



# 1.Synopsis

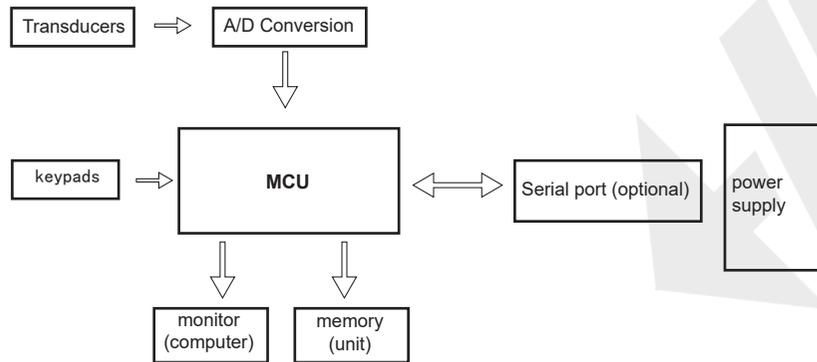


Some of the products in this series are shipped with transportation safety screws, please remove the screws on the bottom surface before use, otherwise it will cause damage to the sensor.

Welcome to use our 8001 series electronic weighing scale. This product adopts advanced eight-bit single-chip microcomputer and high-precision load cell, with rapid and accurate measurement, stable and reliable performance, large LCD display, clear and easy to read, AC and DC dual-use, easy to use.

- ▲ Large LCD display with LED backlight, easy to read.
- ▲ Dual use of AC and DC
- ▲ With checkweighing function and three-color backlight.
- ▲ Backlight can be selected from normally closed or automatic backlight.
- ▲ Switching function of weighing unit

### ■ System Block Diagram



# 2. Basic models and sizes

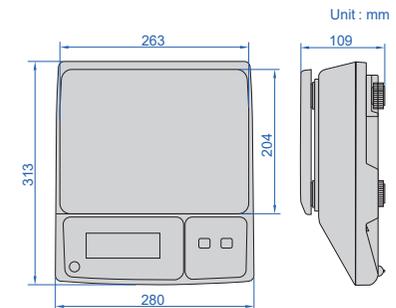
### ■ Products



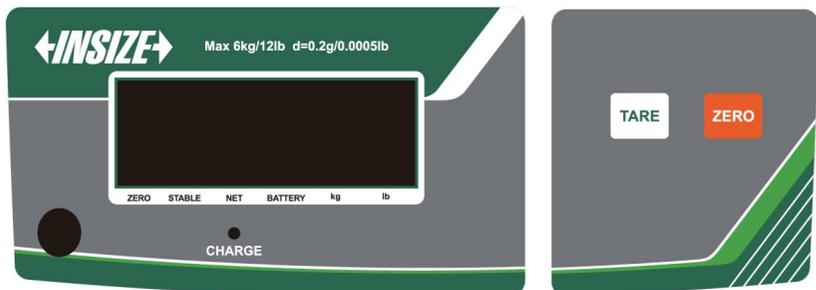
### ■ Product Specification

Code	8001-6	8001-15	8001-30	8001-6D	8001-15D	8001-30D
Maximum weighing	6kg	15kg	30kg	6kg	15kg	30kg
Minimum weighing	4g	10g	20g	4g	10g	20g
Resolution (d)	0.2g	0.5g	1g	0.2g	0.5g	1g
Accuracy (m is load)	ms1kg: ±1g 1kg~ms4kg: ±2g m>4kg: ±3g	ms2.5kg: ±2.5g 2.5kg~ms10kg: ±5g m>10kg: ±7.5g	ms5kg: ±5g 5kg~ms20kg: ±10g m>20kg: ±15g	ms1kg: ±1g 1kg~ms4kg: ±2g m>4kg: ±3g	ms2.5kg: ±2.5g 2.5kg~ms10kg: ±5g m>10kg: ±7.5g	ms5kg: ±5g 5kg~ms20kg: ±10g m>20kg: ±15g
Units	kg, lb			kg		
Output	no			RS232		
Operation temperature	-10~40°C					
Power	rechargeable lead acid battery (6V/3.2Ah)					
Dimensions of pan	263×204mm					

### ■ Product Size



### 3. Display and keys



■ Functional description of each key

keys	function
	<p><b>Function 1:</b> Deduction key, press this key to perform the deduction operation, press this key and keep it pressed for 3 seconds to perform the unit switching operation.</p> <p><b>Function 2:</b> Selection key in setting status</p>
	<p><b>Function 1:</b> Zeroing operation by pressing this key in the weighing state.</p> <p><b>Function 2:</b> Confirmation key in the setting state.</p>

■ Description of instructions

indicator light	marking
ZERO	zero position marker
STABLE	stable mark
NET	Net weight marker
BATTERY	Lack of power marking
kg	Marking of weighing units in kg
lb	Marking of weighing units in lb

### 4. Operation

■ Precautions for use

- ▲ Open the box and take the scale slowly out of the package box to make sure there is no damage as well as all the accessories are complete.
- ▲ Remove the protective cover. If you want to forward it to another place, please place and use the package properly.
- ▲ Check scales and terminals for damage. Make sure all accessories are complete
- ▲ After obtaining this product for the first time, please charge the battery immediately and wait until the battery is fully charged before you start using it.
- ▲ When the power inside the machine is insufficient and the power shortage mark is on, please plug it into the AC power supply to charge it. If you continue to use it without charging it, the machine will display 'BAT LO' every 5 minutes as a reminder, and it will automatically cut off the power after 30 minutes for the protection of the battery inside the machine.
- ▲ The power indicator light is red when charging, when the power indicator light turns green it means that the power is sufficient.
- ▲ Do not over discharge the battery to protect the battery life.
- ▲ The first time you obtain this product, please charge it continuously for 12 hours before use to ensure that the battery is fully charged.
- ▲ If the product is not used for a long time, it should also be charged every three months.

■ Basic operation

▲ Start-up instructions

Before powering on, please make sure the scale is in no-load state. Press the on/off key to turn on the machine, the switch is on the lower right side of the scale, after the machine is turned on, it displays the version and range, then performs self-test, and then enters the weighing state.

When the scale enters the display state, it will be automatically zeroed (more than 10% of the full scale range will not be automatically zeroed) and the zero mark will be on. If it is not zeroed, it can be zeroed manually. (see zeroing instructions)

\*If the unit powers off 2 minutes after powering on, this may be caused by a lack of battery power, please plug in the AC power to recharge and continue to use. Please plug in AC power to recharge the battery and continue to use.

▲ Overload warning

Please do not load more than the maximum weighing capacity. When '-----' is displayed, please remove the items on the pan immediately to avoid damage to the sensor.

▲ Zeroing Instructions

When there is no item on the pan and the weight is displayed, you can press the **ZERO** key to reset to zero.

When the weight exceeds 2% of the maximum capacity, the zeroing function is disabled.

▲ Description of weight deduction

Put on the buckling weight, when the stabilization mark is on, press the **TARE** key to buckling weight, the net weight mark is on, and then load again, the net weight is displayed; after removing all the weights, a negative number will be displayed, and pressing the buckling key will release the buckling weight status, the displayed value is 0 at this time, and the net weight mark is off.

▲ Setting the backlight

In the weighing state, press and hold the **ZERO** key to display 'BK-AU'; press the **TARE** key to select (AU: automatic, OF: off), press the **ZERO** key to confirm and return to the weighing state.

▲ Setting upper and lower limit values

In the weighing mode, press the **TARE** key and the **ZERO** key at the same time, the display will show "00.00h" (set upper limit) with the number and the letter h cyclic; press the **TARE** key to change the checkweighing value, press the **ZERO** key to confirm and shift the position. Press the **ZERO** key to confirm the last shift and the display will show '00.00L' (lower limit) with the number and the letter L cyclically;

Press the **TARE** key to change the checkweighing value, press the **ZERO** key to confirm and shift. Press the **ZERO** key to confirm and return to the checkweighing state when the last shift is reached.

In checkweighing mode, the backlight is orange when the weight is below the lower limit, green when the weight is within the upper and lower limits and red when the weight is above the upper limit.

\*The checkweighing function is only valid when the weight is greater than 20d (sense); to disable the checkweighing function, set the upper and lower values to 0.

▲ Setting upper and lower limit values

Power on and enter the parameter selection F8 BEP, press the **TARE** key to select (0: beep off;

1: when the detection is within the limit range, the buzzer sounds alarm;

2: when the detection is out of the limit range, the buzzer sounds alarm), press the **ZERO** key to confirm.

## 5.Parameter setting

■ Entering parameter setting

▲ Press the ON/OFF key to turn on the power, press the **TARE** key to enter the parameter setting, the screen displays 'FOCAL'.

■ Button operation method

▲ Press the **TARE** key to cycle or select other functions, or use the key to change the setpoint.

Press the **ZERO** key to enter or confirm the selected function.

Press the ON/OFF key to exit the setting state

■ parameter menu

Menu	Descriptive	
F0 CAL	Calibration	
F1 rES	3000	Setting accuracy
	6000	
	15000	
	30000	
	DUAL	
F2 CAP	1.5	Setting range
	3	
	6	
	15	
	25	
	30	
F3 inP	Display of internal code values	
F4 OFF	Setting the automatic shutdown time	
	3 min	Automatic shutdown after 3 minutes
	5 min	Automatic shutdown after 5 minutes
	15 min	Automatic shutdown after 15 minutes
	OFF	Disable this feature

Menu	Descriptive	
F5 GrA	Setting the local acceleration of gravity	
F6 SPd	S-SPD	Setting the AD Conversion Rate
	F-SPD	
	M-SPD	
F7 TN	PtArE	Multiple weight deduction function on
	otArE	Multiple weight deduction function off
F8 bEP	bEP 0	Turn off chirping during checkweighing
	bEP 1	Interval Tweet
	bEP 2	Out-of-Interval Tweet
F9 Unt	G/Lb/tL	Weighing unit g, lb, tL
F10 Ct	on	Turn on the checkweighing function
	oFF	Turn off the checkweighing function

## 6. Calibration

Press the **TARE** key to enter the setting state, the screen displays 'F0 CAL', Press the **ZERO** key to enter the calibration, the screen displays 'UNLOAD', press the **ZERO** key to confirm, at this time, the screen prompts the calibration weight, press the **TARE** key to select the calibration weight, at this time, please empty the pan, put on the calibration weights, and wait for the stability mark to light up, confirm and press the **ZERO** key, the screen displays 'PASS', the calibration is complete.

If any error message appears, please recalibrate.

- parameter menu

## 6. Error Definition

ERR1	Setting date error
ERR2	Setting time error
ERR3	Weights are too light (external calibration); weights for external calibration are less than 10% of the range
ERR4	1. Zeroing outside the zeroing range 2. Zero point obtained at power on is compared to the internal calibrated zero point. (OMIL not greater than 10%) 3. When pressing the zeroing key, the current weight is compared with the zero point obtained at power on. (OMIL not greater than 4%)
ERR5	Bad keyboard or a key pressed for more than 30 seconds
ERR6	A/D conversion, bad sensor, sensor not connected, etc.
ERR7	Percentage sampling error. 0.01% of weight less than 0.5d
ERR8	Weight overrun (external calibration), where the difference between the weight of the externally calibrated weight and the weight obtained from the internal calibration exceeds 4 percent
ERR9	The scale was unstable and the zero and weight buttons were pressed.
ERR10	No data input when serial port receives continuously
ERR11	Detecting protocol inconsistencies in serial port communication when receiving continuously from the serial port
ERR12	1. Accumulation error (the number of times of accumulation exceeds 999 or the weight of accumulation cannot be displayed) 2. Accumulated weight cannot be displayed means that the totalized scored weight is more than 999999 (5-digit LCD is 999999), and the maximum accumulated weight is 999999kg instead of 999.999kg. For example, the maximum totalized weight of 6.000kg is 999999kg instead of 999.999kg.

ERR13	Sampled single weight less than 0.5d
ERR14	Samples sampled too light <20d (count sampling, percentage sampling)
ERR15	The ratio of gravitational acceleration is set incorrectly. (The range is 0.96-1.04.) The gravitational acceleration at the poles is 9.8322 and at the equator 9.7804.
ERR16	Printer out of paper
ERR17	Negative weight, or weight deduction over full scale.
ERR18	Preset tare setting is incorrect. (Out of range, negative value)
ERR19	Initial zero error
ERRP	If the printer does not respond for more than 2 seconds, it means that you need to make sure that the printer can print (e.g., BUSY signal, etc.) before sending data to the printer.
OK	The password is set successfully, the commands (T, R, etc.) sent from the serial port have taken effect, and the commands sent back to the serial port have taken effect.
PASS	Calibration successful
FAIL	Unsuccessful calibration, wrong set password, mainly to prevent empty calibration during internal calibration
NG	Commands sent over the serial port (T, R, etc.) didn't take effect, and the commands sent back
--oL--	Overloading (> range + 9d) NTEP standard, 105% of the calibrated weight is also overloaded
--Lo--	Weight too light (-5%) (zero ratio to linear calibration)
bAt Lo	Power failure (BatLo in five segments) Lead-acid battery's power failure is when the voltage is lower than 5.95V (there is an error, specifically between 5.75V-5.95V) Nickel-metal hydride battery's power failure is when the voltage is detected as 5.5V.