





Linkedin

Facebook

Wechat



Weighing Instrument Selection Manual





General Measure Technology Co.,Ltd.

Address: Room2208, Block A, Building 6, Shenzhen International Innovation Valley,

Nanshan District, Shenzhen, Guangdong Province, P.R.China.

Tel/Wechat/Whatsapp: +86 185 6585 5789

E-mail: xjlv@szgmt.com

Website: www.gmweighing.com

Weighing automation technology GENERAL MEASURE TECHNOLOGY CO.,LTD

ENTERPRISE PROFILE

General Measure established in 1993, as one of China's earliest industrial weighing company who is also a national high-tech enterprise, has over 50 people in the R&D team. For decades, we have been committed to improving the automatic process of industrial weighing and the precision of weighing control.

In 2003, we began to open the overseas market. Since 2006, General Measure dominated the high-end market and occupying more than 25% of the market in China. To expand the global business scale, we have been focusing on overseas markets since 2012. It has been seen that the average sales growth is above 30% every year.

We will continue to provide reliable industrial weighing indicators and equipment with excellent performance and weighing solutions with innovative value to our partners. Listening, Innovating, and Growing together is our value, which guides us to achieve win-win cooperation by helping clients achieve their goals.







50[±] Country Sales



200⁺
R&D Patent



2000⁺



CUSTOMER CASE

Multi-applications

GM products are widely used in lithium battery, chemical, building materials, foods, feeds, pharmaceutical industries and etc.



Chemical industry



Grain industry



Feed industry



Building materials industry



Logistics industry





Lithium battery industry



Chemical industry



-01-



Making weighing more accessible.



2000 + Global Clients

























CONTENTS

04

| Weighing Transmitter ———0 | 5 |
|--|----|
| GMT-X1 (Digital Version Available) 0 | 5 |
| GMT-X4 0 | 7 |
| GMT-H4 1 | 0 |
| GMT-P1 (Digital Version Available) 1 | 3 |
| GMT-H1 (Digital Version Available) 1 | 5 |
| GMT-H2 (Digital Version Available) | 7 |
| GM7702 1 | 9 |
| | |
| Weighing Controller 2 | 1 |
| GMC-X32 | 1 |
| GMC-X904-2/D 2 | 23 |
| GMC-X802-C2/D 2 | 25 |
| M04 Series 2 | 27 |
| GMC-P7 3 | 31 |
| GMC-P7(F8) (Digital Version Available) 3 | 3 |
| GM9907 Series | 9 |
| | |
| Others ————4 | .9 |
| Remote Display GM8892/GM88954 | .9 |
| Junction Box GM-JX-M5 | |
| Junction Box GMA-JB4-Ex5 | |



GMT-X1

Weighing Transmitter
(Digital Version Available)

GMT-X1, a DIN rail-mounted weighing transmitter for industrial automation, can be used in various weighing applications, such as weight checking, loss-in-weight, liquid filing, batching, vessel and silo weighing, etc. Through Bluetooth, it can be connected to Weasy App for configuration and monitoring.

-05-



SOFTWARE HIGHLIGHTS

- Liquid filling software selectable;
- Calibration without weights (by load cell sensitivity value);
- Printer function :
- Self-testing for I/O and Communication port;
- Self-editable boot screen.





HARDWARE HIGHLIGHTS

Simulation/Digital Version

- Stainless steel case with compact design;
- Different configuration choice, a variety of combinations;
- Standard:RS485 + RS485/RS232(Selectable)

Option 1 3 input 5 Output or 3 input 4 Output relay (Optional);

Option 2 RS485+16bit Analog or 2 input 4 Output or CAN;

Option 3 Modbus TCP or Ethernet/IP or Profinet or Profibus DP

or CCLink IE or Ethercat;

(Hardware Option 1, 2, 3 can be selected at the same time);

Bluetooth Communication.







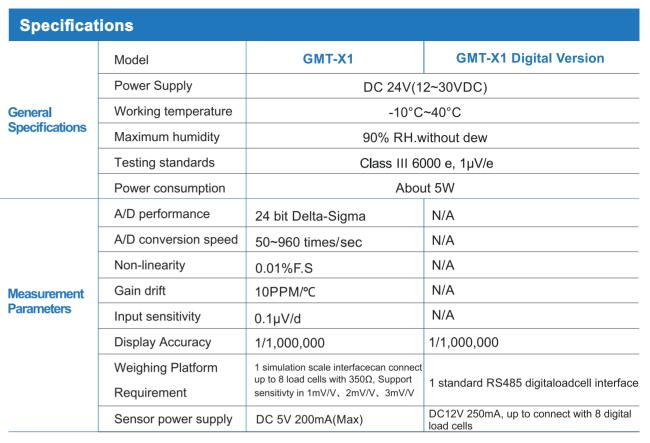


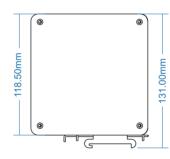










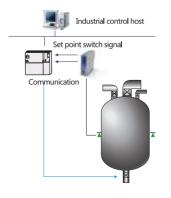




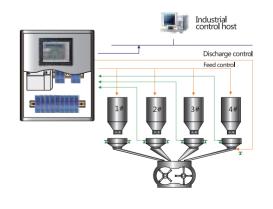


*Specification and dimension may be upgraded, please consult sales manager for the latest info

Application







Multi-material batching application

-06-

GMT-X4
Weighing Transmitter
(Intelligent Junction box)



GENERAL MEASURE TECHNOLOGY CO.,LTD

GMT-X4 is a DIN rail mounted weighing transmitter with four-channel. It has the characteristics of compact design, stable performance, and easy operation, which can be used for various weighing applications, such as weight checking, loss-in-weight, liquid filing, batching, vessel and silo weighing, etc.



HARDWARE HIGHLIGHTS



- Stainless steel housing with compact design (62 X 134 X 128mm);
- Different configuration choices, a variety of combination;

Standard

- (1) 4-channel of 6-wire load cell interfaces;
- ② RS485 & RS232;
- 3 4 Input 8 Output I/O.

Option 1

Modbus TCP /IP or EtherNet/IP or ProfiNet or EtherCat or CCLink IE;

Option 2

4-channel analog output;

Option 3

CAN communication;











(Option1, 2, 3 can be selected at the same time.)



SOFTWARE HIGHLIGHTS

- Zero point reset function: support resetting the zero point as before power failure when re-powering;
- Theoretical value calibration, stable within 3s of the calibration process automatically;
- Remote monitoring and configuration by PC with Modbus TCP connecting up to 6 devices at once;
- Input anti-vibration function, which time can be set.



338kg

Main display

• Up to 6 digits

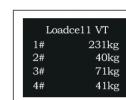
Main display

Error notice

· Load cell failure

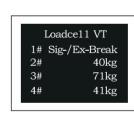
Press > to view

1#Channel Error



GMT-X4 weighing indicator with intelligent junction box built in can easily monitor the defaulted load cell.

- Weight display
- Individual load cells

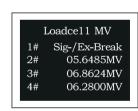


- Weight display
- Error notice
- Defaulted load cell

|] | Loadce11 MV |
|----|-------------|
| 1# | 05.6425MV |
| 2# | 05.6485MV |
| 3# | 06.8624MV |
| 4# | 06.2800MV |
| | |

CE

- Millivolt display
- Individual load cells



- Millivolt display
- Error notice
- Defaulted load cell



Stainless steel housing with compact design(62X134X128mm);

Standard

1 4-channel of 6-wire load cell interfaces;

② RS485 & RS232;

3 4 Input 8 Output I/O;

Option1 Modbus TCP /IP or EtherNet/IP or ProfiNet or EtherCat or CCLink IE;

Option2 1-channel analog output;

Option3 CAN communication;

(Option1, 2, 3 can be selected at the same time.)









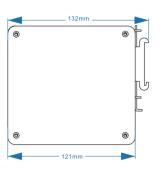


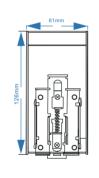
-07-

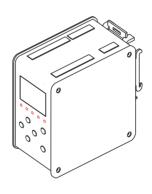
-08-



| Specificati | ons | |
|---------------------------|-----------------------|--|
| | Model | GMT-X4 |
| | Power | DC 24V ±5% |
| | Size | 62mm ×134mm ×128mm |
| General | Weight | Approx. 880g |
| Specifications | Operating Environment | -10 ~ 40°C; 90%R.H,No Condensation |
| | Storing Environment | -40 ∼ 60°C; 90%R.H,No Condensation |
| | Power Dissipation | 10W |
| | Weighing Platform | FV 200mA/MAY\/ohannal |
| | Excitation Voltage | 5V, 200mA(MAX)/channel |
| | Weighing Platform | 4 simulation scale interface, can connect up to 40 load |
| | Requirement | cell with 350 Ω , support sensitivity 1mV/V, 2mV/V, 3mV/V |
| Measurement Parameters | Sensitivity | 0.1uV/d |
| T didifiotoro | Non-Linearity | 0.01% F.S |
| | A/D Conversion Speed | 50/60/100/120/200/240/400/480/800/960/SPS |
| | Maximum Display | 4/4 000 000 |
| | Accuracy | 1/1,000,000 |

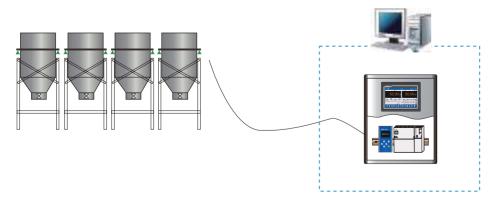






*Specification and dimension may be upgraded, please consult sales manager for the latest info

Application



Multi-material batching application

-09-





HARDWARE HIGHLIGHTS



- Wall mount or panel mount installation available, stainless steel case;
- IP65 for wall mount case and front panel;
- Four independent load cell input channels;
- Two-screen display: LED and OLED;

Configuration interface:

Standard: 1 RS485 and 1 RS232;

- Optional: ① 4 inputs 6 outputs I/O; ② Modbus TCP/IP;
 - ③ Profinet/Ethernet IP/CC-Link IE;













SOFTWARE HIGHLIGHTS

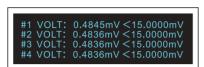
- Two-screen with Chinese and English display, easy to operate;
- Four-channel combination mode for digital weighing system;
- Each load cell's data can be checked in detail;
- Intelligent load cell installation and automatic angular difference adjustment;
- Calibration without weight function by higher accurate load cell parameters;
- Support special weighing system, each channel can be involved in different ranges and different sensitivity of the load cell;
- Preset point output

-10-

Usage:

- Multiple load cells can connect to the GMT-H4 directly without junction box;
- Bright LED main screen displays the total weight allowing to see under sunshine or long distance;
- OLED screen can check each load cell's weighing data in detail.



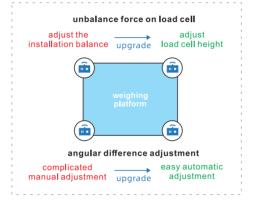






Load Cell Installation:

- GMT-H4 can remind the force data during load cell installation. Adjust the height of load cell according to the force of each load cell;
- Automatic adjustment of the angular difference, to avoid the repeated adjustment process.











Early Warning Function:

• GMT-H4 has detection and early warning functions which is helpful for users to intuitively understand the working state of the weighing system. It can detect and remind the below problems:

Unbalance load

GMT-H4 can detect the load at different positions on the weighing platform to avoid the weighing error caused by partial load.

Installation base subsidence

GMT-H4 can identify changes or settlement of the foundation to prevent inaccurate weighing due to unstable foundation.

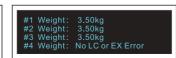
Load cell damage

GMT-H4 can real time monitor the load cell status and identify the load cell damage to ensure the weighing accuracy. Load cell wiring failure

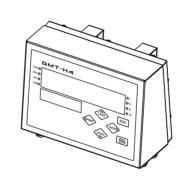
GMT-H4 can real time monitor the load cell wiring status for identifying and reminding the fault immediately. Emergency use

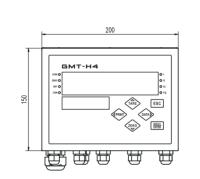
When the load cell damaged, GMT-H4 can switch the load cell to emergency use mode to make sure the production runs well.

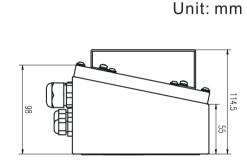
Scale body tilt any key clear alarm #1 Weight: 19.00kg #2 Weight: 19.00kg #3 Weight: 19.00kg #4 Weight: Loadcell Tilt #1 Weight: 19.00kg #2 Weight: 19.00kg #3 Weight: 19.00kg #4 Weight: LC broken



Specifications GMT-H4 Model Power DC 24V ± 10% Certificated Environment -10 ~ 40°C; 90%R.H no condensation General **Specifications Operating Environment** -40 ~ 70°C; 90%R.H no condensation Approx. 20W **Power Consumption** ClassIII6000e, 1µV/e Calibration standard Size 200mm x 150mm x 120mm **Load Cell Channel** Four independent analog load cell input channels Nonlinearity 0.01%F.S Gain Drift 10 PPM/°C Measurement **Parameters** Sensitivity 0.01µV/d DC5V, 200mA(Max) **Load Cell Power** Maximum Display Accuracy 1/100000 A/D Sampling Rate 50/100/200/400/800Hz

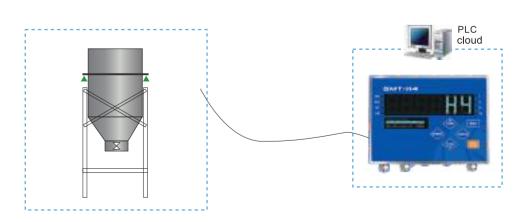






*Specification and dimension may be upgraded, please consult sales manager for the latest info

Application



Schematic diagram of weighing data transmission

-11-



The GMT-P1 is a panel/harsh-mounted weighing transmitter that offers exceptional reliability, advanced filtering, and tested ability to perform stably under interference of harsh industrial environments. It is customized for dynamic weighing systems with the highest demand for reliability, response speed and accuracy.



FEATURES

- OIML R76 approval;
- With second generation anti-vibration filter;
- Support calibration without weights;
- 1,000,000 weight resolution ability;







HARDWARE HIGHLIGHTS

Standard

- RS232 or RS485 selectable by switch;
- 1 input 2 output I/O;

Options

- Single network port, support Modbus;
- Dual network ports, support ModbusTCP (No serial ports);
- Profinet or Ethernet IP or EtherCAT or CCLink IE (No serial ports);
- Analog output.

Digital Version

Standard

- RS232 or RS485 selectable by switch;
- RS485 for digital loadcell interface;
- 1 input 2 output I/O;

Options

• 16-bit analog output (Voltage/Current Type);





-13-







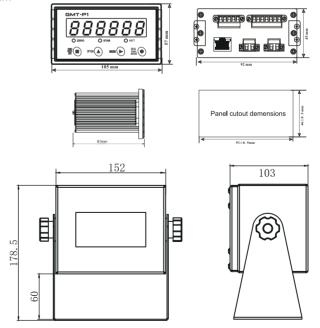


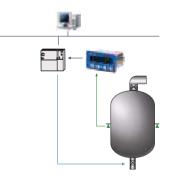
Model GMT-P1 **GMT-P1** Digital Version DC 24V±5% Power Working temperature -10°C~40°C General **Specifications** 90% RH.without dew Maximum humidity Class III 6000 e, 1 µ V/e Testing standards Power consumption About 10W 24 bit Delta-Sigma A/D performance N/A A/D conversion speed 30/60/120/240/480/960 times/sec N/A Non-linearity 0.01%F.S N/A Gain drift 10PPM/°C N/A Measurement **Parameters** N/A Input sensitivity $0.01\mu V/d$ N/A Maximum input voltage 0~15mV 1/1.000.000 Display Accuracy 1/1.000.000 DC 5V,200mA(Max),Up to 8 load cells DC12V, 250mA, up to connect 8 digital Load cell excitation (350Ω) can be connected load cells **Dust/water protection** The IP65 display when mounted into a panel

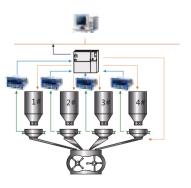
Application

Specifications

Unit:mm







^{*}Specification and dimension may be upgraded, please consult sales manager for the latest info.

-14-



GMT-H1 weighing transmitter is designed for industrial weighing application. It's harsh mount, IP65 protection widely used in silo and vessel weighing field.





- Anti-dust and waterproof harsh mount case;
- 6-wire load cell interfaces, connecting up to 8 load cells in 350Ω;
- Support theoretical data calibration;
- Support GPRS, Modbus-RTU, Modbus-TCP/IP, RS485 for communication;
- The function of automatic upload relevant weighing data;
- Through IO port to get the information of material level.



DIGITAL VERSION

Standard

- | Oβ
- RS485 support ModbusRTU;
- Standard network port, support ModbusTCP;
- 3 inputs 3 outputs, 3 self-defined I/O (input or output);

• RS485 for digital load cell interface;

Options

• GPRS data transmission function;

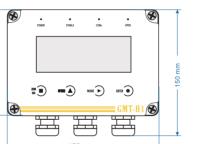


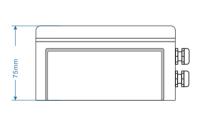






| Specifications | | | | |
|--------------------|--|---|--|--|
| | Mode | GMT-H1 | GMT-H1 Digital Version | |
| | Power | AC 90~260V 50H | z(or 60Hz)±2% | |
| General | Temperature | -20°C~60°C;90% RH.without dew | | |
| Specifications | Power consumption | About 1 | 10W | |
| | Weights | 750 | g | |
| | A/D conversion | 24 bit Delta-Sigma | N/A | |
| | Sampling rate | Sampling rate, initial value:100times/sec, range: 50,60,100,120,200,240,400,480 times/sec | N/A | |
| | Nonlinearity | 0.01%F.S | N/A | |
| | Gain drift | 10PPM/℃ | N/A | |
| | Sensitivity | 0.1μV/d / 0.5μV/d | N/A | |
| | Input range | Max 0.02~15mV | N/A | |
| Measurement | Maximum display accurarcy | 1/100,000 | 1/100,000 | |
| Parameters | Weighing platform load cell | 1 simulated weighing platform load cell interface can connect up to 8 load cells that is in 350Ω , and the sensitivity in 1mV/V、2mV/V、3mV/V. | 1 digitial load cell interface, up to connect to 8 load cells | |
| | Load cell excitation | DC 5V 200mA(Max) | DC 12V 250mA | |
| | RS485(Standard); Support ModbusRTU, continuous transmission protocol | | | |
| I/O Interfaces and | RJ45(Standard); Support Modbus-TCP, continuous transmission protocol | | | |
| Communications | GPRS data transmission function | | | |
| | Fixed IO: 3 Input, 3 Output | | | |
| | Optional IO: 3 more (can be selfdefined as output or input) | | | |

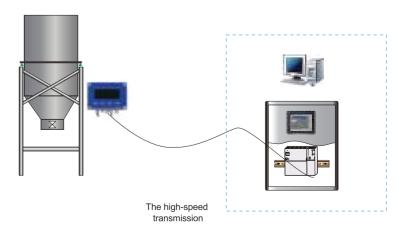




*Specification and dimension may be upgraded, please consult sales manager for the latest info

Unit: mm

Application



-15-



GMT-H2 is a wall/desk-mount weighing transmitter, with stainless steel shell which reaches IP65 protection. 2inch LED display with 6 digits and 6 indicator lights. It can be widely used in the industrial automation fields, such as silo weighing, platform weighing, weight checking, loss-in-weight, liquid filling, batching, and so on.



HARDWARE HIGHLIGHTS



Standard

- 2 RS485, 1 RS232 ports;
- 4 in 6 out I/O ports;

Options

- 1 analog output;
- Modbus TCP, or Profinet(support Siemens PLC connection), or Ethernet IP (Omron or Schneider PLC connection) or EtherCAT (developing phase, Omron or Schneider PLC connection) or CCLink IE.













SOFTWARE HIGHLIGHTS

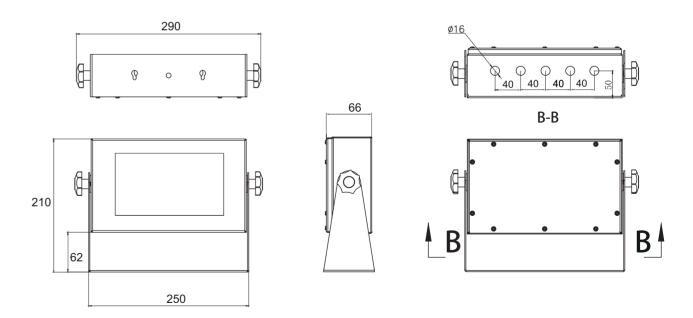
- Zeroing and taring functions;
- Print function;

Analog functions;

- I/O preset point function;
- Serial port communication functions;
- Simple weighing functions: weight collect, filter and display;
- Calibration with or without weights, support 5 points calibration with weights;

| Standard S | Specification | |
|----------------|-----------------------|---|
| | Model | GMT-H2 |
| | Power Supply | DC 24V (12~30VDC) |
| General | Working temperature | -10°C~40°C |
| Specifications | Maximum humidity | 90% RH.without dew |
| | Testing standards | Class III 6000 e, 1 μ V/e |
| | Power consumption | About 10W |
| | A/D performance | 24 bit Delta-Sigma |
| | A/D conversion speed | 30/60/120/240/480/960 times/sec |
| | Non-linearity | 0.01%F.S |
| Measurement | Gain drift | 10PPM/℃ |
| Parameters | Input sensitivity | 0.1µV/d |
| | Maximum input voltage | 0~15mV |
| | Display Accuracy | 1/1,000,000 |
| | Load cell excitation | DC 5V,200mA(Max),Up to 10 load cells(350Ω) can be connected |

Dimension unite:mm



-17--18-

^{*}Specification and dimension may be upgraded, please consult sales manager for the latest info



GM7702, a digital weighing transmitter with the standard dimension, is suitable for mounting on DIN rail in many industrial fields. Small size and compact design make it ideally integrate with whole weighing sector. Due to its high practicability, stability and easy operation, GM7702 can be widely applied to the industry of feeds, chemical, concrete and bitumen mixing, metallurgy smelting, etc.

DESCRIPTION





Standard

- WithRS232 and RS485 serial ports and support remote control;
- Support tare, preset tare function;
- Equipped with 2 IN 3 OUT I/O module.





Compact Design

 Small size and compact design with standard 35mm DIN mounting;





Optional Communication

 Optional 16bit high-precision analog output: 0~24mA,0~5V, 0~10V and user-defined analog output.



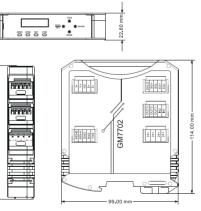


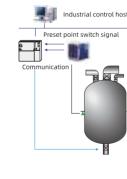


Standard specification Model GM7702 DC 24V Power Supply **General Specifications** Working temperature -10°C~40°C Maximum humidity 90% R.H without dew A/D performance 24 bit Delta-Sigma 120/240/480 t/s A/D conversion speed 0.01%F.S Non-linearity Gain drift 10PPM/°C Input sensitivity **Measurement** 0.02µV/d **Parameters** Input range -15mV~15mV Maximum display accuracy 1/100.000 Load cell power DC 5V 100mA(Max) Input impedance 10ΜΩ Zero steady range -15mV~15mV(Load cell 3mV/V) Inputs 2,active low Zero/tare/trigger preset point n (n=1/2/3/4) 3, single drive current 500mA Outputs I/O Partt Stabilization/Overfilow/Trigger Point n Output (n=1/2/3/4)/Upper/Middle/Lower Limit

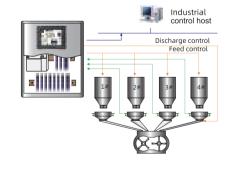
Dimensions

Unit:mm









Multi-material serial weighing and networking

*Specification and dimension may be upgraded, please consult sales manager for the latest info.



GMC-X3 is a rail-mounted loss-in-weight scale control module for high precision continuous dosing applications, capable of reliable, accurate and stable dosing of liquid, powder, granular and flake dry bulk materials, reducing material waste and improving mixture consistency. It is mainly used in chemical, plastic, rare earth smelting and other industries.

Functions & Features

Weasy Functions

- Standard 1.92-inch OLED display
- Optional Weintek 7-inch or 10-inch touch screen, well-designed interface, easy operation.





Optional

export.

Two permissions, prevents operator error;



 Modular design, Clear simple interface and easy operation.

 Support 4 points flow calibration,
 Historial data check and excel single point flow calibration, more accuracy;

| may's | THINGS THERE | THE DWGGG, DY |
|---------|--------------------|----------------|
| hake II | Hilling at forms I | 14 Balle > |
| ered is | 10000-30744981 | 10 Bertin |
| tedar. | 100552/heat | Fel Disease (A |



Hardware Features

- Stain less site licase, IP65pro tection;
- USB Port, Easy to upgrade and import/ export data;
- Standard
- 6-wire load cell interface;
- 1 analog output interface;
- 1 RS485,1 RS232 interface with isolation;
- 4 inputs and 4 outputs + 4 self-defined transistor input or output interfaces;
- A standard network port for Modbus TCP
- Dual net work ports for Modbus TCP or Profinet;
- 1 Analog input (current/voltage optional)+1 analog output interface;



- New generation flow control algorithm, more stable;
- Support analog calibration, automatic/manual calibration of flow rate;
- Automatic locking and unlocking function for flow interference;
- Support two devices to access the instrument parameters function simultaneously (ModbusTCP);
- Working modes: 1) Flow calibration mode;

Software Features

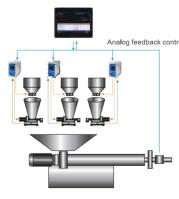
- 2 Flow rate presetting and flow rate giving mode;
- 3 PID control mode, segment control mode;
- Threshold anti-interference function, which makes the working process of the instrument more stable;
- Multi-material function, support up to 10 sets of material parameters, convenient to switch between different material parameters;

| Standard S | pecification | |
|---------------------------|------------------------------|--|
| | Model | GMC-X3 |
| General | Power Supply | DC 24V (18~36VDC) |
| | Approved Environment | -10°C~40°C |
| Specifications | Maximum humidity | 90% R.H without dew |
| | Testing standards | Class III 6000 e, 1 μ V/e |
| | Power Dissipation | 15W |
| | Load cell excitation voltage | 5V 200mA(MAX) |
| | Load cell connection | 1load cell interface , 6-wire with compensation , up to 8 load cells with 350 Ω , support 1mV/V、2mV/V、3mV/V sensitivity. |
| | Analog Input Range | 0~15mV |
| Measurement Parameters | Input sensitivity | 0.1μV/d |
| - uramotoro | Non-Linear | 0.01%F.S |
| | A/D Conversion | 480 times/sec |
| | Display Accuracy | 1/1,000,000 |
| Communication Interface | Standard | 1 analog output interface 1 RS485, 1 RS232 interface with isolation 4 inputs and 4 outputs + 4 self-defined transistor input or output interfaces; A standard network port for Modbus TCP |
| | Optional | Dual net work ports for Modbus TCP or Profinet 1 Analog input (current/voltage optional) + 1 analog output interface; |

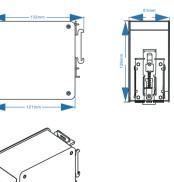
Application Diagram



Continuous Dosing Application



Multi-heads Continuous Dosing



-22--21-

^{*}Specification and dimension may be upgraded, please consult sales manager for the latest info



GMC-X904-2/D single or double hopper packing controller is a DIN rail-mounted weighing controller developed for packaging machine. Stainless steel case provides strong capability in anti-interference. The new algorithm makes the weighing control faster and more accurate. It can be widely used in feed, chemical, grain and other industries.



HARDWARE HIGHLIGHT



• Stainless steel case with compact design (61*132*126mm);

Standard: ①1 RS232 and 1 RS485; ② I/O 12 input and 16 output.

Optional: Single or dual network port: support Modbus TCP/IP.



SOFTWARE HIGHLIGHT

• Support hopper/non hopper/big bag/bulking scale structure;

Multiple working modes: pneumatic feeding/discharging; motor feeding/discharging;

Clamping and loosening bag modes: Pneumatic, stepping motor, motor single-limit, motor double-limit optional;

- Batches setting function;
- Material level control function;
- I/O logic programming control function;
- Multiple Digital Filtering;
- Automatic Zero Tracking;

Weighing and peripheral functions:

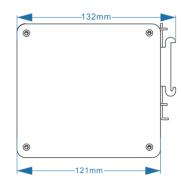
- Auxiliary Pulse;
- Multiple Bag Tapping Modes;
- Sewing Machine Control;
- Discharge Vibration;
- Conveyor Control;
- Printing Function.

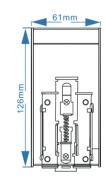






Standard Specification Model GMC-X904 Power DC24V ±5% General 61mm×132mm×126mm Size Working Environment -10~40°C Max. Humidity 90%R.H No Condensation **Power Dissipation** Approx. 15W Weighing Standard ClassIII6000e, 1µV/e A/D Conversion 24bit Sigma-Delta A/D Speed 120/240/480/960 SPS Non-Linearity 0.01%FS Measurement parameters 10 PPM/°C Gain Drift Sensitivity $0.02\mu V/d$ Input Millivolt 0.02~15mV Load cell Power DC5V, 125mA(Max) Input Impedance 10MQ Maximum 0.002~15mV(Load Cell 3mV/V) Zero Steady Range

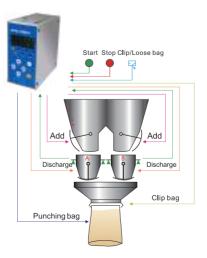




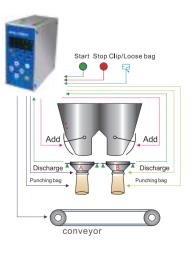


*Specification and dimension may be upgraded, please consult sales manager for the latest info

Application Diagram



Duplex Packing Controller with Hopper



Duplex Packing Controller without Hopper

-23-

-24-



The GMC-X802-C2/D is a weighing module developed for linear feeder packing systems with vibrators. Single scale (C2) or dual scale (CD) are selectable. The new algorithm makes the weighing control faster and more accurate. Various communication ports make the equipment easier to connect with the system. it is suitable for weighing powdery or small granular materials, such as sugar, salt, seeds, rice, sesame, spice, milk powder, coffee, washing powder, etc.



Hardware Interface



Standard:

- 2 RS485 Communication: for PC, PLC, printer, tag printer, remote display, or other external device;
- USB: used for program upgrade and parameter import, export and backup;
- 10 Input/20 Output I/O ports: for starting, stopping, discharging, feeding, I/O definable for different applications;
- C2: 1load cell interface: for the 6-wire load cell scale;
- CD: 2 load cell interface: for the 6-wire load cell scale, 1 interface can connect up to 8 load cells with 350Ω;

Options:

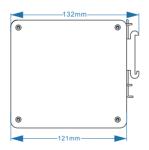
- Single/dual internet ports: support Modbus TCP;
- C2: 1/2 analog interfaces, output range: 0~5V, 0~10V, 0~24mA, 4~20mA;
- CD: 2/4 analog interfaces, output range: 0~5V, 0~10V, 0~24mA, 4~20mA.

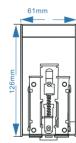


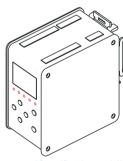
Functions

- DIN rail mount, save space;
- With screen and buttons for easy operation;
- For dual packing scales, up to 3 controllers for 6 packing scales interlocking without PLC;
- McgsPro program sample code of single / double / four / six scales can be provided;
- Various feeding mechanisms: vibrator, air cylinder, stepper/servo motor;
- Various discharging mechanisms: pneumatic, common motor, stepper motor, etc.;
- Support for batching management, bag clamp/loosen, material level control, over-under alarm and under-level feed;
- Support analog self-search, lead adaptive function, reduce the difficulty of debugging, to achieve intelligent system.

| Specificati | ons | | |
|------------------------|-------------------------|--|--|
| | Model | GMC-X802-C2/D | |
| · | Power | DC 24V ±5% | |
| General | Working Temperature | -10 ~ 40°C | |
| Specifications | Humidity | 90%R.H no condensation | |
| | Power Consumption | Approx. 5W | |
| | Calibration standard | ClassIII6000e, 1µV/d | |
| | Size | 61mm x 132mm x 126mm | |
| | A/D Conversion | 24 bits Delta-Sigma | |
| | Nonlinearity | 0.01%F.S | |
| | Gain Drift | 10 PPM/℃ | |
| Weighing | Sensitivity | 0.1μV/d | |
| Parameters | Input range | 0.02~11mV (load cell: 2mV/V) | |
| | Load Cell Power | DC5V, 125mA(Max) | |
| | Input Impedance | 10ΜΩ | |
| | Zero Adjustment Range | Max 0.02~8mV (load cell: 2mV/V) | |
| | Load Cell Interface | C2: 1load cell interface: for the 6-wire load cell scale; CD: 2 load cell interface: for the 6-wire load cell scale, 1 interface can connect up to 8 load cells with 350Ω ; | |
| Hardware Interfaces | I/O Interface | 10 IN 20 OUT transistor interfaces (PW1-PW6 is PWM output) | |
| interraces | Communication Interface | 2 RS485 communication interfaces Modbus TCP optional | |
| | Analog Interface | C2: 1/2 analog interfaces, output range: 0~5V, 0~10V, 0~24mA, 4~20mA CD: 2/4 analog interfaces, output range: 0~5V, 0~10V, 0~24mA, 4~20mA | |

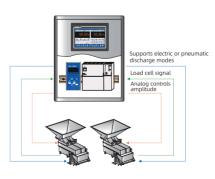




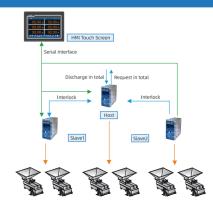


*Specification and dimension may be upgraded,

Applications Diagram



GMC-X802CD for 2 Linear Feeder Packing



GMC-X802CD for 6 Linear Feeder Packing interlocking without PLC

-25-

-26-

M04

Weighing Controller Plastic Version



M04 weighing controller is designed for dynamic weighing applications like: packing, bulking, and liquid filling, widely used in grain and seeds, feeds, fertilizer, cement and concrete, and the chemical industries.

DESCRIPTION







Application Software

Multiple Software Selections:

- M04-2 Simplex packing;
 M04-D Duplex packing;
- M04-4 Reduce weight method packing;
 M04-5 Bulk Scale (continuous weighing);
- M04-6/6D Liquid filling(simplex/duplex);



Highlight Features

Button Functions

Quick access key can be set to facilitate formulation selection, batch setting, parameter calibration and other operations.

Auxiliary logic programming function

Up to 6 sets of logic trigger signals can be defined and simple logic signal output can be configured to control the upper barrel, gland, coding and other auxiliary devices.

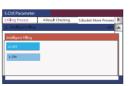
▶ Database

It can store 20 groups of recipes. For each formula can input target value, fast/slow feed drop value and other parameters.

► Intelligent feeding control

Automatic adjustment of fast feeding, slow feeding, filling scale speed and accuracy to achieve the best.





Multiple Communication Methods

- RS232 + RS232/RS485 selectable;
- M04-2, M04-4, M04-5, M04-6: 8 Inputs/12 Outputs
 M04-D, M04-6D: 12 Inputs/17 Outputs for starting, stopping, zeroing, clamping/loosening bags, etc.;
- Modbus TCP for connecting PC, PLC, printer etc. (M04-2 & M04-5);
- USB for importing and exporting data or working parameters, upgrading software or customizing boot screen.;



M04

Weighing Controller Stainless Steel Version



M04 weighing controller is designed for dynamic weighing applications like: packing, bulking, and liquid filling, widely used in grain and seeds, feeds, fertilizer, cement and concrete, and the chemical industries.

DESCRIPTION







Application Software

Multiple Software Selections:

- M04-2 Simplex packing;
- M04-D Duplex packing;
- M04-4 Reduce weight method packing;
- M04-5 Bulk Scale (continuous weighing);
 M04-6/6D Liquid filling(simplex/duplex);
- To. 00 kg

 Co-F FI-F WAIT Li→ II -NZ- N-Empt FULL
 Recipe ID 0 kg Total ACUM Weight 0 kg
 Target 0 kg Total ACUM PCS

 Fine filling.





Industrial Design

- Stainless steel case, robust and durable;
- 5-inch LCD screen plus button input, user-friendly operation;
- 20 species formula for different weight ranges and materials packing;





Multiple Communication Methods

- RS232 + RS232/RS485 selectable;
- M04-2, M04-4, M04-5, M04-6: 8 Inputs/12 Outputs M04-D, M04-6D: 12 Inputs/17 Outputs for starting, stopping, zeroing, clamping/loosening bags, etc.;
- Modbus TCP for connecting PC, PLC, printer etc. (M04-2 & M04-5);
- USB for importing and exporting data or working parameters, upgrading software or customizing boot screen.;



-27-

Weighing automation technology GENERAL MEASURE TECHNOLOGY CO.,LTD

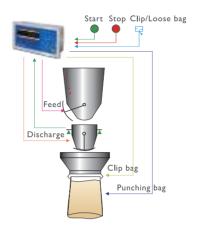
Standard Specification M04 Model AC 90~260V 50Hz(60Hz) ±2% Power supply -10°C~40°C Working temperature General 90% R.H without dew **Specifications** Maximum humidity Testing standards Class III 6000 e, 1 µ V/e IP65 (front panel) IP grade A/D performance 24 bit Delta-Sigma A/D conversion speed 120/240/480/960 times/sec Non-linearity 0.01%F.S 10PPM/°C Gain drift Input sensitivity 0.02µV/d A/D Conversion 1/100,000 Display accuracy 0.02~15mV Input range Sensor power supply DC5V 125mA(Max) 10MΩ Input impedance Maximum 0.002 ~ 15mV(Load Cell 3mV/V) Zero steady range 1.M04-2 Simplex packing; 2.M04-D Duplex packing; **Application** 3.M04-4 Reduce weight method packing; Software 4.M04-5 Bulk scale (continuous weighing); 5.M04-6/6D Liquid filling(simplex/duplex);

GENERAL

Dimension 225mm 209.5mm 209.5mm 209.5mm 209.5mm

*Specification and dimension may be upgraded, please consult sales manager for the latest info.

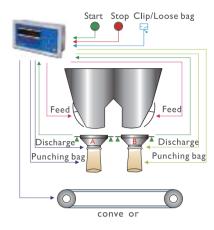
Application



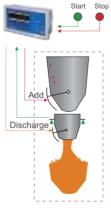
Single Channel Packaging Controller with Hopper



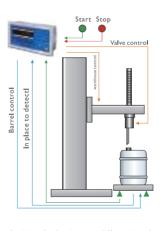
Double Channel Packaging Controller with Hopper



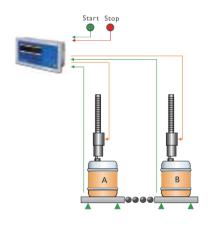
Double Channel Packaging Controller without Hopper







Single Nozzle for Liquid Filling Application



Double Nozzle for Liquid Filling Application

-30-



GMC-P7 weighing controller is designed for dynamic weighing/packing/batching applications, widely used in grain and seeds, feeds, rubber and plastic, and the chemical industries.

DESCRIPTION





Application Software

Multiple Software Selection:

- Simplex packing;
- Duplex packing;
- Reduce weight method packing;
- Bulk Scale (Continuous weighing);
- Batching scale.







User-friendly Design

- 7-inch touch screen, interactive design, and easy operation;
- Record the weight of every pack, million data storage and export.

| | | Russ | 0.98 | kg | 2021/01/0 Adr | |
|--------------|-------------------------|----------|----------|-------------|------------------|-------------------|
| | Total ACUM | | 5 pcs | | 0.01 kg | |
| | Recipe ID | ACUM pcs | | | ACUM Weight kg | < 1=8 |
| | 01 | 20 | | | 10000000,00 | |
| User ACUM | 02 | 5 | | | 50000000.00 | 9-16 |
| | 03 | 40 | | | 0.00 | 17-20 |
| History | 04 | 0 | | | 0.05 | 17 10 |
| Data | 05 | 0 | | | 0.00 | Clear All |
| Print | 06 | 50 | | | 50000000.05 | Recipe ACUM |
| S Home | <u>iii</u> Statistic | | A Recipe | Peripherals | (i) | ⊘ Start |

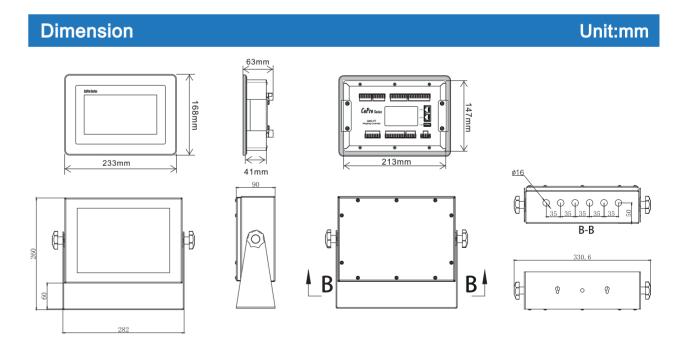


Multiple Communication Methods



- RS232+RS485 for connecting PC, PLC, Printer, Label Printer, Remote Display, Code Printer, or other external devices, for reading and setup remotely;
- 12 Input/16 Output for starting, stopping, unloading, clamping/loosening bags, etc.;
- Modbus TCP for connecting PC, PLC, Printer, etc., for reading remotely;
- USB for importing and exporting recipes, I/O function communication parameters and other working parameters, upgrading system software, customizing boot screen, etc.

| Standard S | pecification | |
|-------------------------|--|---|
| | Model | GMC-P7 (CoPro Series) |
| General | Power Supply | DC 24V plus or minus 5% |
| | Working temperature | -10°C~40°C |
| Specifications | Maximum humidity | 90% R.H without dew |
| | Testing standards | Class III 6000 e, 1 µ V/e |
| | Power consumption | About 15 w |
| | A/D performance | 24 bit Delta-Sigma |
| | A/D conversion speed | 120/240/480 times/sec |
| | Non-linearity | 0.01%F.S |
| | Gain drift | 10PPM/°C |
| Measurement | Input sensitivity | 0.02μV / d |
| Parameters | Display Accuracy | 1/100,000 |
| | Input range | 0.02~15mV |
| | Sensor power supply | DC5V 125mA(Max) |
| | Input impedance | 10ΜΩ |
| | Zero steady range | Maximum 0.002 ~ 15mV(Load Cell 3mV/V) |
| Application Software | Simplex packing;Reduce weight method packing;Batching scale. | Duplex packing;Bulk Scale (Continuous weighing); |
| Function extension | Equipped with GMA-X1 automatic tra | ction module, reduce workforce cost |



*Specification and dimension may be upgraded, please consult sales manager for the latest info

-31-



GMC-P7(F8) is a high precision weighing controller with 7-inch touch screen. It is easy for operation and checking data. The new algorithm and optimized A/D conversion scheme make the weighing transmission faster and more accurate. A variety of optional communication interfaces make it easier to interact with data between various equipment systems, It can be used in harsh environment for the applications of platform scale silo weighing, animal weighing, counting, and truck scale.



HARDWARE CONFIGURATION



Standard:

- 5 input (TTL), 5 output (TTL), I/O position can be customized;
- 2 RS485 and 1 RS232;
- Modbus TCP;

Options:

- Profinet or Ethernet/IP:
- 1 analog output;
- 4 relay output;







Digital Version

Standard:

- RS485+ RS232:
- 1 RS485 for digital loadcell interface;
- 5 inputs 5 outputs I/O;
- USB for software upgrading;

Options:

- Analog output;
- ModbusTCP or Ethernet/IP or Profinet;

SOFTWARE SELECTION

- Standard weight transmitting
- Static checkweighing,









Touch Screen Weighing Controller

(Static Checkweighing Application)





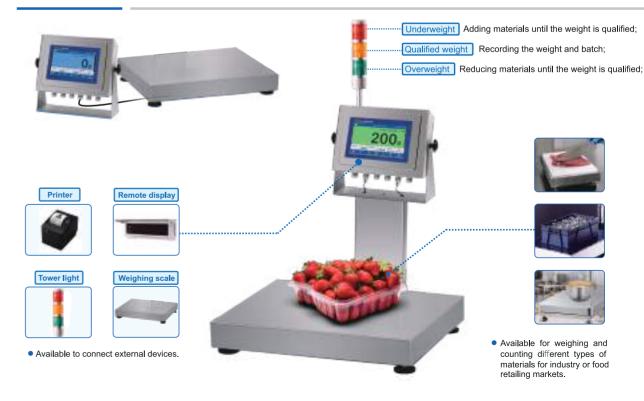
FEATURES & FUNCTIONS



- 7-inch touch screen, intuitive display, better interaction, easy operation;
- Stainless steel, front panel IP65, strong anti-interference;
- 50 editable formulas for user switching easily;
- Support micro printer and EPSON serial printer, table head and foot is editable;
- 4 million data storage, USB for exporting data;
- Check history records by selecting time or product name;

- Cumulative batches of weights qualified can be recorded;
- Continuous taring function;
- Analog output function;
- Standard 5 IN/5 OUT I/O ports;
- Two-level filtering function dealing with data fluctuating;
- Customized boot screen;
- Multilevel user authority management (operator, administrator);





-33--34-



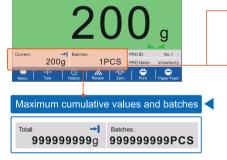
Static Weighing Function



 Three tolerance modes: absolute, deviation, percentage; easy to use;



 Recording the accumulated weights and batches, easy to manage;



When it reaches qualified weights, the total weights and batches will be record automatically.



→ Batches:





Non-target mode

Record the qualified cumulative weights and batches.

| Function Setting | 14/1 | 0/2024 17:23 | Technician |
|-----------------------|-------------------|------------------|------------|
| App Mode | Static Check WT) | Target Batches | 0 PCS) |
| Auto Print | | Clear Total ACUN |) |
| Forbid operator modif | y parameters | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Target Ba | atches | | 0 PCS > |

Target-mode

Reach the target weighing batch.

| √ Function Setting | 14/10/20 | 24 17:23 | Technician |
|------------------------------|-----------------|---------------|------------|
| App Mode Static | Check WT) Targ | get Batches | 6 PCS) |
| Auto Print | Cle | ar Total ACUM | |
| Forbid operator modify param | eters 🔃 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Target Batc | h | 6 | PCS > |

After reaching the target batch, the completion alarm pop up, and the cumulative weights and batches will be cleared.



- Two-level filtering: dealing with data fluctuating, make it stable;
- Multilevel sampling rate, more choice for user.

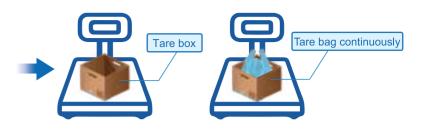


-35-



Continuous taring;

| (Basic PA | RAM | 200 | 0.0 ₂ | 14/10/2024 17:28 Technician |
|-----------------|-------------------------|-------|----------------------------------|--------------------------------|
| Zero CFG | Remote Tare | • | Negative Net Weight Correctic | Correct Tare |
| | Tare Record | | Chain Tare | • |
| | Clear Tare Threshold | 9 d > | | |
| STAB &TrZero | | | | |
| FIR &Sample | | | | |
| A Home | | | | |



Formula Function

| Recipe Param | | Operator | |
|-----------------------|-------------|-----------------------|--------------|
| PRO ID | 1 > | PRO Name | strawberry) |
| Tolerance Entry | Deviation > | Target Value | 5g) |
| Upper Limit-Deviation | 5g > | Lower Limit-Deviation | 5g) |
| Preset Tare | 5g > | | |
| | | | |
| | | | |
| | | | |

| ⟨ Recipe selection | | | | | | | |
|--------------------|------------|-----------------|--------------------------|--------------------------|----------------|-------|--|
| Recipe number | PRO Name | Target Value | Upper Limit -Absolute | Lower Limit -Absolute | Preset Tare | | |
| | strawberry | | | | | | |
| No.2 | cherry | 500g | 505g | 495g | 15g | | |
| No.3 | bread | 800g | 805g | 795g | 5g | 7-12 | |
| No.4 | apple | 1000g | 1005g | 995g | 10g | 13-18 | |
| No.5 | orange | 500g | 510g | 490g | 16g | | |
| No.6 | avocado | 500g | 505g | 495g | 13g | ~ | |

50 formulas setting:
 each formula has a corresponding
 number, name, and supports three
 tolerance modes.



 4 million history records, including serial number, formula name, time, weighing result, target value, upper limit, lower limit.

| √ History □ | History Data | | 203 🧕 | | 14/10/2024 17:28 Technician | | |
|-------------|--------------|--------------|------------------|---------------|--------------------------------|---|--|
| | Number | Recipe name | Time | Weight Result | Target Value | ^ | |
| Date Export | 1 | strawberry | 2024-10-14 15:02 | 205g | 200g | ٠ | |
| By USB | 2 | strawberry | 2024-10-14 15:06 | 195g | 200g | ۰ | |
| | 3 | strawberry | 2024-10-14 15:08 | 198g | 200g | ۰ | |
| | 4 | cherry | 2024-10-14 16:12 | 501g | 500g | | |
| Clear | 5 | cherry | 2024-10-14 16:19 | 497g | 500g | | |
| Data | 6 | cherry | 2024-10-14 16:27 | 505a | 500a | ~ | |
| | < | | | | | > | |
| | Historica | I ACUM:2102g | | | | | |
| Home | | Filter | Reset filter | | | | |
| | | | | | | | |





 USB for exporting the history data;



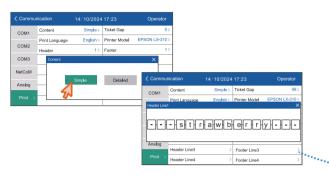
-36-

Weighing automation technology GENERAL MEASURE TECHNOLOGY CO.,LTD



GENERAL MEASURE

Support micro printer and EPSON serial printer, table head and foot is editable;
 Available for Chinese/English printing, simple/standard format printing;



Simple format

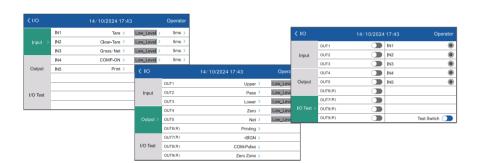
---strawberry--Date 14/10/2024
Time 15:45:00
TNO. 62
Net +503 g

Check HI
Sum 10693 g
Batches 44PCS
general-measure-



---strawberry---Date 14/10/2024 Time 15:45:00 TNO. 62 +503 g Gross +503 g Tare +0 g Check Tareget +500 g +3 g Tol_H +3 g Tol_L Entry Deviation 10693 g Sum 44PCS Batches general-measure-





- Standard 5 inputs 5 outputs
 I/O ports, optional 4 relay outputs;
- Support I/O testing funtions;

Boot Screen Function



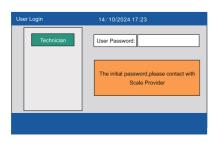




2

User Authority Function

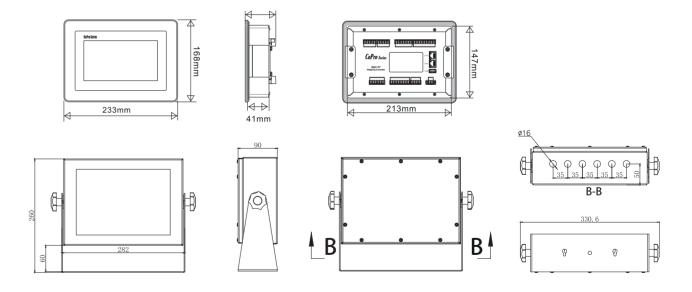
 Two-level autority, support admin to manage operator behavior.



| | √ Function Setting | | 0/2024 17:23 | Technician |
|---|------------------------|-------------------|------------------|------------|
| | App Mode | Static Check WT > | Target Batches | 0 PCS > |
| | Auto Print | | Clear Total ACUM | > |
| · | Forbid operator modify | y parameters | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Standard Specification | | | | | | | |
|------------------------|----------------------|---------------------------------------|---------------------------|--|--|--|--|
| | Model | GMC-P7 F8 | GMC-P7 F8 Digital Version | | | | |
| | Power Supply | DC 24 | 4V±5% | | | | |
| General | Working temperature | -10°C | ~40°C | | | | |
| Specifications | Maximum humidity | 90% RH.v | vithout dew | | | | |
| | Testing standards | Class III 60 | 000 e,1µV/d | | | | |
| | Power consumption | About 15W | | | | | |
| | A/D performance | 24 bit Delta-Sigma | N/A | | | | |
| | A/D conversion speed | 50~960 times/per second | N/A | | | | |
| | Non-linearity | 0.01%F.S | N/A | | | | |
| | Gain drift | 10PPM/°C | N/A | | | | |
| Measurement | Input sensitivity | 0.02µV/d | N/A | | | | |
| Parameters | Input range | 0.02~15mV | N/A | | | | |
| | Display Accuracy | 1/100,000 | 1/100,000 | | | | |
| | Sensor power supply | DC 5V 125mA(Max) | DC 12V 250mA | | | | |
| | Input impedance | 10ΜΩ | N/A | | | | |
| | Zero steady range | Maximum 0.002 ~ 15mV(Load Cell 3mV/V) | N/A | | | | |

Dimension



*Specification and dimension may be upgraded, please consult sales manager for the latest info

-37-

GM9907-L2/LD

Packing Controller

(L2:Simplex Packing LD:Duplex Packing)



GM9907-L2/LD is the simplex/duplex packing controller, widely used for, granule packing scale, powder packing scale, big bag, valve type scale-cement, etc.

Version Features

User-Friendly · Better Experience

- Memory card build in, 7-inch touch screen for displaying clearly and operating easily, Single/double scale interface mode switching;
- L2: Simplex packing; LD: Duplex packing; can be choosed, interface displayed accordingly;





• Multi-Mode: With Hopper, No Hopper, Big Bag Scale, Valve Scale, PLC;

| Scale S | tructure | With H | lopper > | Manual Ur | Nock Bag | |
|---------|----------|-------------|----------|-----------|---------------|---|
| Working | Mode | Single | Scale > | DISC Gate | Pos Detect | |
| Filling | Scale S | tructure | | | | × |
| Fill Ga | | | | | | |
| Clamp | | With Hooper | No F | lopper | Big Bag Scale | |
| | | Valve Scale | F | r.c | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |



• Self-Adaptive: I/O Programmable;

| User Logic(| | | | |
|------------------|-----------------------|-----------------------------|--------------------------|-----------------------------|
| | User Logic Type | OFF To On Edge Trigger > | User Logic Type | OFF To On Edge Trigger > |
| Recipe > ACUM | Logic Trigger Type | Input-1 > | Logic Trigger Type By Tr | igger Function > |
| | | | Trigger Fune(IN) | None > |
| | Trigger Func(OUT) | None > | Trigger Fune(OUT) | None > |
| User ACUM | Delay ON Timer | 0.0s) | Delay ON Timer | 0.0s > |
| | | | | |
| | Logic Output On Timer | 0.0s > | Logic Output On Timer | 0.0s > |
| History Data | | | | |
| Data | | | | |
| | | | | |



RS485+RS232

• For connecting PC,PLC,Printer,Label Printer, Remote Display,Code Printer,or other external devices,for reading and setup remotely;

USB

 For importing and exporting recipes,works,I/O function communication and other parameters, upgrading system software,customizing boot screen.etc:

12 Input/16 Output

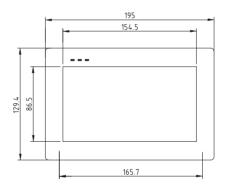
 For starting, stopping, feeding, unloading, clamping/loosening bags, etc;

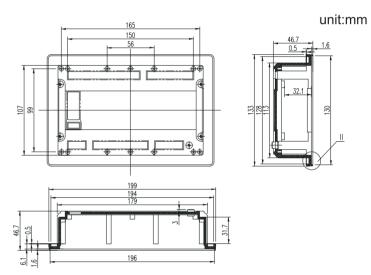
Modbus TCP

• For connecting PC, PLC, Printers, etc., for reading remotely.

Specification

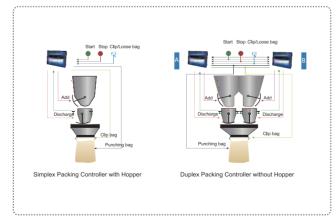
| | Model | GM9907-L2/LD | | |
|--------------------|--|---|--|--|
| | Power Supply | DC24V | | |
| General | Operating Temperature | -10~40 °C | | |
| Specifications | Maximum Humidity | 90%R.H without dew | | |
| | Test Standard | Class III 6000 e, 1 µ V/e | | |
| | Power Consume | About 15W | | |
| | A/D converter type | 24 bit Sigma-Delta | | |
| | A/D Conversion Rate | 120/240/480/960 times /sec | | |
| | Non-Linear | 0.01%F.S | | |
| | Gain Drifting | 10PPM/°C | | |
| Measurement | Minimum Sensitivity | 0.02µV/d | | |
| parameters | Analog Input Range | 0.02~15mV | | |
| | Display Accuracy | 1/100,000 | | |
| | Power Source for Load Cell | DC5V 125mA(MAX) | | |
| | Input Resistance | 10ΜΩ | | |
| | Zero Point Adjustment Range | 0.002~15mV (load cell 3mV/V) | | |
| | 12 Input 16 Output, I/O Selectable | | | |
| I/O Interfaces and | 12 Input, Active-low Start, Emergency stop, Stop, Zeroing, Clear alarm, Clear total ACUM, Bag Lock/Unlock, Manual discharge, Manual fine flow, Manual coarse flow, Change recipe, Empty material | | | |
| Communications | 16 Output, Single drive current 500mA Run, Stopped, Coarse flow, Medium flow Alarm, Batch complete, Over/Under | , Fine flow, Bag lock, Result waiting, Ready, Discharge, -NZ-, Pat bag, FILL, EMPT, | | |

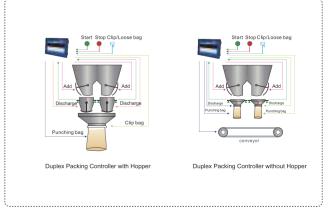




*Specification and dimension may be upgraded, please consult sales manager for the latest info.

Application Diagram





GM9907-LD GM9907-LD

-39-

Weighing automation technology

GM9907-L4

Reduce weight method Packing Controller



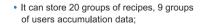
GM9907-L4 is designed for Loss-in-weightlt bagging machine. It can be widely used in rice, grains, feeds, chemical industries etc.



Version Features

User-Friendly · Better Experience

 Memory card build in, 7-inch touch screen for displaying clearly and operating easily;



| | flur | | 0.98 | kg | | |
|---------|------------|----------|-------|-------------|--------------|-------------|
| | Total ACUM | | 5 pcs | | 0.01 kg | |
| | Recipe ID | ACUM pcs | | ACL | JM Weight kg | < 1−8 |
| | 01 | 20 | | 100 | 000000-00 | |
| User | 02 | 5 | | 500 | 000000.00 | 9-16 |
| | 03 | 40 | | | 0.00 | 17-20 |
| History | 04 | 0 | | | 0, 05 | - 17-20 |
| Data | 05 | 0 | | | 0,00 | Clear All |
| Print | 06 | 50 | | 50000000,05 | | Recipe ACUI |
| 6 | ali I | % | A I | | | |



• Data backup and recovery function can save the optimal parameters and improve the working efficiency;

| System Info | Run | 0.2 | 20 t 2021/01/06 Admin | |
|-------------|----------------------|--------|--------------------------------|--------|
| | All | Reset | Communication | Reset |
| Version | All(No Calibration) | Reset | Basic Para, | Reset |
| | Recipe | Reset | Advanced Para. | Reset |
| | Calibration | Reset | I/O Function | Reset |
| Reset > ' | | | | |
| Others | Parameter Backup | Backuo | Backup Date: 2021/01/06 13:00: | 00 |
| | Recovery From Backuo | Reset | Delete Backup | Delete |
| S Home | | & | Peripherals E-Stop | Start |



• Starting patting mode when filling material to shape bags by setting relevant parameter;

| Red (E | | Run | 5 | 50. 00 k | σ | 06 14:00 lmin |
|-----------|-------------|--------------------------------|-------|--------------|--------------|-------------------------------------|
| 01 | | Overtime Monitor | | Patti | ing Para. | |
| 0.00 | 0,00 | Supply Overtime | 5 s > | Patting Mode | No-Patting > | Filing Values |
| 0.00 | 04 0,0 P | | | | | |
| 05 | 06 | | | | | Filing Timer |
| 0.00 | 0.0 | No-Patting | | When Fill | ing | |
| 97 | GS. | | | | - | OverUnder FreeFall Correction |
| 0.00 | 0.0 | | | | | Conscion |
| 0.00 | 10 | | | | | |
| | | | | | | |
| < | > | | | | | |
| Hon | | LL X Statistic Filling Test | A | | <u>()</u> | |



RS485+RS232

• For connecting PC,PLC,Printer,Label Printer, Remote Display,Code Printer,or other external devices,for reading and setup remotely;

USB

 For importing and exporting recipes,works,l/O function communication and other parameters, upgrading system software,customizing boot screen,etc;

12 Input / 16 Output

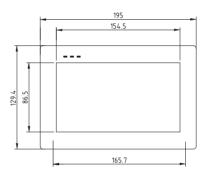
 For starting, stopping, feeding, unloading, clamping/loosening bags, etc;

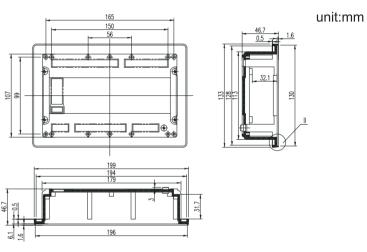
Modbus TCP

• For connecting PC, PLC, Printers, etc., for reading remotely.

Specification

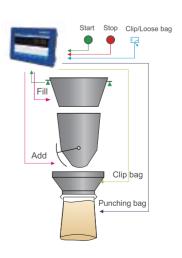
| | Model | GM9907-L4 | |
|-----------------------------------|--|-------------------------------|--|
| | Power Supply | DC24V | |
| General | Operating Temperature | -10~40 °C | |
| Specifications | Maximum Humidity | 90%R.H without dew | |
| Opeomoations | Test Standard | Class III 6000 e, 1 µ V/e | |
| | Power Consume | About 15W | |
| | A/D converter type | 24 bit Sigma-Delta | |
| | A/D Conversion Rate | 120/240/480/960 times / sec | |
| | Non-Linear | 0.01%F.S | |
| | Gain Drifting | 10PPM/C | |
| Measurement | Minimum Sensitivity | 0.02μV/d | |
| parameters | Analog Input Range | 0.02~15mV | |
| Parameters | Display Accuracy | 1/100,000 | |
| | Power Source for Load Cell | DC5V 125mA(MAX) | |
| | Input Resistance | 10ΜΩ | |
| | Zero Point Adjustment Range | 0.002~15mV (load cell 3mV/V) | |
| | 2 Input 16 Output, I/O Selectable | | |
| I/O Interfaces and Communications | 12 Input, Active-low Start, Emergency stop, Stop, Zeroing, Clear alarm, Change recipe, Bag Lock/Unlock, Manual discharge, Manual fine flow, Manual coarse flow, Clear total ACUM, etc. | | |
| | 16 Output, Single drive current 500mA Run, Stopped, Coarse flow, Medium flow, Fine flow, Bag lock, Result waiting, Pat bag, FILL, Batch complete, Supply full, Pause, etc. | | |





*Specification and dimension may be upgraded, please consult sales manager for the latest info.

Application Diagram



Reduce weight method packing

-41-



GM9907-L5 is designed for bulk scale to solve the problem of batch weight and automatic totalizing of incoming and outgoing material. it can be used widely used in chemical, grain, feeds. construction and harbor logistics industies etc.

Version Features



 Memory card build in, 7-inch touch screen for displaying clearly and operating easily;

• Flow rate function can discharge material automatically and alarm when flow rate is low,which is more intelligent;

| 01 | | Target Flowrate On/OFF | Filling |
|------|------|--|----------------|
| 03 | 04 | Target Flowrate 20, 00 t/h) | |
| 0.00 | 0.00 | Flowrate Low Alarm On/OFF | Filing Tim |
| 0.00 | 06 | Flowrate Low Alarm Trigger Count 3 PCS 3 | Over/ Under |
| 07 | 08 | Flowrate Low Auto Adjust On/OFF | ∠ Floerat |
| 0.00 | 0.00 | | ` Functio |
| 09 | 10 | | |
| 0.00 | 9.00 | | Motor Gro |
| < | > | | |



Two scale mode: Stock-In or Stock-Out;
 Data information is more convenient to operate;

| Recipe | Scale Mode | Stocken > | Permanent ACUM | 5 pc |
|--------------|-----------------|-----------|----------------|--------|
| ACUM | Stock-Cut Total | 0.00 kg> | | 0.00 k |
| | Scale Mode | | | × |
| User ACUM | | | | |
| | | | | |
| | Stock-Ir | | Stock-Out | |
| | | | | |
| | | | | |
| History | _ | | | |
| Data | | | | |



• Two packing mode: Motor or Pneumatic; Add/Discharge feed is more convenient;

| Motor & Back | | 50.00 kg | |
|----------------------------|----------------|------------------------|------------------------|
| Filing | | | DISC |
| Fill Gate Driver | Motor Drived > | DESC Gate Driver | Normal Motor(One Pos.) |
| Filler Motor Cfg ID | 0 > | DISC Gate Pos.Signal | ON:1f Closed) |
| Co-Fi∎ Gate Open Time | 0.8s > | DISC Gate Pos.Detect w | then Filling |
| Fi-Fill Gate Open Time | 0.2s > | DISC Gate Close OverT | ime 3.0s > |
| Filler Gate Close OverTime | 4.0s > | DISC Gate Open Timer | 1.0s > |
| Filler Gate Pos. Signal | ON/If Closed | | |
| | | | |
| Satura Satura | X . | A Bristonia | (I) (D) |

Communication

RS485+RS232

• For connecting PC,PLC,Printer,Label Printer, Remote Display,Code Printer,or other external devices,for reading and setup remotely;

USB

 For importing and exporting recipes,works,I/O function communication and other parameters, upgrading system software,customizing boot screen,etc;

12 Input / 16 Output

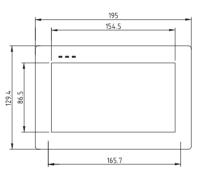
 For starting, stopping, feeding, unloading, clamping/loosening bags, etc;

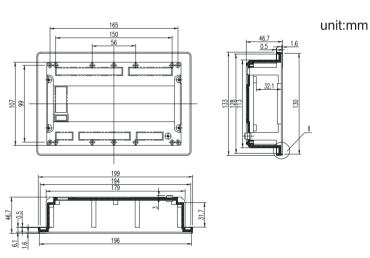
Modbus TCP

• For connecting PC, PLC, Printers, etc., for reading remotely.

Specification

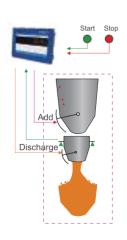
| | Model | GM9907-L5 | |
|--------------------|--|--|--|
| | Power Supply | DC24V | |
| General | Operating Temperature | -10~40 °C | |
| Specifications | Maximum Humidity | 90%R.H without dew | |
| • | Test Standard | Class III 6000 e, 1 μ V/e | |
| | Power Consume | About 15W | |
| | A/D converter type | 24 bit Sigma-Delta | |
| | A/D Conversion Rate | 120/240/480/960 times / sec | |
| | Non-Linear | 0.01%F.S | |
| | Gain Drifting | 10PPM/°C | |
| Measurement | Minimum Sensitivity | 0.02μV/d | |
| parameters | Analog Input Range | 0.02~15mV | |
| | Display Accuracy | 1/100,000 | |
| | Power Source for Load Cell | DC5V 125mA(MAX) | |
| | Input Resistance | 10ΜΩ | |
| | Zero Point Adjustment Range | 0.002~15mV (load cell 3mV/V) | |
| | 12 Input 16 Output, I/O Selectable | | |
| I/O Interfaces and | 12 Input, Active-low Start, Emergency stop, Stop, Zeroing, Clear alarm, Fill permission, Clogged, Manual fine flow, etc. | | |
| Communications | 16 Output, Single drive current 500m Run, Stopped, Clogged, Coarse flow, Fin | A e flow, Result waiting, Over/under, Alarm, Stock-out Done, Last feed, DISC, -NZ-, etc. | |





*Specification and dimension may be upgraded, please consult sales manager for the latest info.

Application Diagram



Continuous Weighing

-43-

GM9907-L6/L6D Liquid Filling Controller

Weighing automation technology



GM9907-L6/L6D is designed for single/double nozzle liquid filing applications. It can widely used in food&beverage, chemical, coating industries and so on.

Version Features

User-Friendly · Better Experience

 Memory card build in, 7-inch touch screen for displaying clearly and operating easily;

• L6/L6D single or double nozzle liquid

filling applications can be chosen. UI



 It can store 20 pieces of formulation for different materials filling.





 Automatic 2-filling speed, feed control function, easy to connect with front-end equipment.

| Process Paramete | Run 50.0 | 00 kg 2021/01/06 14:00 Reserved > |
|------------------------|------------------------------------|--------------------------------------|
| Start | Filling Start Pre-Delay 0.1s > | Intellengent Filling |
| Condition | Cowenbibit Timer(SP1) 0.6s > | Auto Filling Speed 0) |
| Pipe Drop Process | Cowenbibit Timer(SP2) 0.8s > | Positive Error Control |
| Filing > | Result Checking Timer 0.58 > | Filling Filter Level 0 > |
| Process | Filling Signal Combination Filling | Filling Threshold Value 0.00 kg > |
| Checking | A SP1 Output Output-16 > | Leaking Detect |
| Bucket Move Proness | A SP2 Output Output-16 > | SP1 Flowrate Low Limit 0.00 kg/s > |
| | | Weight Sudden Drop Alarm 1.23 kg > |
| S Home | ill | |

Communication

RS485+RS232

• For connecting PC,PLC,Printer,Label Printer, Remote Display,Code Printer,or other external devices,for reading and setup remotely;

USB

• For importing and exporting recipes,works,I/O function communication and other parameters, upgrading system software,customizing boot

12 Input / 16 Output

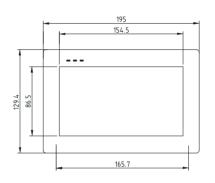
• I/O programmble.

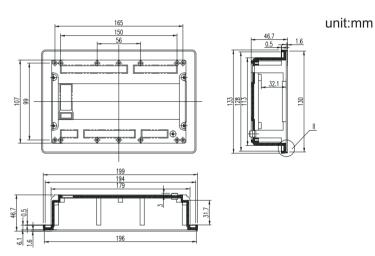
Modbus TCP

• For connecting PC, PLC, Printers, etc., for reading remotely.

Specification

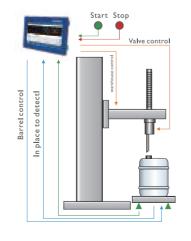
| | Model | GM9907-L6/L6D | |
|--------------------------------------|--|--|--|
| | Power Supply | DC24V | |
| General | Operating Temperature | -10~40°C | |
| Specifications | Maximum Humidity | 90%R.H without dew | |
| • | Test Standard | Class III 6000 e, 1 µ V/e | |
| | Power Consume | About 15W | |
| | A/D converter type | 24 bit Sigma-Delta | |
| | A/D Conversion Rate | 120/240/480/960 times /sec | |
| | Non-Linear | 0.01%F.S | |
| | Gain Drifting | 10PPM/C | |
| Measurement | Minimum Sensitivity | 0.02μV/d | |
| parameters | Analog Input Range | 0.02~15mV | |
| | Display Accuracy | 1/100,000 | |
| | Power Source for Load Cell | DC5V 125mA(MAX) | |
| | Input Resistance | 10ΜΩ | |
| | Zero Point Adjustment Range | 0.002~15mV (load cell 3mV/V) | |
| | 12 Input, Active-low | | |
| | Start, Emergency stop, Zeroing, Clear alarm, Switch formula, Dropping/lifting nozzle, feeding, etc | | |
| I/O Interfaces and Communications | 16 Output, single drive current 500 Run, Stop, Fast feeding, Slow feeding Batching finish, etc. | mA g, Constant value, Over/Under weight, Alarm, Move barrel, dropping nozzle, | |



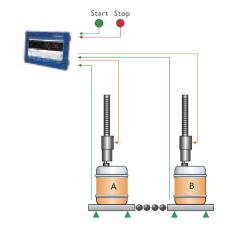


*Specification and dimension may be upgraded, please consult sales manager for the latest info.

Application Diagram



Single Nozzle for Liquid Filling Application



Double Nozzle for Liquid Filling Application

-45-



GM9907-LB is designed for batching scale that can sort feeding orders of a variety of materials. It can be widely used in concrete mixing, bituminous mixing, metallurgy, chemical, feeds industries etc.

Version Features



- Memory card build in, Dynamic batching process can be graphically displayed for better understanding and monitoring;.
- Support the batching of 12 kinds of materials.
 It can be customized according to the batching process sequence, which is flexible to use;





• The working process is clear. Feeding value and time of the material can be set, and real-time feeding dynamic can be displayed;

| Recipe | | | |
|---------------------|---|--------------------------|-----|
| Recipe1 Supplement2 | | Filling PreDelay Timer | . 5 |
| Target | > | COMP.Inhibit Timer(Co-F) | . 5 |
| Co-Fill Ramin | > | COMP.Inhibit Timer(Me-F) | . 5 |
| Me-Fill Ramin | > | COMP.Inhibit Timer(Fi-F) | . 5 |
| Free Fall | > | Stir Control | . 5 |
| Over Limit Value | > | | |
| Under Limit Value | > | | |
| Fill Pause Control | | | |



• User-friendly design: Save function when power down and monitoring alarm function;





RS485+RS232

• For connecting PC,PLC,Printer,Label Printer, Romote Display,Code Printer,or other external devices,for reading and setup remotely;



• For importing and exporting recipes,works,I/O function communication and other parameters, upgrading system software,customizing boot screen.etc:

12 Input/16 Output

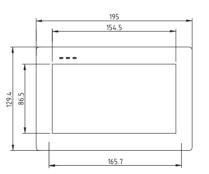
• For starting, stopping, feeding, unloading, clamping/loosening bags, etc;

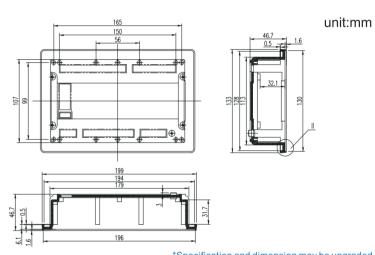
Modbus TCP

• For connecting PC, PLC, Printers, etc., for reading remotely.

Specification

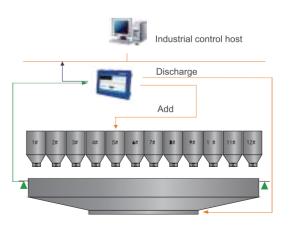
| | Model | GM9907-LB | |
|--------------------|---|--|--|
| | Power Supply | DC24V | |
| General | Operating Temperature | -10~40°C | |
| Specifications | Maximum Humidity | 90%R.H without dew | |
| Opodiloadoris | Test Standard | Class III 6000 e, 1 μ V/e | |
| | Power Consume | About 15W | |
| | A/D converter type | 24 bit Sigma-Delta | |
| | A/D Conversion Rate | 120/240/480/960 times /sec | |
| | Non-Linear | 0.01%F.S | |
| | Gain Drifting | 10PPM/C | |
| Measurement | Minimum Sensitivity | 0.02μV/d | |
| parameters | Analog Input Range | 0.02~15mV | |
| • | Display Accuracy | 1/100,000 | |
| | Power Source for Load Cell | DC5V 125mA(MAX) | |
| | Input Resistance | 10ΜΩ | |
| | Zero Point Adjustment Range | 0.002~15mV (load cell 3mV/V) | |
| | 12 Input 16 Output, I/O Selectable | | |
| | 12 Input, Active-low | | |
| I/O Interfaces and | Start, Emergency stop, Stop, Pause, 2 | ZERO, Clear alarm, Change recipe, M-DISC permission, TARE, Clear tare, | |
| Communications | Manual stir, etc. | | |
| | 16 Output, Single drive current 500m/ Run, Stopped, Coarse flow, Medium fl | A low, Fine flow, Result waiting, Over/under, DISC, -NZ-, Alarm, Stir, etc. | |





*Specification and dimension may be upgraded, please consult sales manager for the latest info.

Application Diagram



Batching, up to 12 materials

-47-

Highly Visible Remote Display



Remote display is a outdoor truck scale weight display of highest quality with full stainless steel body with IP65 standard, which is the ultra light LED display with wide viewing angle of 170 degrees and crystal clear under sunlight.



Remote Display GM8892



High Clarity LED Remote Display for Truck Scales



Remote Display GM8895



High Clarity LED Remote Display for Truck Scales



Communication

Our remote display offer unmatched flexibility with smart data recognition system compatible with indicators for truck scales, such as AD-4321, AD-4323, TOLEDO, Fairbanks, R2500, UMC600, GSE50 serial, Rinstrum, WI-125, WI-127, Df1500 etc.





-49-



Standard Specification

| Model | GM8892 | GM8895 |
|--------------------------------|--|--|
| INDICATOR POWER | | |
| Power Supply | 90V ~ 260V AC 50Hz(or 60Hz)±2% | 90V ~ 260V AC 50Hz(or 60Hz)±2% |
| Power Consume | 20W | 40W |
| DISPLAY | | |
| Display | 6 digits, 7 segments, Ultra bright LED | 6 digits, 7 segments, Ultra bright LED |
| Digits Size | 2.5" | 5.0" |
| LED Indicators | 3 LED, Gross, Net, Motion | 3 LED, Gross, Net, Motion |
| Visible angle | 10 degree to 170 degree | 10 degree to 170 degree |
| ENVIORNMENTAL | | |
| Operating Temperature | -10°C to 40°C | -10°C to 40°C |
| Storage Temperature | -25℃ to 70℃ | -25℃ to 70℃ |
| Humidity | 90% R.H without dew | 90% R.H without dew |
| IP Level | IP65 | IP65 |
| MECHANICAL DATA | | |
| Dimensions with sun shelter | 582×228×200 (L×W×H) | 905×295×258 (L×W×H) |
| Dimensions without sun shelter | 578×226×76 (L×W×H) | 900×280×107 (L×W×H) |
| Weight | Approx. 8kgs | Approx. 16kgs |
| Certification | CE | CE |
| Enclosure | stainless steel | stainless steel |
| COMMUNICATION | | |
| Interface | RS485/RS232; Current Circle; Wireless(Op | otional) |
| INDICATOR SUPPORTED | | |

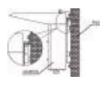
AD-4321, AD-4323, TOLEDO&Fairbanks, R2500, UMC600, GSE50 serial, Rinstrum, WI-125, WI-127, DF1500

Dimensions

Unit:mm

GM8892



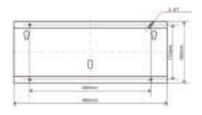




GM8895







-50-

^{*}Specification and dimension may be upgraded, please consult sales manager for the latest info



OPERATING INSTRUCTION

Terminal identification

• GM-JX-M can connect with the analog or digital load cell.

When applying to the analog load cell:

• EX+: EXCITATION +

• SIG-: SIGNAL -

• EX-: EXCITATION -• SIG+: SIGNAL+

• SHLD: SHIELD

(When the load cell is six-wire, short-circuit the +excitation and +sense to EX+, short-circuit the -excitation and -sense to EX-.)

②When applying to the digital load cell:

• 12V+: EXCITATION + • 12V-: EXCITATION - • SHLD: SHIELD

A: SIGNAL A B: SIGNAL B

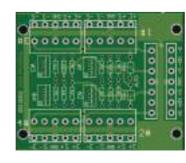
Adjustment Method

①Switches SW1-SW4 can be assigned to control the on-off of each load cell for single-channel load cell adjustment.

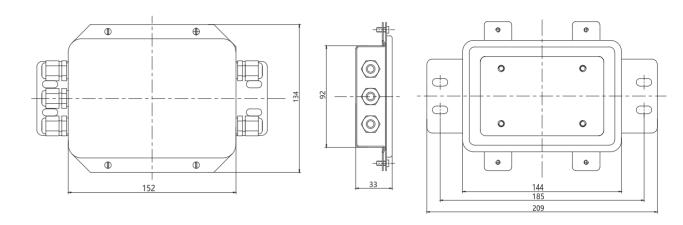
②Potentiometer R1-R4 can fine-tune the output signal of each load cell respectively for adjustment of the four corners of the load cell.

Four-Angle Deviation Adjustment Method

- Step 1: Before adjustment, the four-channel potentiometer is gently rotated to the middle position;
- Step 2: Fine-tune the channel with large deviation to the average value (close the other three channels when observing one channel);
- Step 3: Repeat step 2 until the millivolt signals of four-channel are similar.

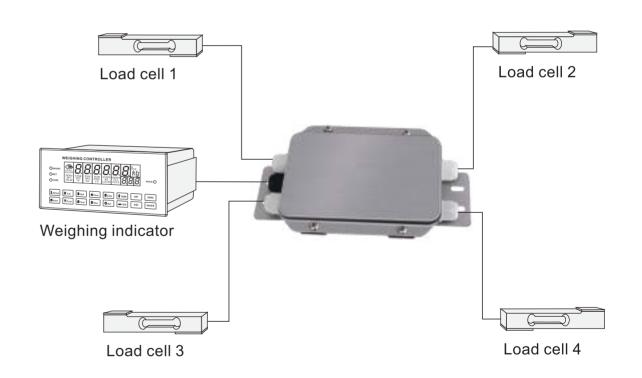


Dimensions Unit:mm



*Specification and dimension may be upgraded, please consult sales manager for the latest info

Connection Diagram



-52--51-



GMA-JB4-Ex is an intrinsic safety explosion-proof junction box that supports connections for 4 analog or digital load cell in 4-wire. By adjusting the resistance value of the potentiometer, it compensates for angle deviations, effectively resolving inaccurate weight results caused by angle differences in weighing applications. Stainless steel housing with 5 explosion-proof cable glands(Ex Marking: Ex db IIC Gb, IP Rating: IP66) delivers enhanced protection and superior anti-interference performance. Certified for intrinsic safety explosion-proof standards, it is ideal for deployment in hazardous environments.

● Ex marking: Ex ia IIC T4 Ga ● IP Rating: IP65

OPERATING INSTRUCTION

Terminal identification

• GMA-JB4-Ex can connect with the analog or digital load cell.

①When applying to the analog load cell:

• EX+: EXCITATION + • SIG-: SIGNAL - • EX-: EXCITATION - • SHLD: SHIELD

• SIG+: SIGNAL+

(When the load cell is six-wire, short-circuit the +excitation and +sense to EX+, short-circuit the -excitation and -sense to EX-.)

②When applying to the digital load cell:

• 12V+: EXCITATION + • 12V-: EXCITATION - • SHLD: SHIELD

A: SIGNAL AB: SIGNAL B

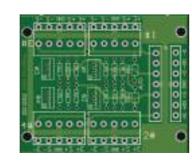
Adjustment Method

①Switches SW1-SW4 can be assigned to control the on-off of each load cell for single-channel load cell adjustment.

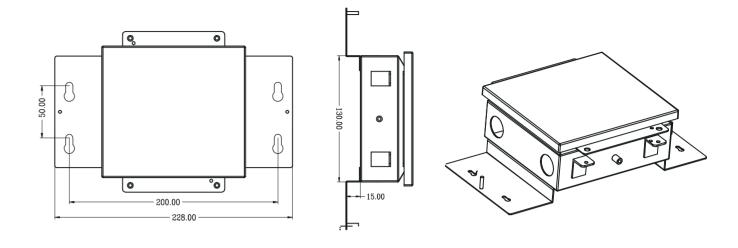
②Potentiometer R1-R4 can fine-tune the output signal of each load cell respectively for adjustment of the four corners of the load cell.

Four-Angle Deviation Adjustment Method

- Step 1: Before adjustment, the four-channel potentiometer is gently rotated to the middle position;
- Step 2: Fine-tune the channel with large deviation to the average value (close the other three channels when observing one channel);
- Step 3: Repeat step 2 until the millivolt signals of four-channel are similar.



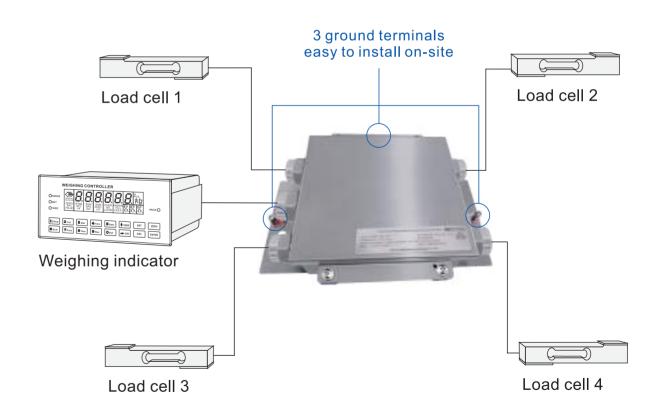
DimensionsUnit:mm



*Specification and dimension may be upgraded, please consult sales manager for the latest info

Connection Diagram

Unit:mm



-54-