 50（Unit:ms）

44083~44084	**4082~4083**	The frequency of power-on return to zero for the bag of Scale B	When the power is cut off and re-started, the bag-clamping motor returns to the origin at this frequency. Range:1~65000 , default: 2000 （Unit:Hz）
44085~48000	**4084~7999**	Reserve	
Communication parameter setting area (readable except annotated ones, uothers are both readable and writable)			
48001	**8000**	Serial port 1 slave number	Range: 0-99, default: 1
48002	**8001**	Serial port 1 baud rate	Range: 0-4, default: 2. 0:9,600; 1:19,200; 2:38,400; 3:57,600; 4:115,200
48003	**8002**	Serial port 1 communication protocol	Range: 0-3, default: 0. 0: Modbus/RTU, 1: Modbus/ASCII, 2: continuous transmission, 3: result transmission
48004	**8003**	Serial port 1 data format	Range: 0-4, default: 1 0:8N1, 1:8E1, 2:8O1, 3:7E1, 4:7O1
48005	**8004**	Serial port 1 double word mode	Range: 0-1, default: 0. 0: AB-CD, 1: CD-AB
48006	**8005**	Serial port 1 Send interval	Range: 0-1000ms, default: 5ms This parameter is valid only under the continuous send protocol
48007 ~ 48020	**8006 ~ 8019**	Serial port 1 reserve address	
48021 ~ 48026	**8020 ~ 8025**	Serial port 2 relative address	For details, refer to serial port **1**
48027 ~ 48040	**8026 ~ 8039**	Serial port 2 Reserve address	
48041 ~ 48059	**8040 ~ 8058**	Reserve	
48060	**8059**	Communication status	Used for synchronous communication, it is 0 when communication was successful, it is 1 after successful communication 2S. (Read only)
48061	**8060**	Serial Port number	Identifies the serial port number. serial port 1 is read out as 1; and serial port 2 is read out as 2. (Read only)
48062 ~ 48100	**8061 ~ 8099**	Reserve	
48101	**8100**	Local IP segment 1	Range: 0-255, default: 192
48102	**8101**	Local IP segment 2	Range: 0-255, default: 168
48103	**8102**	Local IP segment 3	Range: 0-255, default: 80
48104	**8103**	Local IP segment 4	Range: 0-255, default: 125
48105 ~ 48112	**8104 ~ 8111**	Reserve	

48113	**8112**	Connect 1 port number	Range: 0-60000, default: 502 0 indicates that the connection is closed
48114	**8113**	Connect 1 Communication protocol	Range: 0-2, Default: 0, 0:Modbus/TCP,1: continuous transmission,2: result transmission
48115	**8114**	Connect 1 High and low bytes	The value ranges from 0 to 1. Default value: 0 0:ABCD, 1:CDAB
48116	**8115**	Connect 1 Send interval	Range: 0-5000ms, default: 10
48117	**8116**	Connect 2 port numbers	Range: 0-60000, default: 502 0 indicates that the connection is closed
48118	**8117**	Connection 2 Communication protocol	Range: 0-2, default: 0 0:Modbus/TCP,1: continuous transmission,2: result transmission
48119	**8118**	Connection 2 High and low bytes	Range: 0-1, default: 0 0:ABCD, 1:CDAB
48120	**8119**	Connect 2 send interval	Range: 0-5000ms, default: 10
48121	**8120**	Connect 3 port numbers	The value ranges from 0 to 60000. Default value: 502 0 indicates that the connection is closed
48122	**8121**	Connection 3 Communication protocol	Range: 0-2, default: 0 0:Modbus/TCP,1: continuous transmission,2: result transmission
48123	**8122**	Connect 3 High and low bytes	Range: 0-1, default: 0 0:ABCD, 1:CDAB
48124	**8123**	Connect 3 send interval	Range: 0-5000ms, default: 10
48125	**8124**	Connect 4 port numbers	Range: 0-60000, default: 502 0 indicates that the connection is closed
48126	**8125**	Connection 4 communication protocol	Range: 0-2, default: 0 0:Modbus/TCP,1: continuous transmission,2: result transmission
48127	**8126**	Connection 4 High or low bytes	Range: 0-1, default: 0 0:ABCD, 1:CDAB
48128	**8127**	Connect 4 Send interval	Range: 0-5000ms, default: 10
48129 ~ 48300	**8128 ~ 8299**	Reserve	
I/O test parameters			
48301	**8300**	**I/O** test mode	Range: 0-1. 0: Exit I/O test mode; 1: Enable the serial port I/O test mode When entering the IO test, the output remains in the original state, and the output static returns to the

			entry when exiting
48302	**8301**	Input **1** Test	Read **0** means no input and read **1** means with input. Writing any value is invalid and only works in IO test mode
48303	**8302**	Input **2** Test	
48304	**8303**	Input **3** Test	
48305	**8304**	Input **4** test	
48306	**8305**	Input **5** Test	
48307	**8306**	Input **6** Test	
48308	**8307**	Input **7** Test	
48309	**8308**	Input **8** Test	
48310	**8309**	Input **9** Test	
48311	**8310**	Input **10** Test	
48312 ~ 48350	**8311 ~ 8349**	Reserve	
48351	**8350**	Output **1** Test	Write: **0**: turn off output, **1**: turn on output (only valid in **IO** test mode), read as the current **IO** port status, **0**: off, **1**: on
48352	**8351**	Output **2** Test	
48353	**8352**	Output **3** Test	
48354	**8353**	Output **4** Test	
48355	**8354**	Output **5** Test	
48356	**8355**	Output **6** test	
48357	**8356**	Output **7** Test	
48358	**8357**	Output **8** Test	
48359	**8358**	Output **9** Test	
48360	**8359**	Output **10** Test	
48361	**8360**	Output **11** Tests	
48362	**8361**	Output **12** Test	
48363	**8362**	Output **13** Test	
48364	**8363**	Output **14** Test	
48365	**8364**	Output **15** Test	
48366	**8365**	Output **16** Test	
48367	**8366**	Output **17** Test	
48368	**8367**	Output **18** Test	
48369	**8368**	Output **19** Test	
48370	**8369**	Output **20** Test	
48371 ~ 48400	**8370 ~ 8399**	Reserve	
Function operation class address area (corresponding to coil function), readable-writable			
48601	**8600**	Start	Write: 1- Start both channels Read: 0- Stop; 1- Run; 2- Slow stop
48602	**8601**	Stop	Write: 1- Stop after two channels finish discharging Read: 0- Stop; 1- Run; 2- Slow stop
48603	**8602**	E−stop	Write: 1- Both channels stop the running status immediately Read: 0- Stop; 1- Run; 2- Slow stop
48604	**8603**	Empty material	Write: 1- two channels start empty material; 0- exit empty material status, Read: 1- emptying material
48605	**8604**	Clear Alarm	Write: 1- Clear alarm;

			Read: 1- alarm output; 0- no alarm output
48606	**8605**	Simulation run	Write: 1- Two channels to start the simulation run Read: 1- Simulation run
48607	**8606**	Single run	Write: 1- Two channels to start a single run Read: 1- Run status
48608	**8607**	Save optimal parameters	Write: 1- Save the current as optimal parameters; Read: 0
48609	**8608**	Restore optimal parameters	Write: 1- Restore to optimal parameters; Read: 0
48610	**8609**	Clear Accumulations	Write: 1 to 20- Clear the accumulations for the corresponding recipe 0- Clear the current recipe cumulative 21- Clear all recipe accumulations Read: 0
48611	**8610**	A scale zero	Write: 1- Perform zero; Read: 1- at zero point
48612	**8611**	B scale zero	Write: 1- Perform zero; Read: 1- at zero point; 0- other
48613	**8612**	A scale start	Write: 1-A scale start Read: 0- Stop; 1- Run; 2- Slow stop
48614	**8613**	B scale start	Write: 1-B scale start; Read: 0- Stop; 1- Run; 2- Slow stop
48615	**8614**	A scale stop	Write: 1-A scale to stop after discharging; Read: 0- Stop; 1- Run; 2- Slow stop
48616	**8615**	B scale stop	Write: 1-B scale to stop after discharging; Read: 0- Stop; 1- Run; 2- Slow stop
48617	**8616**	A scale to a slow stop	Write: 1-A scale stop immediately; Read: 0- Stop; 1- Run; 2- Slow stop
48618	**8617**	B - Slow stop	Write: 1-B scale stop immediately; Read: 0- Stop; 1- Run; 2- Slow stop
48619	**8618**	A scale empty material	Write: 1-A scale empty material; Read: 1- empty material; 0- Other
48620	**8619**	B scale empty material	Write: 1-B scale empty material; Read: 1- empty material; 0- Other
48621	**8620**	A scale manual fast feed	Write: 1-A scale fast feed; Read: 1- Fast feed; 0- Other
48622	**8621**	B scale manual fast feed	Write: 1-B scale fast feed; Read: 1- Fast feed; 0- Other
48623	**8622**	A scale manual mid feed	Write: 1-A scale mid feed; Read: 1- feed; 0- Other
48624	**8623**	B scale manual mid feed	Write: 1-B scale mid feed; Read: 1- feed; 0- Other

48625	**8624**	A scale manual slow feed	Write: 1-A scale slow feed; Read: 1- Slow feed; 0- Other
48626	**8625**	B scale manual slow feed	Write: 1-B scale slow add; Read: 1- Slow add; 0- Other
48627	**8626**	A scale manual discharge	Write: 1-A scale manual discharging; Read: 1- discharging in; 0- Other
48628	**8627**	B scale manual discharge	Write: 1-B scale manual discharging; Read: 1- discharging; 0- Other
48629	**8628**	A scale simulation run	Write: 1-A scale starts simulation run; Read: 1- simulation running; 0- Other
48630	**8629**	B Scale simulation run	Write: 1-B scale start 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 Scale clear alarm	Write: 1-B scale clear alarm; Read: 1- Alarm; 0- Other
48633	**8632**	A Scale small vibrator test	Range: 0-24000, after writing the data, the vibrator begins to vibrate according to the corresponding voltage value, and the instrument enters the voltage test mode. Write 0 or give stop, emergency stop command after exit
48634	**8633**	B Scale small vibrator test	Operate as above A scale
48635	**8634**	A scale large vibrator test	Range: 0-24000, after writing the data, the vibrator begins to vibrate according to the corresponding analog value, and the instrument enters the voltage test mode. Write 0 or give stop, emergency stop command after exit
48636	**8635**	B Scale large vibrator test	Operate the same as the scale A above
48637	**8636**	A scale save the optimal parameters	Write: 1-A scale performs save parameters; Read: 0
48638	**8637**	B scales save optimal parameters	Write: 1-B scale performs save parameters; Read: 0
48639	**8638**	A scale restores optimal parameters	Write: 1-A scale restores optimal parameters; Read: 0
48640	**8639**	B Scale restores optimal parameters	Write: 1-B scale restores optimal parameters; Read: 0
48641	**8640**	A scale single run	Write: 1-A scale starts a single run; Read: 0

48642	**8641**	B Scale single run	Write: 1-B scale starts a single run; Read: 0
48643	**8642**	A Scale compensate material test	Write: 1-A scale start to compensate material; Read: 1- compensating material; 0- Other
48644	**8643**	B Scale compensate material test	Write: 1-B scale start to compensate material ; Read: 1- compensating material; 0- Other
48645	**8644**	A scale clear cumulative	Write: 1~20- Clear the accumulations for the corresponding recipe 0- Clears the current recipe cumulative 21- Clear all recipe accumulations Read: 0
48646	**8645**	B Scale clear cumulative	Write: 1~20- Clear the accumulations for the corresponding recipe 0- Clears the current recipe cumulative 21- Clear all recipe accumulations Read: 0
48647	**8646**	Manual supply material	Write: 1- supply material valid; 0- supply material not valid Read: Return feed status
48648	**8647**	Clip/loose Bag	Write: 1- Perform clip/loose bag; Read: Return to clip bag status
48649	**8648**	Clear Total accumulations	Write: 1- Clear total system cumulative; Read: 0
48650	**8649**	Empty the current recipe voltage	Write: 1- recipe vibrator voltage set to 0; Read: 0
48651	**8650**	Material level function disabled	Write: 1- Disable material level function Read: Returns to level disabled state, with upper level and lower level invalid when level disabled function is used.
48652	**8651**	B Scale clip/loose bag	Write 1 to perform the clip/loose bag action and read the return clip/loose bag status
48653	**8652**	USB parameter export	Write 1 to export all parameters,2 to export application parameters,3 to export weight parameters,4 to export communication parameters,5 to export IO parameters,6 to export transmitter parameters,7 to export recipe parameters, read as the exported state
48654	**8653**	USB parameter import	Write 1 to import all parameters,2 to import application parameters,3 to import weight parameters,4 to import communication parameters,5 to import IO parameters,6 to

			import transmitter parameters,7 to import recipe parameters, read as imported status
48655	**08654**	Clear batches accumulations	Write 1 Clear batches cumulative, read returns 0
48655 ~ 48699	**08654 ~ 08698**	Reserve	
48700	**08699**	Soft reboot (program reboot)	Write: 1- Restart; No operation allowed when running, read: 0
48701 ~ 48900	**08700 ~ 08899**	Reserve	
Reset parameters with LOGO configuration area			
48901	**8900**	Reset all parameters	**Write 1** to perform the corresponding reset operation(the reset does not involve communication parameters). Read out are all 0.
48902	**8901**	Uncalibrated parameters reset	Readable/writable, write 1 Perform an uncalibrated parameter reset.
48903	**8902**	Calibration parameter reset	Both scale calibration parameters are reset
48904	**8903**	Application parameter reset	Write 1 resets application parameters except for the IO function, and write 2 resets all application parameters
48905	**8904**	Recipe parameter reset	Write 0 to reset the current formula parameter content, write 1-20 to reset the corresponding formula parameter, the above two operations no longer reset the formula number. Write 21 to reset all recipe parameters, including the recipe number
48906	**8905**	Transfer parameters reset	Write 1 Reset transmitter parameters
48907	**8906**	The **I/O** function resets	Write 1 resets the input function, write 2 resets the output function, write 3 resets all functions
48908	**8907**	A scale calibration parameter reset	Write 1 reset, only reset the A-scale calibration parameters
48909	**8908**	B scale calibration parameters reset	Write 1 reset, only reset B scale calibration parameters
48910	**8909**	The current formula feeding parameter of scale A is reset	Write 1 Reset feeding parameters (lead, voltage, forbidden time)
48911	**8910**	B scale current formula feeding parameters reset	Write 1 Reset feeding parameters (lead, voltage, forbidden time)

48912	**8911**	Reset the feeding parameters of the current recipe	Write 1 Reset the current recipe feed parameters (lead, voltage, forbidden time)
48913	**8912**	A scale all formula feeding parameters reset	Write 1 to reset all formula feeding parameters of A scale (lead, voltage, forbidden time)
48914	**8913**	B scale all formula feeding parameters reset	Write 1 to reset all formula feeding parameters of B scale (reserve, voltage, forbidden judge time)
48915	**8914**	Motor parameters reset	Write 1 reset, reset the motor parameters
48916	**8915**	Adaptive parameters reset	Write 1 reset, reset the Adaptive parameters
48917~48920	**8916~8919**	Reserve	
48921	**8920**	Reset results	When the reset is successful, the read is not 0 for 2S. (Read only) 1: reset all parameters; 2: reset uncalibrated content; 3: reset calibration parameters; 4: reset application parameters except IO function; 5: reset all application parameters; 6: reset current recipe parameters; 7: reset formula parameter; 8: reset all formula parameters; 9: reset transfer parameters; 10: reset input definition; 11: reset output definition; 12: reset all definition; 13: reset A scale calibration parameters; 14: reset B scale calibration parameters; 15: reset A scale current formula feeding parameters 16: reset B scale current formula feeding parameters 17: reset current formula feeding parameters 18: reset A scale all formula feeding parameters 19: reset B scale all formula feeding parameters 20: reset motor parameters 21: reset Adaptive parameters
48922-48980	**8922-8979**	Reserve	
48981-48990	**8980-8989**	Boot logo Characters **1-10** (**10** characters)	The sequence corresponds to the **1st** to **8th** characters of the startup **logo**, which needs to be written in **Ascii** code, ranging from **0-9**,**A-**

			Z,a-z, space, '-' '_', default: GMC-X802cd
48991 ~ 49000	**8990 ~ 8999**	reserve	
Module system information area (read-only area)			
410001	**10000**	Software version (high byte)	/
410002	**10001**	Software version (low byte)	If read is **10000**, **version:01.00.00**
410003	**10002**	Compile date (high word)	/
410004	**10003**	Date of compilation (low word)	/
410005~41001 7	**10004~100 16**	instrument serial number characters **1-13**	/
410018~41002 9	**10017~1002 8**	instrument code characters **1-12**	/
410030	**10029**	Reserve	
410031~41004 0	**10030~1003 9**	Meter model characters **1-10**	/
410041~41010 0	**10040~1009 9**	Reserve	
410101	**10100**	Network port 0 instrument Mac address segment 1	0-255
410102	**10101**	Network port 0 instrument Mac address segment 2	0-255
410103	**10102**	Network port 0 instrument Mac address segment 3	0-255
410104	**10103**	Network port 0 instrument Mac address segment 4	0-255
410105	**10104**	Network port 0 instrument Mac address segment 5	0-255
410106	**10105**	Network port 0 instrument Mac address segment 6	0-255
410107	**10106**	Network port 1 instrument Mac address segment 1	0-255
410108	**10107**	Network port 1 instrument Mac address segment 2	0-255
410109	**10108**	Network port 1 instrument Mac address segment 3	0-255
410110	**10109**	Network port 1 instrument Mac address segment 4	0-255

410111	**10110**	Network port 1 instrument Mac address segment 5	0-255
410112	**10111**	Network port 1 instrument Mac address segment 6	0-255
410113	**10112**	Bluetooth Mac address segment 1	0-255
410114	**10113**	Bluetooth Mac address segment 2	0-255
410115	**10114**	Bluetooth Mac address segment 3	0-255
410116	**10115**	Bluetooth Mac address segment 4	0-255
410117	**10116**	Bluetooth Mac address segment 5	0-255
410118	**10117**	Bluetooth Mac address segment 6	0-255
410119 ~ 410200	**10118 ~ 10199**	Reserve	
Coil address			
0x00001	**00000**	Start 1	Write ON (0xFF00) to start, write OFF to stop (0x0000), read 1 is run, 0 is stop (any run is 1)
0x00002	**00001**	Start 2	Write ON (0xFF00) to start, write OFF to stop (0x0000), read 1 is run, 0 is stop (any run is 1)
0x00003	**00002**	Stop	Write ON (0xFF00) to stop, write OFF (0x0000) no response, read 1 is run, 0 is stop (any run is 1)
0x00004	**00003**	E-stop	Write ON (0xFF00) to E-stop, write OFF (0x0000) no response, read 1 is run, 0 is stop (any run is 1)
0x00005	**00004**	Empty materail	Write ON (0xFF00) to start empty material, write OFF (0x0000) to stop empty material, read 1 means empty material, and 0 means not empty material
0x00006	**00005**	Clear Alarm	Write ON (0xFF00) to clear alarm, write OFF (0x0000) no response, read as 0
0x00007	**00006**	Simulation Run	Write ON (0xFF00) to start the simulation run, write OFF (0x0000) to stop the simulation run, read out 1 means simulation run, and 0 means non-simulation run
0x00008	**00007**	Run once	Writing ON (0xFF00)to starts a single run, writing OFF (0x0000) returns an error, reading 1 to run and 0 to stop
0x00009	**00008**	Save the optimal parameters	Write ON (0xFF00) to save the optimal parameters of the current recipe, write OFF (0x0000) to return an error,

			read as 0
0x00010	**00009**	Restore optimal parameters	Write ON (0xFF00) to restore the optimal parameters of the current recipe, write OFF (0x0000) to return an error, read as 0
0x00011	**00010**	Clear accumulations	Write ON (0xFF00) to clear the current recipe cumulative, write OFF (0x0000) to return an error, read as 0
0x00012	**00011**	Clear all recipe accumulations	Write ON (0xFF00) to clear all recipe accumulations (excluding total system accumulations), write OFF (0x0000) to return an error, read as 0
0x00013	**00012**	A Scale zero	Writing ON (0xFF00)to zero channel 1, writing OFF (0x0000) returns an error, and read out is 0
0x00014	**00013**	B Scale zero	B scale, operate as above
0x00015	**00014**	A Scale start 1	Write ON (0xFF00) to start channel 1, write OFF(0x0000) to E-stop, read out is 1 means channel 1 to run, and 0 means stop
0x00016	**00015**	B Scale start 1	B scale, operate as above
0x00017	**00016**	A Scale start 2	Write ON (0xFF00) channel 1 to start, write OFF(0x0000) to scram, read 1 for channel 1 to run, and 0 for stop
0x00018	**00017**	B Scale start 2	B scale, operate as above
0x00019	**00018**	A Scale stop	Writing ON (0xFF00) channel 1 stops, writing OFF (0x0000) returns an error, reading 1 for channel 1 running and 0 for stopping
0x00020	**00019**	B Scale stop	B scale, operate as above
0x00021	**00020**	A Scale to stop	Write ON (0xFF00)to e-stop channel 1, write OFF (0x0000) to return an error, read out 1 means channel 1 to run, and 0 means stop
0x00022	**00021**	B Scale to stop	B scale, operate as above
0x00023	**00022**	A scale empty material	Write ON (0xFF00) channel 1 to start cleaning, write OFF (0x0000) to stop cleaning, read 1 for channel 1 cleaning and 0 for non-cleaning
0x00024	**00023**	B scale empty material	B scale, operate as above
0x00025	**00024**	A scale manual fast feed	Write ON (0xFF00) to make channel 1 to start manual fast feed, write OFF (0x0000) to stop fast flow, read out is 1 means channel 1 fast feed, and 0 means non-fast feed
0x00026	**00025**	B scale	B scale, operate as above

		manual fast feed	
0x00027	**00026**	A scale manual feed	Write ON (0xFF00) to make channel 1 to start manual mid feed, write OFF (0x0000) to stop mid feed, read out is 1 means channel 1 mid feed, 0 means non-mid feed
0x00028	**00027**	B scale manual feed	B scale, operate as above
0x00029	**00028**	A scale manual slow feed	Write ON (0xFF00) to make channel 1 to start manual slow feed, write OFF (0x0000) to stop slow feed, read out is 1 means channel 1 slow feed, 0 means non-slow feed
0x00030	**00029**	B scale manual slow feed	B scale, operate as above
0x00031	**00030**	A Scale manual discharge	Write ON (0xFF00) to make channel 1 to start manual discharge, write OFF (0x0000) to return error, read out 1 means channel 1 discharge, and 0 means non-discharge
0x00032	**00031**	B Scale manual discharge	B scale, operate as above
0x00033	**00032**	A scale simulation run	Write ON (0xFF00) to make channel 1 to start simulation run, write OFF (0x0000) to stop simulation run, read out is 1 means channel 1 simulation run, and 0 means non-simulation run
0x00034	**00033**	B Scale simulation run	B scale, operate as above
0x00035	**00034**	A scale clear alarm	Write ON (0xFF00) to make channel 1 to clear alarm, write OFF (0x0000) to return error, read as 0
0x00036	**00035**	B scale clear alarm	B scale, operate as above
0x00037	**00036**	A scale saves optimal parameters	Write ON (0xFF00) to save channel 1 current formula optimal parameters, write OFF (0x0000) to return an error, read as 0
0x00038	**00037**	B scale saves optimal parameters	B scale, operate as above
0x00039	**00038**	A scale restores optimal parameters	Write ON (0xFF00) to restore channel 1 current formula optimal parameter, write OFF (0x0000) to return error, read as 0
0x00040	**00039**	B Scale re-	B scale, operate as above

		stores optimal parameters	
0x00041	**00040**	A scale run once	Write ON (0xFF00) to start channel 1 for a single run, write OFF (0x0000) to return an error, read 1 for run and 0 for stop
0x00042	**00041**	B Scale run once	B scale, operate as above
0x00043	**00042**	A Scale replenish material test	Write ON (0xFF00) to start the feed test of channel 1, write OFF (0x0000) to return an error, read out is 1 means replenishing materials, 0 means non-replenishing materials
0x00044	**00043**	B Scale replenish material test	B scale, operate as above
0x00045	**00044**	A scale clear current recipe accumulation	Write ON (0xFF00) to clear the current formula accumulation in channel 1. Write OFF (0x0000) to return an error and read as 0
0x00046	**00045**	B Scale clear current recipe accumulation	B scale, operate as above
0x00047	**00046**	A Scale clear all recipe accumulations	Write ON (0xFF00) to clear channel 1 All recipes accumulation, write OFF (0x0000) to return an error, read as 0
0x00048	**00047**	B Scale clear all recipe accumulations	B scale, operate as above
0x00049	**00048**	Manual feeding	Write ON (0xFF00) to make supply material be valid, write OFF (0x0000) or upper level is valid to make supply material invalid. Read return supply material status
0x00050	**00049**	Clip/loose Bag	Write ON (0xFF00) to perform clip/loose bag action, read as clip/loose bag status
0x00051	**00050**	Clear Total Cumulative	Write ON (0xFF00) to clear total system accumulations, read returns 0
0x00052	**00051**	Clear the current formula voltage	Write ON (0xFF00) to set the recipe vibrator voltage to 0, read to return 0
0x00053	**00052**	Disabled Material	Write ON (0xFF00) to disable the feed level function, write OFF (0x0000) to undisable, read as disabled state

		level function	
0x00054	**00053**	B Scale clip/loose bag	Write ON (0xFF00) to clip/loose bag action, read as pinch bag status
0x00055	**00054**	Clear batch Accumulations	Write ON (0xFF00) to clear batch accumulation, read as 0
0x00056~ 0x00299	**00055~ 00298**	Reserve	
0x00300	**00299**	Soft restart	Write ON (0xFF00) to let program restart, no operation allowed when running, read 0
0x00301	**00300**	Reset all parameters	Writing ON (0XFF00) performs a reset, writing OFF (0x00) returns an error, reading out returns 0.
0x00302	**00301**	Uncalibrated content reset	Writing ON (0XFF00) performs a reset, writing OFF (0x00) returns an error, and reading out returns 0.
0x00303	**00302**	Calibration reset	Writing ON (0XFF00) resets both channel calibration parameters, writing OFF (0x00) returns an error, and reading out returns 0.
0x00304	**00303**	Application parameter reset	Writing ON (0XFF00) resets all application parameters, writing OFF (0x00) returns an error, reading out returns 0.
0x00305	**00304**	Non-I/O functions Define reset	Writing ON (0XFF00) resets application parameters other than the IO function, writing OFF (0x00) returns an error, and reading out returns 0.
0x00306	**00305**	I/O function reset	Writing ON (0XFF00) resets the IO function, writing OFF (0x00) returns an error, reading out returns 0.
0x00307	**00306**	Input port function reset	Writing ON (0XFF00) resets the input port function, writing OFF (0x00) returns an error, and reading out returns 0.
0x00308	**00307**	Output port function reset	Writing ON (0XFF00) resets the output port function, writing OFF (0x00) returns an error, and reading out returns 0.
0x00309	**00308**	Current recipe feed parameter reset	Write ON (0XFF00) to reset the current recipe feeding parameters (reserve, voltage, forbidden judge time), write OFF (0x00) to return an error, read out to return 0. Note that this operation does not change the recipe number
0x00310	**00309**	current recipe parameter reset	Writing ON (0XFF00) resets all parameters of the current recipe, writing OFF (0x00) returns an error, reading out returns 0. Note that this action

			does not change the recipe number
0x00311	**00310**	Reset all recipe parameters	Writing ON (0XFF00) resets all recipe parameters, writing OFF (0x00) returns an error, reading out returns 0. Note that this operation will reset the recipe number
0x00312	**00311**	reset transfer parameter	Writing ON (0XFF00) resets transmitter parameters, writing OFF (0x00) returns an error, and reading out returns 0.
0x00313	**00312**	A scale calibration parameter reset	Write ON (0XFF00) to reset channel 1 calibration parameter, write OFF (0x00) to return error, read out to return 0.
0x00314	**00313**	B scale calibration parameter reset	Write ON (0XFF00) to reset channel 2 calibration parameters, write OFF (0x00) to return an error, read out to return 0.
0x00315	**00314**	A Scale resets the current recipe feed parameter	Write ON (0XFF00) to reset channel 1 current formula feeding parameters (reserve, voltage, forbidden judge time), write OFF (0x00) to return error, read out to return 0. Note that this operation does not change the recipe number
0x00316	**00315**	B Scale resets the current recipe feed parameter	Write ON (0XFF00) to reset the current formula feeding parameters (reserve, voltage, forbidden judge time) in channel 2, write OFF (0x00) to return an error, read out to return 0. Note that this operation does not change the recipe number
0x00317	**00316**	A balance all formula feeding parameters reset	Write ON (0XFF00) to reset channel 1 All formula feeding parameters (reserve, voltage, forbidden judge time), write OFF (0x00) to return error, read out to return 0. Note that this operation does not change the recipe number
0x00318	**00317**	B Scale all formula feed parameters reset	Write ON (0XFF00) to reset all formula feeding parameters (reserve, voltage, forbidden judge time) in channel 2, write OFF (0x00) to return error, read out to return 0. Note that this operation does not change the recipe number
0x00319	**00318**	Motor parameters reset	Write ON (0XFF00) to reset the motor parameters, write OFF (0x00) to return an error, read out to return 0. Note that this operation does not change the recipe number
0x00320	**00319**	Adaptive parameters	Write ON (0XFF00) to reset the Adaptive parameters, write OFF (0x00) to

		reset	return an error, read out to return 0. Note that this operation does not change the recipe number
0x00321~ 0x00329	**00320~ 00328**	Reserved	
0x00330	**00329**	Reset results	Read out returns 1 when the above reset is successful for 2S
0x00331~ 0x00400	**00330~ 00399**	reserve	
0x00401	**00400**	Enter **IN1** status	Read only area **0**: invalid; **1** valid
0x00402	**00401**	Enter **IN2** status	
0x00403	**00402**	Enter **IN3** status	
0x00404	**00403**	Enter **IN4** status	
0x00405	**00404**	Enter **IN5** status	
0x00406	**00405**	Enter **IN6** status	
0x00407	**00406**	Enter **IN7** status	
0x00408	**00407**	Enter **IN8** status	
0x00409	**00408**	Enter **IN9** status	
0x00410	**00409**	Enter **IN10** status	
0x00411~ 0x00450	**00410~ 00449**	Reserve	
0x00451	**00450**	Output **OUT1** status	Read only area Read Return each output status bit **0**: invalid; **1** valid
0x00452	**00451**	Output **OUT2** status	
0x00453	**00452**	Output **OUT3** status	
0x00454	**00453**	Output **OUT4** status	
0x00455	**00454**	Output **OUT5** status	
0x00456	**00455**	Output **OUT6** status	
0x00457	**00456**	Output **OUT7** status	
0x00458	**00457**	Output **OUT8** status	
0x00459	**00458**	Output **OUT9** status	
0x00460	**00459**	Output **OUT10** status	
0x00461	**00460**	Output **OUT11** status	
0x00462	**00461**	Output **OUT12** status	
0x00463	**00462**	Output **OUT13** status	
0x00464	**00463**	Output **OUT14** status	
0x00465	**00464**	Output **PW1** status	

0x00466	**00465**	Output **PW2** status	
0x00467	**00466**	Output **PW3** status	
0x00468	**00467**	Output **PW4** status	
0x00469	**00468**	Output **PW5** status	
0x00470	**00469**	Output **PW6** status	
0x00471~ 0x00800	**00470~ 00799**	Reserve	

5.2 Continuous Sending Protocol

Data frame Format description:

Start character	A Scale weight status	A scale charging status	A scale weight	B Balance weight status	B scale feeding status	B Scale weight	Checksum	Terminator

◆ Start character - 1 bit, 40H

◆ Weight status - 1 position, A scale /B scale weight status

D7	D6	D5	D4	D3	D2	D1	D0
	Is **0** (unchanged)	1-AD failure **0**- Normal	**1**- over range **0**- Normal	**1**- Negative overflow **0**- Normal	**1**- Positive overflow **0**- normal	**1**- zero **0**-non-zero	1- Stable 0- Unstable

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

State **0**:

D7	D6	D5	D4	D3	D2	D1	D0
	Is **0** (unchanged)	**1**- Weigh ok **0**- Normal	**1**- Replenishing materials **0**- Not	**1**- feed completed **0**- Not	01 - Slow feed 10: Mid feed 11: Fast feed		1- Before feeding 0- not

Status **1**:

D7	D6	D5	D4	D3	D2	D1	D0
	Be **0** (unchanged)	00: Stop 01: Run 10: empty material 11: Vibration plate test		**1-IO** test **0**- not	1- under 0- not	1- over 0- not	1-discharge 0- Not

◆ Weight -- 8 bits, A scale /B scale weight; Contains symbol and decimal point, blank supplement is 20H

◆ Checksum - 2 digits, standard CRC

◆ Terminator - 2 digits: 0D 0A

If 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

Then it means that the scale A is stable and stopped, and the weight is +1632; scale B is stable and stopped, with a weight of +312.

5.3 Result sending mode

When the serial port communication protocol is selected as "result sending" (that is, when the address of 48003 and 48023 is selected as "3"), each scale is sent once (weigh ok status is valid). If another scale is completed during the sending process of a scale, the results of another scale need to be sent after the end of the sending interval "continuous sending time interval".

Data frame format description:

Start character	A scale status	A Scale result serial number	A Scale weight	B balance state	B Scale result serial number	B Scale weight	Checksum	Terminator

- ◆ Start character - 1 bit, 40H
- ◆ Status - 1 digit, A scale /B scale weight result status
  O: over; U: unde; Q: qualified; F: feeding
- ◆ Result sequence number - 1 digit, +1 for each completion, only add 1 after this channel completes a feeding, only related to whether the fixed weight packing process of this channel is completed.
- ◆ Weight -- 8 digits, A scale /B scale weight; Contains symbol and decimal point, blank supplement for 20H