

GMI-500 Digital Weighing Indicator Operation Manual

Version 2.1



Gamma Scale

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1. Main Data

- 1.1 Zero-load signal input range: 0mV ~ 16mV
- 1.2 Zero point temperature drifts $\leq 0.15\mu\text{v}/^\circ\text{C}$
- 1.3 Sensitivity temperature drifts $\leq 12\text{ppm}/^\circ\text{C}$
- 1.4 A/D conversion resolution ratio: 280000
- 1.5 Display resolution ratio: 20000
- 1.6 A/D conversion rate: 5 ~ 20T/S
- 1.7. Accuracy class: III
- 1.8 Non-linearity: $\leq 0.01\%$ F•S
- 1.9 Load cell exciting power: DC8V, driving 4 load cells of 350 Ω
- 1.10 Operation temperature: 0 ~ 40 °C
- 1.11 Storage environment temperature: -25°C ~ 55°C
- 1.12 Relative humidity: $\leq 90\%$ RH (No condensation)
- 1.13 Min display value 1 / 2 / 5 available
- 1.14 Display style: 6-Digit 0.8-Inch 7-Segment LED
- 1.15 Thirteen Max. Capacities optional: 6kg (12lbs) ~ 10000kg (20000lbs)
- 1.16 Baud rate for data output available: 600, 1200, 2400, 4800 and 9600
- 1.17 Power supply: AC 110V; Rechargeable Battery 6V (Option)
- 1.18 Dimensions (L x H x W): 24cm x 14cm x 16cm
- 1.19 Weight: 2.26kg

2. Main Features

- 2.1 External graduation number up to 20000e
- 2.2 Complete keyboard calibration
- 2.3 Auto zero tracking
- 2.4 Full range tare

- 2.5 Overload indicating
- 2.6 Weight and times accumulating
- 2.7 Display converting between gross weight and net weight
- 2.8 Unit switch
- 2.9 Two calibration methods: Fixed point and arbitrary point calibrating
- 2.10 Extended display (i.e. minor counts display function)
- 2.11 RS-232C output (option)
- 2.12 Holding and printing function

3. Panel keypad function

I/O key: Power on and off key

M/MC key: Storage calling and clearing key

Hold/P/Exit: Printing and holding key

G/N: Gross weight /net weight converting key

UNIT: Unit switch and digit increment key

T/ENTER: Tare and confirming key

→0←: Zero-setting and place shifting key

4. Operation Keys Instruction

4.1 Zero and place-shifting key

Under weighing state, when the weight displayed is not more than 2% of Max. Weighing capacity, you can press this key to make the display return to zero. While pressing this key repeatedly, you can make the display of not more than 5% Max. Capacity returns to zero. At the same time, “→0←” light on the LED screen is on.

4.2 Tare and confirmation key

Under weighing state, when the weight loaded on the scale platform is not more than Max. Capacity plus 9e ("e" refers to division value), you can make the display return to zero by pressing this key, and the light "T" on the screen will be on. At this time if you remove the article from the scale platform, the screen displays a negative value. If you press this key again, the display returns to zero and the light "T" is off.

4.3 Unit converting and digit increment key

If you press this key, the weight unit will convert between "kg" and "lb".

4.4 Gross / Net weight converting key

This key is used for converting the display lay value between gross weight and net weight.

4.5 Printing key

This key is used for printing when scale connected with printer.

4.6 Storing and display calling and clearing key

1> Accumulate the displaying value by pressing this key. While accumulating, the indicator will first display the accumulated times and then display the accumulated weight value in 2 times.

2> Press this key to call the accumulated value for display.

3> Press and hold IM id key for 5 seconds, you can clear accumulation record. When the accumulation value is cleared, the "M+" indicating light will be off.

4.7 Power on and off key

Used for turning on and off power supply.

5. Use Guide

5.1 Be sure that the ground terminal of AC power is properly grounded.

5.2 Weighing (tare included) can't exceed the scale's Max. Capacity plus 9e ("e" refers to the division value). When the weighing is more than the value, the indicator displays I FULL.

5.3 Never disassemble it without authorization.

5.4 If the indicator displays nothing or its display doesn't change after power on, please try to turn it off and turn it on again.

5.5 Turn off power supply and pull out its power plug at once if it is out of order. Non-specialized manufacturer or non-professional staff can't fix it without authorization; you can contact our selling agent in your area.

5.6 Never try to change its setup data, unless permitted by the laws.

6. Operation

6.1 Power on

Insert power plug and press [I/O] to switch on the indicator. The indicator first displays an edition number and then carries through self-checking from "09" to "0" successively. If the load cell input connection is correct and zero position is normal, the indicator will display 0.

6.2 Green power

When scale not in use for certain period, the indicator will display '□', scale goes to sleeping mode to save power. Scale will wake up whenever you start to use it.

6.3 Zero setting

When the weighing is under 2%F•S and if you press →0←, the indicator displays 0. And the repeated zero-setting range is 5%F•S for the indicator. When the indicating light "T" is on, you can not carry through zero-setting operation.

6.4 Deducting tare

1> If you want to regard the weight of the article loaded on the scale platform as a tare weight to deduct, press →T←, the indicator will display 0 and the indicating light "T" will be on. The tare weight value been deducted repeatedly can't exceed the Max capacity.

2> When the indicator display 0 and the indicating light "T" is on, if you press →T←, the light "T" will be off.

3> See the following table for negative tare appearing and clearing.

6.5 Accumulation

While carrying through weighing each time, you can accumulate the weighing result by pressing [M+]. And you can also clear the accumulated values in memory by pressing and holding [M+] for 5 seconds.

6.6 Display converting between gross weight and net weight

Under weighing state, you call press G/N to convert the display value between gross weight and net weight. When the indicator displays the net weight, the weight "N.W." is on. If the light "N.W." is not on, the displaying value is the gross weight.

6.7 Rechargeable battery maintaining

Notes: Rechargeable battery is an option; please skip this section if battery not installed.

1> You can always use AC power with rechargeable battery installed inside. In order to prolong the working time of the rechargeable battery, please charge your battery in time.

2> Low battery: When scale keeps shutting off, the output of the rechargeable battery may too weak to work normally. You may not turn on the scale, or the scale will automatically stop working in 1 minute after your turn it on.

3> If the indicator is not used for a long time, be sure that the storage battery is in power off state.

4> If you find the working time is rather short for the rechargeable battery that is fully charged, you should consider changing the battery.

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