LP7519A

Wireless Weighing Kit

USER MANUAL

Safety Instruction

For safety operation, pls. follow the safety instruction.

WARNING
Setting, Calibration Inspection and Maintain of the indicator is prohibited by Non-professional staff.

WARNING
Pls. make sure the weighing display has good ground in using.

	**WARNING**
	The indicator is the static and sensitive equipment,cut off the power during electrical connections, internal components touched by hand is prohibited, and please take the measure of anti-static.

LIST

1. Instruction **1**
1.1 Main function *1*
1.2 Technical parameter *1*
1.3 Overall dimension *2*
1.4 Battery Instruction *4*
2. Installation and calibration **5**
2.1 Power supply connection 5
2.2 Connection of load cell and transmitter 5
2.3 Communication Interface 6
3. Basic operation and instruction **7**
3.1 Keypad 7
3.2 Power on & off 10
3.3 Zero operation 10
3.4 Tare operation 11
3.5 Accumulation operation 11
3.6 Print 12
3.7 Hold 12
3.8 Count 12
4. Calibration andparameter setting **13**
4.1 Enter setting 13
4.2 Step of calibration operation 14
4.3 Application function parameters setting chart 16
5. Serial Interface reception command **21**
5.1 Enter setting 21
5.2 Step of calibration operation 21
5.3 Application function parameters setting chart 22
6. Maintenance **22**
6.1 Regular error and solution 22
6.2 Daily maintain 24

1.Introduction

LP7519A wireless weighing kit is an electronic weighing kit specially developed by our company for wireless weighing.

The indicator has friendly display interface, simple operation and stable performance. It can be connected wireless with the supporting wireless indicator and scale to realize wireless weighing, and it also has the functions of accumulation , counting, printing etc.

1.1 major function

Weighing function:

Zero, Tare, Accumulation, Printing

Overload remind

Print format: Date, Time, Net, Tare, Gross

Options:

Printer

RS232/RS485 serial interface or second display

1.2 Technical Parameter

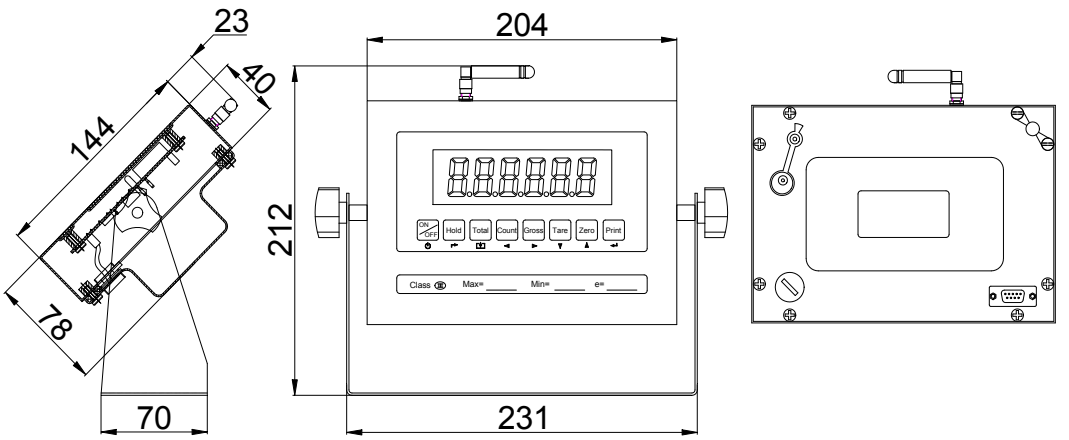
1.2.1 Weighing indicator technical parameters

>> Initial zero range	±10%Max
>> Manually zero range	± 2% Max
>> Tare range	2% ~ 100% Max
>> Zero tracking rate	0.5d/s
>> Communication distance	≤50 meters
>> AC power	AC 110 ~ 240V, 50/60HZ, DC 9V

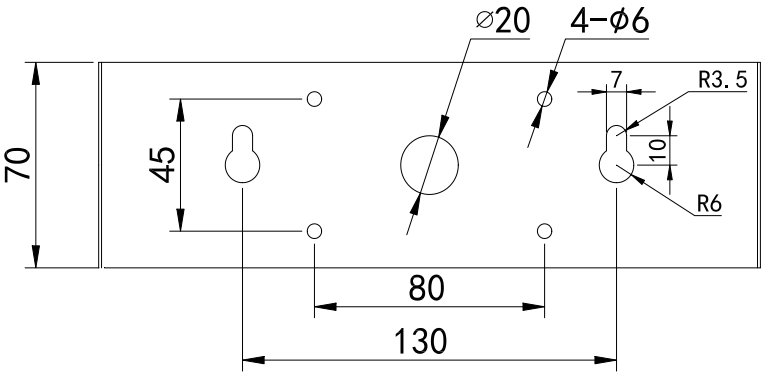
1.2.2 Technical parameters of transmitter

>> Minimum signal voltage	1uv/e
>> Communication distance	≤50 meters
>> Transmitter excitation circuit	DC 3V, 4 wire connection, Maximum connect 6 load cells of 350Ω
>> AC power	AC 110 ~ 240V, 50/60HZ, DC 4.2V
>> Operation temperature & humidity	-10℃ ~ +40℃, ≤85%RH

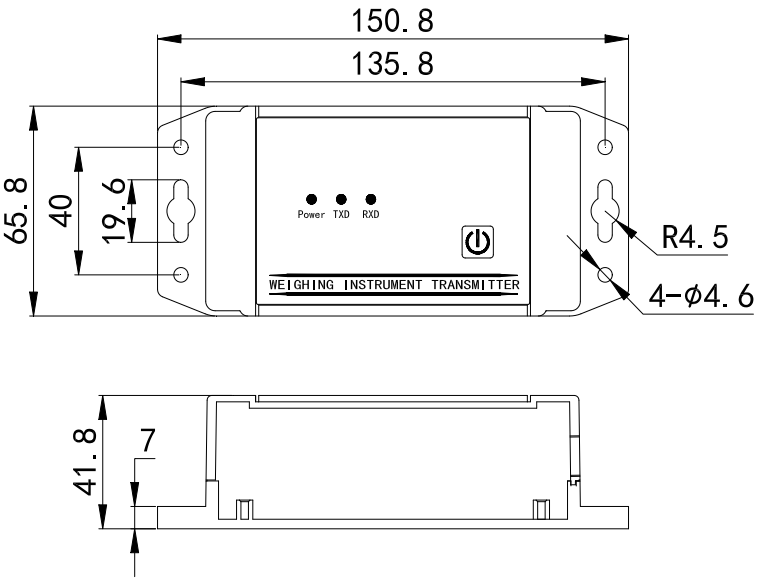
1.3 Drawing



LP7519A indicator



U-shaped support



LP7519SEND transmitter

1.4 Battery Instruction

1.4.1 Battery of weighing indicator

1.The indicator has a built-in 6V/4Ah lead-acid battery which can be continuously used about 25 hours, need to charge about 16 hours.

2.When you use the internal battery first time， you should charge the battery to prevent low voltage resulted from self leakage of battery.

3.The battery voltage could be checked from the light on the right bottom of the display. When low-voltage,  flickering on LCD display; Red light flickering on LED display, then please recharge the battery.

4.When the battery light turns green on LED display or  all full on LCD display , it means charging finish.

5.If you don't use the indicator for a long time, please take out the battery to protect the indicator from the battery leakage.

6.In order to keep good use of the battery, it is recommended to make the battery fully discharged once a month. The discharge method: keep the indicator power on until the battery runs out and automatically shut down.

1.4.2 Lithium battery of transmitter

1.The transmitter has a built-in 3.7V/4Ah lithium battery which can be continuously used about 40 hours, need to charge about 4 hours.

2.When you use the internal battery first time, please charge it by a special lithium battery charger before using it, so as to prevent the transmitter from being stopped due to the lack of power of the lithium battery.

3.When the battery power is too low, the transmitter will automatically shut off.

4.You can check the power of the transmitter in the C43 menu of the indicator, and it needs to be charged when it is lower than 3.5V.

5.When not in use for a long time, it is recommended to charge the battery every two months.

2. Installation And Calibration

2.1 Power Supply Connection

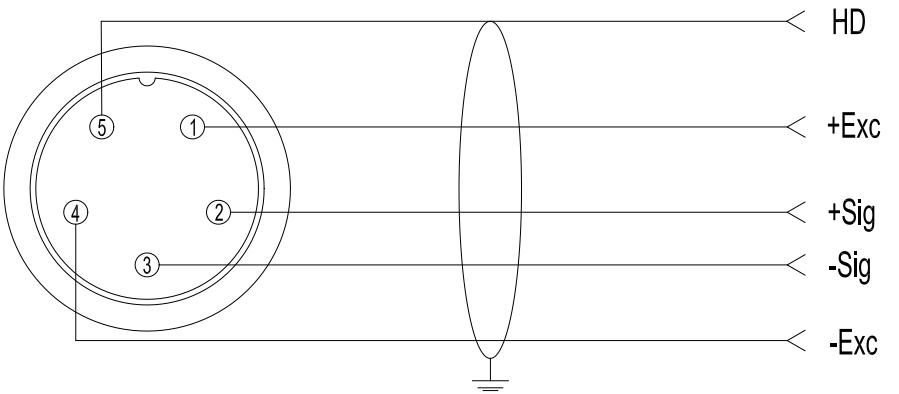
The indicator is powered by DC adaptor, please plug the adapter directly into the “DC” pin at the back cover of the indicator.

The indicator power adapter and transmitter lithium battery charger cannot be mixed.

2.2 Connection of load cell and transmitter

The indicator can connect with 6 pcs load cells of 4 wires 350Ω at most.

Quick disconnect, as below:

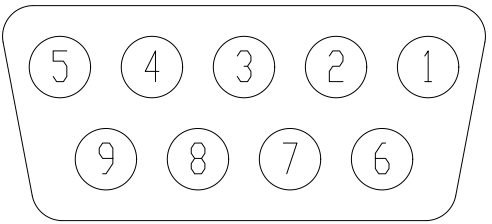


4 wires load cell connector

2.3 Communication Interface

RS232 : DB9 Pin or 3 Pin

DB9 definition



Pin function and definition as bellows:

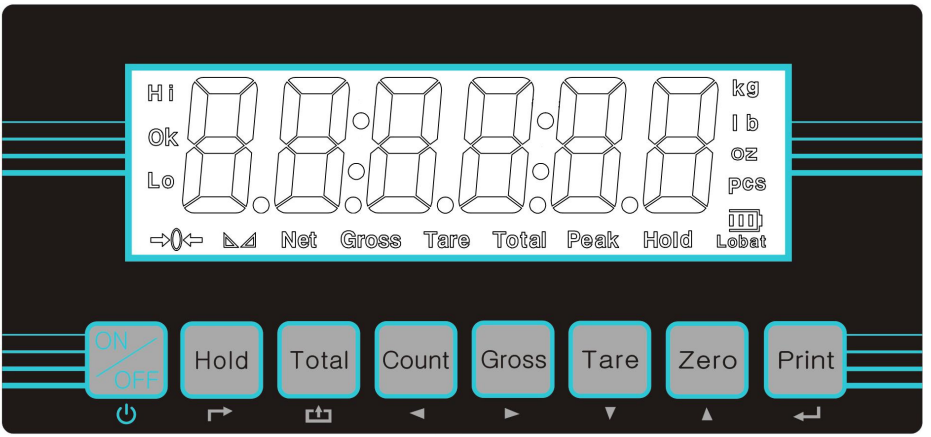
DB9 joint	Definition	Function
2	TXD/A	Transmit data
3	RXD/B	Receiving data
5	GND	Ground interface

Note: if RS485 (option) A and B, the connection pin is 2 pin and 3 pin.

3.Basic Operation And Instruction

3.1 Keypad

3.1.1 Indicator keypad



LCD	Instruction
8	Weighing data
Hi	Over load
OK	Ok
Lo	Under load
⇨0⇦	Zero indicating
◺◿	The weighing data is stable
Net	Net weight
Gross	Gross weight
Tare	Tare status
Total	Go to accumulation mode
Hold	Hold mode
▯▯▯	Battery indicator
PCS	Show the counting status.
kg	kg unit

Keys function

keys	Key name	Key function
ON/OFF	Power on/off	Press 2 seconds to power on or power off.
Hold	Holding the data	1. Holding the data. 2. Work with “PRINT” go to calibration.
Total	Accumulation	1. Accumulation. 2. work together with “ Print” to perform . The accumulation function and check the accumulation result.
Count	Counting	Counting operation.
Gross	Gross weight	1. At Net mode, check the Gross, after 3 seconds back to Net automatically. 2. Work with “PRINT” weight 10 times.
Tare	Tare	At Gross mode, get the tare weight. At Net mode, clear the tare, get the Gross.
Zero	Zero	Zero the weight within zero range.
Print	Print	Print.

3.1.2 Transmitter keypad



Keys function

Key	Key name	Function
	Power on/off	Press and hold for 1 second, the red and green lights flash at the same time, indicating that it is turned on. the red and yellow lights flash at the same time, indicating that it is turned off.

LED function

Name	Function	Color
Power	Blink at low battery	red
TXD	sending signal	green
RXD	receiving signal	yellow

3.2 Power On & Off

Note: When using, the transmitter should be powered on firstly, and then the indicator should be powered on, so that the indicator can awaken the transmitter.

3.2.1 Indicator power on / off

Press and hold the **"ON/OFF"** key of the indicator for one second to turn on/off.

When powered on, the indicator will firstly perform a self-test and try to awaken the transmitter. After the transmitter is successfully woken up, the transmitter green and yellow lights will flash. After the self-test is completed, the current voltage value of the battery of the indicator will be displayed, and then it will enter the weighing state.

Note: If ERR01 is displayed after the self-test, please check whether the antenna connector is installed and whether the transmitter is turned on.

3.2.2 Transmitter power on / off

Press and hold the transmitter  for one second.

The red and green lights flash, indicating that it is turned on.

The red and yellow lights flash, indicating that it is turned off.

3.3 Zero operation

1. Initial zero setting

When power on the indicator, if the weight on the scale is within the initial zero range, indicator show zero automatically.

2. Manually Zero setting

When the scales is stable, you can zero the weight within range by press **“Zero”**keys.

3.4 Tare operation

When the scales is stable, press **"Tare"** key, the gross weight is tared, indicator show the Net weight, the "Net" "Tare" status light is on. At tare mode, Press**"Tare"** key, clear the tare weight, the indicator will show the gross weight.

3.5 Accumulation operation

At zero mode, load weight till stable, press **"Total"** go to accumulation mode, "Total" light on, display **[n 001]**, and then display loaded weight; unload the weight , back to zero, load the second weight again till stable.Press **"Total"** display **[n 002]** then display the second loaded weight. It can be operated for maximum 999 times.

Check the accumulation:

Press **"Print"** and hold it then press **"Total"**, display **[n ***]**(it is the accumulating times) ,then show total weight. there are 8 digits totally. It shows the first 4 digits then the last 4 digits. For example, the first 4 digits is**[0012]**, the last 4 digits is**[34.56]** It means the actual weight is **[1234.56]**.

EXIT the accumulation function:

When the indicator show the last 4 digits, press **"Total"** and hold it, the indicator show **[clr n]**, it means not clear the total Weight, press **"PRINT"** key to back accumulative mode; If you want to clear total weight, press **"ZERO"** or **"TARE"** key, **[clr n]** change to **[clr y]** it means clear total weight ,then press **"PRINT"** to clear the total weight and exit accumulating mode.

3.6 Print

If the weighing is stable, after connecting with printer, press **"Print"** can print the weight.

Note: at tare mode, print with tare. if negative weight, can not print. Set C41 for date format.

3.7 Hold

There are three different hold functions. Peak hold function and data hold function. And the setting is different accordingly.

option：

0= close hold function / 1= Peak hold / 2= Data hold / 3= Auto hold

Instruction:

Peak-hold: it shows the max. weight value, mainly application for materials testing, such as tension and pulling force.

Date-hold: it shows current weight value. Mainly application for animal weighing.

Auto-hold: When the goods remain stable on the scale, the indicator will automatically "Hold" for 6 seconds.

3.8 Count

1.At weighing mode, load the weights on the platform scales, press **"Count"** the indicator show **[PCS 0]** press **"Zero"** key input the quantity, press **"Print"** to confirm it.

2.Load the goods on the platform scales, then the indicator will show the quantity.

3.Press**"Count"** back to weighing mode.

4.If you want to weigh different goods, at weighing mode, put the sample on the platform scales,Press the **"Count"** key to enter the counting mode.Press **"Print"** hold it and then press **"Count"** the indicator show**[PCS 0]**, press **"Zero"** input the sample quantity, press **"Print"** to confirm it. Then repeat the step 2 and 3.

4.Calibration And Parameter Setting

4.1 Enter setting

There have two methods to enter the setting menu:

1.Put the switch “MARK” to “On” position, enter calibration.
And when calibration is finish. Put the switch “ MARK” to “Off” position. Then add the sealing screw at the back of indicator.

2.when the switch “MARK” is “On” position, press the **“Print”** hold it and then press **“Hold”** enter calibration.

The key functions in setting：

Symbol		Name	Function
Hold		BACK	Return to the previous menu
Total		EXIT	Return to the weighing interface
Count		LEFT	Move the flashing bit to the left and select the value to be set
Gross		RIGHT	Move the flashing bit to the right and select the value to be set
Tare		UP	Select add number when entering a number
Zero		DOWN	Select decrease number when entering a number
Print		ENTER	Determine the input value; Proceed to the next step

4.2 Step of calibration operation

According to the second method which can enter setting menu, C01-C49。

Step	Operation	Display	Remark
		[C01]	After you enter calibration mode, it display [C01].
Unit	press↵	[C1 1]	Weight unit kg
Decimal point	press↵ press▲or▼ press↵	[C02] [C2 0] [C2 2]	Set decimal digits Option:0/1/2/3/4 Select decimal digit Example, two decimal point: [C02 2].
Division value	press↵ press▲or▼ press↵	[C03] [C3 1] [C3 5]	Set graduation Option:1/2/5/10/20/50 Select required graduation Example, graduation 5: [C03 5].
Range	press↵ press▲or▼/◄ press↵	[C04] [0100.00] [0100.00]	Max capacity Example, max weighing 100kg: [0100.00].
Zero calibration	press↵ press▲ press↵ press↵	[C05] [C5 0] [C5 1] [CAL 9] ... ... [0000.00]	Zero calibration Option: 0= no need zero calibration 1= need zero calibration Till show[0.00].

Loading point calibration	press↵ press▲or▼ press↵ press▲or▼/◄ press↵ press↵ press↵	[C06] [C6 0] [C6 1] [SPAN] [0100.00] [0080.00] [CAL 9] …… [CAL 0] [0080.00] [CALEnd]	Calibration Option: 0= no need calibration 1= need calibration Load weights on scales according to max. capacity. Suggest close to the max capacity, at least 10% of max. capacity. Example: the weights is 80kg As bellows: Input the 0080.00, count down , then indicator shows 0080.00 , calibration is over. If you want to set application function parameter, press "↵" . if you want to exit press "⍐".
Initialize	press↵ press▲or▼ press↵	[C07] [C7 0] [C7 0]	Default parameters setting option: 0= skip 1= restore parameters Note: after the above parameters setting finish, please do not set default parameters to avoid the original setting parameters is lost.

4.3 Application function parameters setting chart

Function	Setting Item	parameters setting and instruction
Warning tone	**C08** Warning tone	0= close warning tone 1= open warning tone
Automatic power off	**C09** Automatic power off	00= close auto power off 10= power off automatically if no change within 10 minute. 30= power off automatically if no change within 30 minute. 60= power off automatically if no change within 60 minute.
Power saving setting	**C10** Power saving	LED Version: 0= close power saving setting. 3= close display if no change within 3min. 5= close display if no change within 5 min. LCD Version: 0= close he backlight. 1= backlight when the weight change or press the keyboard. 2= constant backlight.
Hold function	**C11** Hold mode	0= close hold function. 1= peak hold / 2= data hold / 3= auto hold. Instruction: Peak-hold: it shows the max. data, mainly application for materials testing, such as tension and pulling force. Date-hold: it shows current weight value. Mainly application for animal weighing.

Upper /lower limit alarm	**C13** Upper limit alarm value	You can set it within the max. capacity limit.
	C14 Lower limit alarm value	
Inner Code display	**C15** Check inner code	Enter C15 to check the inner code.
Date and time	**C16** Date	Enter C16, you can set the date, from left to right: year/month/day.
	C17 Time	Enter C17, you can set the time from left to right: hour/min./sec.
Communication setting	**C18** Serial interface data output method	0= close serial interface data output. 1= continuous sending, connect big display. 2= print method, connect printer. 3= command request method, connect computer.
	C19 Baud rate	0= 1200/1= 2400/2= 4800/3= 9600.
Zero range	**C20** Manually zero range	0= close manually zero setting. 1= ±1% max capacity. 2= ±2% max capacity. 4= ±4% max capacity.
	C21 Initial zero range	0= no initial zero setting. 1= ±1% max capacity. 2= ±2% max capacity. 5= ±5% max capacity. 10= ±10% max capacity. 20= ±20% max capacity.

Zero tracking	**C22** Automatically zero tracking range	0= close zero tracking. 0.5=±0.5d / 1.0=±1.0d. 2.0=±2.0d / 3.0=±3.0d. 4.0=±4.0d / 5.0=±5.0d. Note: 1. d = division. 2. the zero tracking range can not bigger than manual zero range.
	C23 Automatically zero tracking time	0= close zero tracking time. 1= 1 second. 2= 2 seconds. 3= 3 seconds.
Overload range	**C24** Overload range	00= close overload range. C24= 01d～99d remark：d= division.
Negative display	**C25** Negative display range	0= -20d. 10= 10% max. capacity. 20= 20% max. capacity.
Standstill time	**C26** Standstill time	0= quick / 1= medium / 2= slow
	C27 Standstill range	1= 1d / 2= 2d / 5= 5d / 10= 10d Remark: d= division
Digital filter	**C28** Dynamic filter	0= close dynamic filter. 1~6 digital filter strength. The higher the value, the stronger the digital filter strength. Generally, the setting value is less than 3.
	C29 Noise filter	0= close noise filter. 1= 1 digital filter strength. 2= 2 digital filter strength. 3= 3 digital filter strength.

Date format	**C30**	0= MM.DD.YY. 1= YY.MM.DD. 2= DD.MM.YY.
Wireless indicator parameter	**C34** Wireless indicator setting	Query / change the wireless. Password 888. Communication parameters between indicator and transmitter: Indicator: Transmitter: [P *****] [P *****] [L00000] [L08193] [D08193] [D00000] The [P *****] of the same indicator and transmitter must be consistent.such as [P00000]～[P65535]. The factory default value is [P04097]. If you want to use multiple sets of devices in the same place, you need to change the value of each set of devices [P *****] to different values. When changing, the wireless parameters of transmitter should be changed first, and then the wireless parameters of indicator should be changed.
Transmitter parameter	**C35** Transmitter setting Before setting,Set the DIP switch address to 0.	
Gravity of calibration location	**C36**	C36= 9.7000~9.9999
Gravity of destination	**C37**	C37= 9.7000~9.9999
Version No.	**C38**	
Zero Delay	**C39**	1= immediate action. 2= action with 2 seconds delay.

Print mode	**C41**	0= auto mode. 1= gross mode. 2= tare mode. See ***5.3 Print format*** parts in detail.
Print blank lines	**C42**	Increase the number of blank lines at the end when printing. 0 ~ 9 blank lines.
Date printing	**C44**	0= no date printing. 1= print date.
Time printing	**C45**	0= no time printing. 1= print time.
Serial number printing	**C46**	0= no serial number printing. 1= print serial number.

5.Output format

Communication setting C18

Option:0= Close serial interface data output.

1= Continuous sending, connect big display.

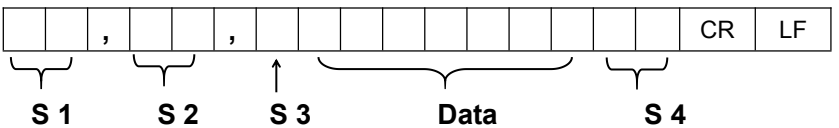
2= Print method, connect printer.

3= Command request method, connect computer.

5.1 Computer continuous sending format

RS232 communication parameters:

baud rate 9600 / 8 data bits / no check bit / 1 stop bit.



S1: weight status, ST= standstill, US= not standstill, OL= overload

S2: weight mode, GS= gross mode, NT= net mode

S3: weight of positive and negative, “+” or ” –“

S4: “kg” or “lb”

Data: weight value, including decimal point

CR: carriage return

LF: line feed

5.2 Serial interface reception command

Command	NAME	Function
T	TARE	Tare operation
Z	ZERO	Zero operation
P	PRINT	Print the weight
R	Reply	Reply the weight

5.3 Print format

Tare mode		Gross mode	
Date:	XX.XX.XX	Date:	XX.XX.XX
Time:	XX:XX:XX	Time:	XX:XX:XX
NET	XX.X kg	GROSS	XXX.X kg
TARE	XX.X kg		
GROSS	XXX.X kg		

6. Maintenance

6.1 Regular error and solution

ERROR	REASON	SOLUTION
UUUUUU	1.Overload 2.Wrong connection with load cell 3. Load cell has quality problem.	1. Reduce the weight. 2. Check load cell connection. 3. Inspection load cell. Check the input and output.
nnnnnn	1.Wrong connection 2.Load cell has quality problem	1.Check load cell connection. 2.Check input and output resistance to judge it is good or not.
ERR01	The transmitter cannot be connected	1.Check whether the transmitter is powered on. 2. Check whether the antenna is installed. 3. Is the distance too far. 4.Restart the indicator to wake up.
ERR10	Unstable when set to zero	Set to zero after waiting for stability.
ERR11	Set to zero in peeled state	Return to zero under gross weight status.

ERR12	When setting zero, the weight exceeds the range of setting zero	Remove some load from the scale plate.
ERR15	Unstable during peeling	Peel after waiting for stability.
ERR16	When peeling, the scale plate is in the zero state	Place a certain tare value on the scale plate so that the scale plate is not in the zero state.
ERR17	When peeling, the weight exceeds the peeling range	Reduce tare weight.
ERR20	Failed to read parameters of wireless module on the indicator	Please check whether the wireless module is damaged.
ERR21	Failed to write parameters of wireless module on the indicator	Please check whether the wireless module is damaged.
ERR22	Failed to read parameters of wireless module on transmitter	1. Check whether the network addresses of the indicator and the transmitter are consistent. 2. Check whether the wireless module is damaged. 3. Is the dialing address of the transmitter 0.
ERR34	When printing, the weight is not in the display range When printing, the weight is unstable	When the weight does not exceed the display range and range, print after it is stable.

6.2 Daily maintain

1. Protect the indicator from strong sunlight to prolong the using life
2. Good connection between load cell and indicator. Far from away from strong electric field, magnetic field.
3. Power off the indicator when lightning.
4. Power off the indicator firstly before plug and unplug.

Manual No.:75190WCG208220217