OCS-XS
series crane scale

user manual

Suggestion: In order to keep your scale good condition, please do read the direction book carefully and place it on hand for reference.

Catalogue

1. Summarizing

OCS-XS electronic crane scale is Wireless Transmission measuring unit that combines weighing instrument of XK-3168S, scale, load cell and power supply together. It can be directly hung on the hook of a hoist and ensure the scale to complete the tasks of loading and weighing goods synchronously. The scale body is made of high strength aluminum alloy (XS1) or armor plate structure (XS2). Its structure is compact and safe; measuring data and condition is wireless transmission; the instrument has the function of taring, zero, save wagon No., totalize weight, clearing, division selection, setting and display clock and date, save data at disconnection, printing and extended scoreboard export etc. the system is steady and operation is quite easy.

This type of scale can be widely used in manufacturing, chemical engineering, steel or fabric producing etc. It is really a satisfying scale for modern management and high production efficiency.

This type of scale can meet the standard of OIML R76 due to it superior quality.

2. Special features

    a. Set all parameters by keyboard.
    b. Software calibrating.
    c. Internal clocks and calendar.
    d. Save data at disconnection.
    e. RS232 communication interface, print interface.
    f. Scoreboard export interface

3. Primary technical characters

(1). Basic parameters

Type	Maximum LOAD (kg)	MINIMUM LOAD (kg)	DIVISION (Kg)	NUMBER OF DEVISION
OCS-XS-1	1000	10	0.5	2000
OCS-XS-2	2000	20	1	2000
OCS-XS-3	3000	20	1	3000
OCS-XS-5	5000	40	2	2500
OCS-XS-10	10000	100	5	2000
OCS-XS-15	15000	100	5	3000
OCS-XS-20	20000	200	10	2000
OCS-XS-30	30000	200	10	3000

(2). Technical Characters

Accuracy classes	OIML Ⅲ
Zero-setting range	4%F.S.
Taring range	100%F.S.
Result steady display	<10 seconds
Max safe load	120%F.S.
Over weight range (alarm)	110%F.S.
Limit coefficient	4
Power supply	12V/7Ah air tight rechargeable battery
Working time	>50 hours
Instrument power of using up	<15VA
Instrument of electrical source	AC220V / 50Hz or (within 12V/7Ah battery)
Instrument display	Red digital tube (height: 25.4mm/6 bit)
Working temperature range	-10℃～+40℃
Relative humidity range	<90RH at 20°C
Radio frequency	230MHz, 450MHz increment five dot
Distance of wireless transmission	>100m

4. Basic operations and the function of keyboard
(1) Starting

a. Turn on the power switch on the rear panel of the scale, and then indicating lamp is light.

b. The screen will show "99999" …" 00000" →" 0" in turn, now it is ready for measuring. If the data is incepting normally, the indicating lamp is aglimmer.

c. If the screen shows "— — — — — —", the signal is not incept. It is check up whether the power supper is turn on and antenna is tight.

(2) Zero

If scale shows the number is not "0", please press <zero> key.

(3) Taring

a. When the gross is unknown, hang the weight; press <tare>, the indicating lamp of "net" is light. Then every time you can get the net weight of the object.

b. When the gross is known, input the value of gross, press <tare>, the indicating lamp of "net" is light. Then every time you can get the net weight of the object

Warning: The instrument can store the value of accessories weight, so every time you can get the net weight of the object till you changed the accessories or turn off the machine.

(4) Clear

Press <clear>, "-cLEAr-" shown, and then press <0>, <input>; totalize and time of measuring is eliminated.

(5) Goods No.

a. Press <function>, <3>, the goods No. "XXXXXX" shown. The scale will be back to work condition after 3 second.

b. If amending goods No., press digital key (six digit), input new goods No., then press <function>, <3> key.

(6) Wagon No.

a. Press <function>, <4>, the wagon No. "XXXXXX" shown. The scale will be back to work condition after 3 second.

b. If amending wagon No., press digital key (six digit), input new wagon No., then press <function>, <4> key.

(7) Print

Press <function>, <5>, the number of "2" or "4" shown. Select print number you want.

(8) Division

Optional grade for selection: 1,2,5,10, press <function>, <8> at a time, the division convert next division. Display and affirm after 3 second. The converted order is 1→2→5→10→1.

(9) Save

a. After hang the object from the ground till it is motionless in the air, then press <save> key, the measuring value is auto saved in instrument. The maximal saved times is nine. When the maximal times >9, it is automatically print (when connect printer). And after eliminate saved measure value;

carry on saving tenth measure value.

b.   Press <function>, <print>, display saved measure value. The scale will be back to work condition after 3 second.

(10) Date

 a.   Press <function>, <date>, the current date shown. If it is right, press <input>. The scale will be back to work condition.

 b.   If amending date, press <function>, <date>, then press digital key (six digit), input new date, then press <input> key. The instrument will be back to work condition.

(11) Clock

a.   Press <function>, <clock>, the current clock shown. If it is right, press <input>. The scale will be back to work condition.

b.   If amending clock, press <function>, <clock>, then press digital key (six digit), input new clock, and then press <input> key. The instrument will be back to work condition.

(12) Tantalize

When the saved times <9, press <total>, print saved measure value. After print end, the saved measure value is eliminated.

(13) Gross/Net

Press <Gross/Net>, it is convert between Gross and Net. If the indication lamp of Gross is light, the scale will be in Gross condition; if the indication lamp of Net is light, the scale will be in Net condition

(14) Turning off and recharging

After using, put off the power switch on the rear side of the scale, in prevent of damaging to battery and recharge it in time.

XS1: Turn off the switch on the under side of the scale, insert charger's plug into the socket of "220V~". Then connect the charger and the scale with a lead. The indicating lamp on the rear side of the panel will be on. The scale now is in the course of recharging.

XS2: Turn off the switch on the rear side of the scale, insert charger's plug into the socket of "220V~". Then connect the charger and the scale with a lead. The indicating lamp on the rear side of the panel will be on. The scale now is in the course of recharging.

Warning: the battery is continually recharged over 8 hours.

5. Install, export interface and connecting

(1) The scale body is install and debug before leave factory. Beside periodic verification, the scale is not install and adjusts. The user is not optionally hard up load cell etc. firmware commonly.

(2) The one side scale body is install circuit board and sends board. The other side is install 12V/7Ah airtight rechargeable battery. The user is not optionally hard up screw etc. firmware commonly.

(3) The sends antenna is fix up antenna socket of scale body crust.

(4) When the electrical source switch of scale moved "OFF" position peacetime, the scale is turn off. The electrical source switch of scale moved "OFF" position at working, and the indication lamp is will be on.

(5) The power supper of instrument is use "220V~", and the power supper switch is well grounded.

(6) Connection of printer socket and scoreboard display:

```
                        CL EN DI GND
  1ooooooooooooo13              1ooooo5
  14ooooooooooooo25             6ooooo9
   Parallel print export socket        scoreboard export socket
```
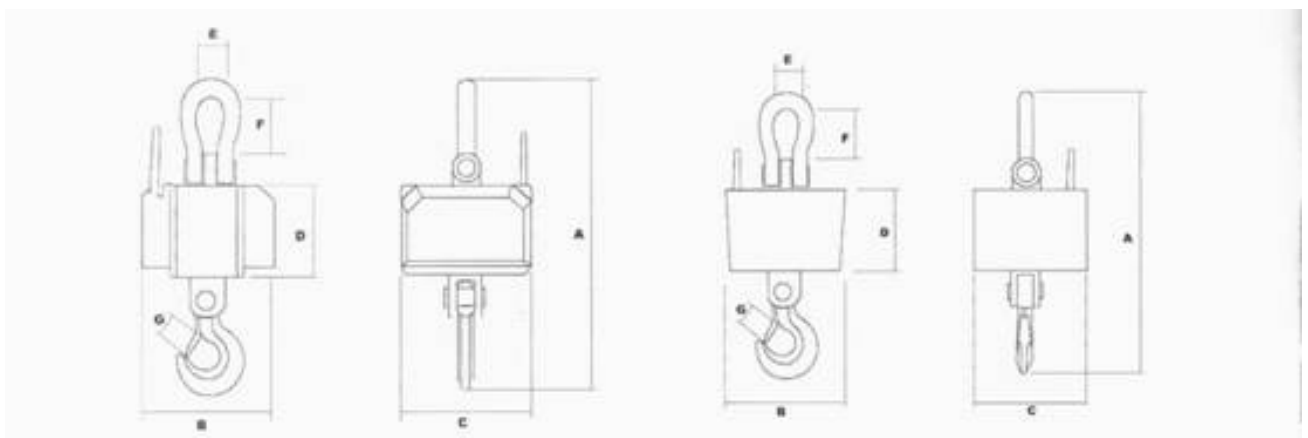
(1): STRB, (2) ~(9): D0-D7, (11): BUSY

(10), (12) ~(17): NULL, (18) ~(25): GND

6. Guide of special display symbol and indicating lamp

HHHHHH	After starting, if zero position of empty is high, "HHHHHH" shown
LLLLLL	After starting, if zero position of empty is low, "LLLLLL" shown
— — — — —	If the signal is not incept in 5 second, "— — — — — —" shown
Continue alarm sound	If hanged weight is high than setting alarm level, the sound will be on. The transmission is exceptional.
Display winkle	The voltage of scale battery is low

7 Dimensions and Weight

drawing A   drawing B

(1) XS1 <drawing A>

Capacity	Dimension (mm)							Weight
(t)	A	B	C	D	E	F	G	(Kg)
3(2)	510	260	290	210	75	135	40	18
5	700	260	290	210	80	135	50	28
10	810	260	290	210	100	180	55	38
15	1010	260	320	260	120	200	80	72
20	1010	260	320	260	120	200	80	72
30	1280	260	320	260	150	250	70	80

(2) XS2 <drawing B>

Capacity	Dimension (mm)							Weight
(t)	A	B	C	D	E	F	G	(Kg)
3(2)	510	340	260	190	75	135	40	32
5	700	340	260	190	80	135	50	48
10	810	340	260	190	100	180	55	58
15	1010	380	260	230	120	200	60	82
20	1010	380	260	230	120	200	60	82
30	1280	400	260	230	150	250	70	94

8. Simple problems and solutions

Phenomena	Judgment	Solutions
No incept signal	No contact or shatter antenna	Check-up scale and antenna of instrument
	Low battery voltage	Turing off the scale and recharging
Battery cannot be charged	Broken charger	Check-up charger (above 12.00V normally)
	Checking the power supply of charger	Replacing battery
Indicating lamp for recharging is not working	Checking the power supply of charger	Re-plugging
	No power in socket	Checking the power supply

Unsteady display value	No voltage battery	Turn off the scale and recharged. The battery is continually recharged over 8 hours
	Motion of weighting object	Waiting till the object is motionless
Display of empty scale not equal to "0"	Insufficient warming time	Warming up 3-5min
	Putting scale on ground for excessive time	Improving the style of storage
No working of printer	Cable break off	Right fix printer and instrument connect cable
	Problems of printer	Repair the printer

9. Guide of setting parameters

(1) Guide of setting method

● Press <function>, <calibration> key, "— — — — — —" shown

● Input number "96618", press <input>, "□□□□□" shown.

● Affirm whether the scale is null. If the scale is empty, press <zero>, then press <input>, "LOAD" shown.

● Loading calibrated weights, press <input>, the old calibration value "XXXXXX" shown.

● Input the weight value of loading weights by number key, then press <input> key, and the old over weight "XXXXXX" shown.

● Input new over weight value by number key, then press <input>, loading weights value shown. The calibration is end.

(2) Setting parameters

● Press <function>, <calibration> key, "— — — — — —" shown

● Input number "86138", press <input>, the current calibration value shown.

● Press <input> key, the decimal digits "P X" shown, then amend decimal digits (0 5) by corresponding digits key.

● Press "input" key, the 0.4d ISN at one division "d X" shown. It is auto setting in calibration.

● Press <input> key, the over weight value "XXXXXX" shown, and then amend over weight value by corresponding digits key.

● Press <input>, and then finish the setting parameter.

10. Maintenance

Electronic crane scale is an exquisite measuring unit. Its power comes from storage battery. Daily maintenance must be needed:

- Before starting, check-up antenna of connect, avert charging antenna.
- It should be warmed up 3-5 minutes after starting.
- It should be avoided to be overweight in a long term. It can do great harm to the load cell.
- No strike and librates scale body in using.
- Recharge the battery after every using. If it is not used in a long time, recharge it once a month.
- If the scale is not needed, hang it or put it on a small vehicle. Do not let the hook touch any object. The storage environment should be dry and clear.
- When the instrument is not use, the switch of power supper is taking down and the power supper switch is well grounded.
- Check small parts of the scale on time to ensure it in a good condition.