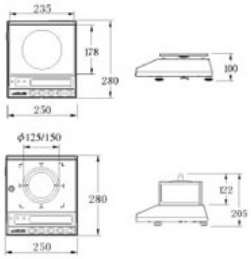
ANVÄNDAR INSTRUKTION Bordsvåg LPWN

Räknevågar för vägning av det mesta.



För normalt bruk räcker det med sida 1 och 2 i instruktionen. Om komplett information önskas kan den kompletta instruktionen laddas hem från www.vetek.se eller rekvireras från Vetek AB.

SPECIFIKATIONER

Typ	LPWN-150	LPWN-3075	LPWN-1530	LPWN-7515	LPWN-1530K
Kapacitet	**150g**	0.02g~300g 300.05g~**750g**	0.1g~1500g 1500.2g~**3000g**	0.5g~7.5kg 7501g~**15kg**	1 g~15kg 15002g~**30 kg**
Gradering	0.01g /0.02g	0.02g 0.05g	0.1g 0.2g	0.5g 1g	1g 2g
Vägningsenheter	g, kg, lb, oz, lb-oz, pcs, %.				
Vågplatta	Ø125 mm	Ø 150 mm	235 x 178 mm		
Display	5 LCD-siffror med bakgrundsbelysning.				
Egen vikt	4.5 kg				
Dimension	280 (B) x 250 (D) x 100 (H) mm				
Matning	110, 220 VAC , 50/60 HZ eller uppladdningsbart batteri 6V/4Ah, 120 timmars drift				
Battery Life	120 hours				
Max fuktighet	85% R.H, icke kondenserande.				
Arbetstem-peratur	-5° ~ 40° C				
Option	RS-232 (Option)				

Allmänt

a. Vågen är utrustad med nivå libell under vågplåten samt fyra justerbara fötter. Var noga med att justera ”bubblan” till centrum av den inre ringen.

c. Vågen bör alltid användas i en miljö som är så fri som möjligt från temperaturvariationer, damm, vibrationer, drag, fukt eller i korrosiv miljö. Dessa faktorer påverkar hållbarhet och tillförlitlighet.

d. För kontinuerlig drift anslut vågen till nätet med nätadaptern. Vi rekommenderar att inte maskiner, tex borrmaskiner, används på samma säkring. Vi rekommenderar att vågen ansluts till ett vägguttag som står inkopplat hela dygnet. Undvik att ansluta vågen till nät som är strömlöst över natten, om så är nödvändigt rekommenderar vi att autopower off funktionen aktiveras.

e. För högsta noggrannhet bör vågen stå på 15 minuter innan den används.

f. En mekanisk transportsäkring till lastcellen är placerad på undersidan av vågen (markerad med etikett). Lossa skruvarna och förvara dom för eventuell framtida transport av vågen.

g. Finns tveksamhet om hur vågen ska monteras eller om komplett information önskas finns utförlig information i den kompletta instruktionen. Den kan laddas hem på www.vetek.se.

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Tryckknappar

ON/OFF **Till / Från**
ZERO **Nollställning av vågen** när vågplattan är obelastad (lasten måste vara <+-2% av max kapaciteten). Viktdisplayen visar ZERO längst ned till vänster när den är stabil.
TARE Lagrar taravikten i minnet när man lägger på ett emballage eller t.ex. en skål. Vågen visar sedan nettovikten. Viktdisplayen visar NET/TARE längst ned till vänster.
MODE Val av enhet kg, g, lb, lb-oz, pcs, %.
PRINT Ger printkommando till skrivare. OBS Vågen måste ha option RS232 utgång.

Strömförsörjning

- I normal läge ansluts vågen till 230 VAC.
- Blybatteriet räcker för ca 120 timmars drift och det tar ca 8 timmar att ladda det. När laddning pågår lyser dioden i fönstret CHARGE röd, när batteriet är fullt lyser dioden grön.
- En symbol visas när batteriet har låg kapacitet.

”Vanlig vägning”

Nollställning & Tara.

1. Närhelst det visas ett värde i fönstret med vågskålen obelastad, går det att nollställa vågen genom att trycka på ZERO.
2. Lagring av Tara i minnet. Placera en tom behållare på vågskålen, tryck på TARE, ordet Tare skall då bli synligt i det nedre vänstra fönstret (intill lysdioden) vikten på behållaren är nu lagrad i vågens minne.
3. Lägg önskat material i behållaren, vågen visar nu nettovikten.
4. Om ni nu tar bort behållaren med innehåll, visas behållarens vikt så som negativt värde. Tryck TARE för att återställa vågen.

Att räkna småsaker

Detta är en våg för ”vanlig vägning” men den har även en enkel räknefunktion.

Räkna enheter

Vågen är utrustad med genomsnitt beräkning, Denna funktion kompenserar för mindre viktskillnader i provvikterna. Provvikterna bör väga minst 0,8 x vågensgradering. Är vikterna för små för att räknas med bra noggrannhet piper vågen.

1. Tryck på MODE tills displayen visar 0 PCS
2. Tryck på TARE en gång, displayen visar CAL.
3. Lägg på 25, 50 eller 100 provvikter på vågen, ju fler ju noggrannare blir räkningen. Tryck på TARE tills displayen visar det valda antalet.Vänta en liten stund tills displayen visar antalet
4. Vågen visar nu antalet enheter på vågplattan.

% Vägning

1. Tryck på MODE tills displayen visar 0 %
2. Tryck på TARE en gång, displayen visar CAL.
3. Lägg på den provvikt som ska motsvara 25, 50 eller 100%. Tryck på TARE tills displayen visar det valda %-värdet. Vänta en liten stund tills displayen visar detta värde.
4. Vågen visar nu i %.

Ett tips:

Det går inte att tarera bort en tom ask eller låda innan dessa funktioner aktiveras. Men man kan ställa på denna ”dödvikt” om det inte väger för mycket innan man startar vågen.

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I. INTRODUCTION

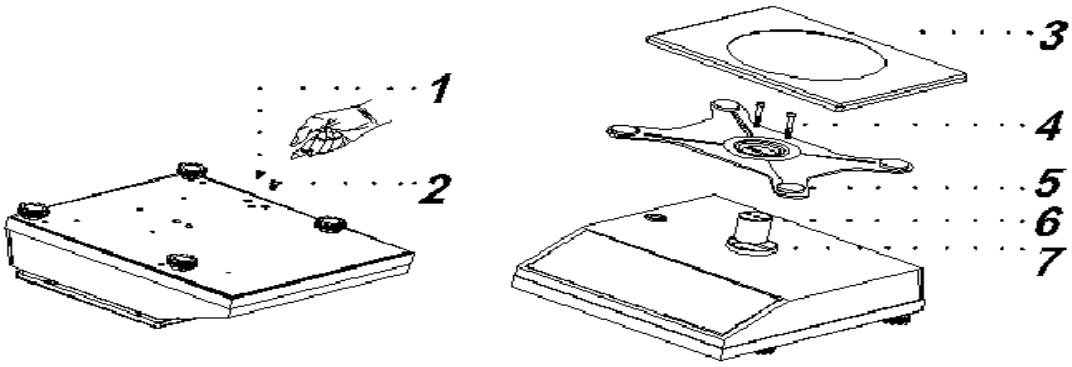
Thank you for your purchase of Vetek high precision electronic weighing scale, which enables you to measure both quantity and weight. The scale is easy to operate, precise, stable and with fast display reaction. It is applicable in the electronic, hardware, plastic, medicine, textile and various other industries. It is useful for packaging, inventory and various production and quality control cases. It will help you save your time, labor, money, and reduce material waste, lower cost, improve your work efficiency, thus to achieve maximum return on investment.

II. FEATURES

1. The microprocessor in this scale features
   (1) Zero point tracking function.
   (2) Tare and pre-tare function.
2. Easy operating and water-resistant membrane keypad.
3. Easy to read LCD display.
4. Counting function is applicable, with backlight function.
5. Tare range is unlimited.
6. The case shell is made of ABS shockproof plastics; stainless steel weighing pan is used for long-term operation.

III. ASSEMBLY

A. Models LPWN-1530□ LPWN-7515 LPWN-1530K



1. Remove the protection copper screw [2], and then screw out the protection copper screw [1];
2. Align the three-hole aluminum column [6] and center of the three round holes on the scale support [5] with the corresponding hole on the "-"shaped iron piece inside hole [7]. Then fix the three-hole aluminum column [6] and scale support [5] on the "-"shaped iron piece of the scale by tightening the M5 Allen screw [4] using an Allen wrench;
3. Put the stainless steel weighing pan [3] on the scale support [5].

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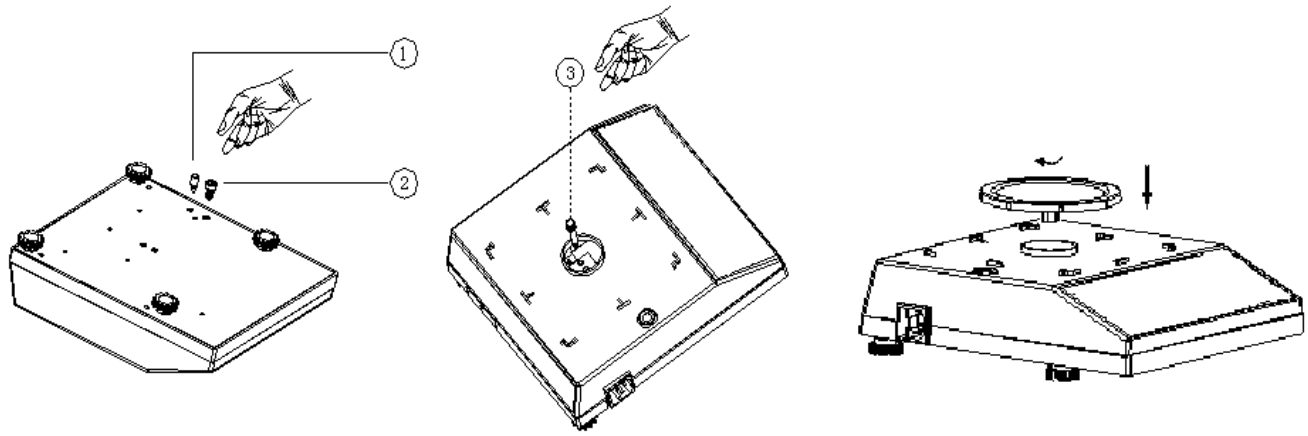
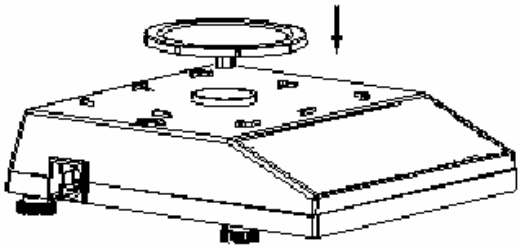
B. Model LPWN-3075



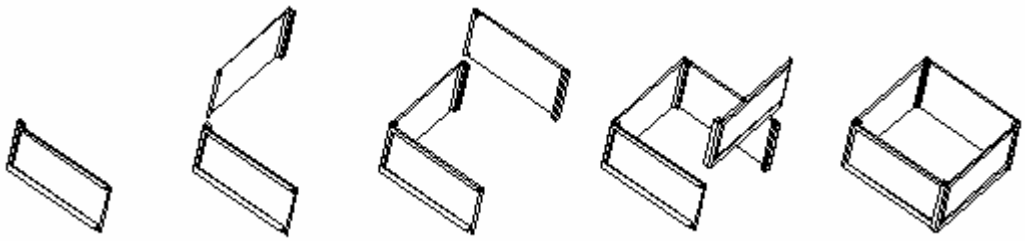
1. Remove the protection copper screw [2], and then screw out the protection copper screws [1] & [3];
2. Screw in the round weighing pan clockwise and downwards.

C. Model LPWN-150



1. Place the round weighing pan directly onto the scale support.

D. Wind Shield

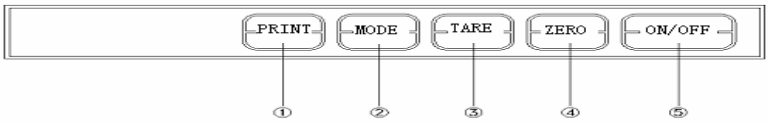


Note: Always reinstall the transportation protection device before transporting the scale, lest the precision sensor should be damaged due to bumping and falling during transportation.

IV. PRECAUTIONS

1. Full charge the battery after unpacking the scale.
   Recharge the battery: When battery symbol appears on the LCD display, charge the battery with AC power cord plug in, the indicator of charge will light up in red; when it becomes green means charge completed. (It takes about 8 hours to full charge the battery.)
2. Install the equipment on a level and stable surface.
3. Do not install the equipment near the air conditioning or a vibrating machine.
4. Install the equipment in an environment with steady temperature (0□~40□), avoid rapid temperature changes.
5. Independent AC outlet for this equipment is recommended, check the voltage before plug in.
6. Warm up the equipment for 15 minutes before use.

V. KEYPAD



1.“PRINT”

Press PRINT key, RS-232 will print data, when negative value is shown on the screen, the printing function is prohibited.

2.“MODE”

Press MODE key for selecting weighing unit.

3.“TARE”

Press TARE key for deduction of current weight on the weighing pan. After removing the weight on the weighing pan, press TARE key to cancel the original tare.

Note: This operation can only be performed in the stable mode.

4.“ZERO”

Press ZERO key and the screen will show zero **0.0000**, press ZERO key in the tare mode, the tare will be cancelled; if the weight on the weighing pan is within the zero adjustment range, the scale will be reset to zero.

5. “ON/OFF”

Power switch.

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Cross reference list of keys in Chinese and English

	¶ Ã ¢	©«	Â ś	¦ C Ì	³ æ ì Â â ¢
ENGLISH	ON/ OFF	TARE	ZERO	PRINT	MODE

VI. FUNCTION SETTING

LCD Display	Function	Selection	Reference
CAL ↓	Model display		Page 4, Item 1
UON ↓	Weighing unit	ON/OFF	Page 5, Item 2
Init ↓	Initial unit	Kg/g/lb/lb-oz/Taiwan jin/HK jin, etc.	Page 5, Item 3
Fil ↓	Filter	1/2/3/4	Page 5, Item 4
Auto ↓	Auto power off	OFF/5/10/30/60	Page 5, Item 5
Ligh ↓	Backlight	OFF/ON/AUT	Page 5, Item 6
Lit ↓	Zero point range	0/1/2/3/4/5	Page 5, Item 7
Baud ↓	RS-232 baud rate	2400/4800/9600	Page 5, Item 8
rS232 ↓	Printing mode	Co/St/ Pr	Page 5, Item 9
Print ↓	External device	PC /SH/EZ	Page 5, Item 10
Stabl	Printing stability	Yes/No	Page 5, Item 11

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1. Power on while holding down MODE key. The scale will enter into function setting mode and **CAL** appears on the LCD display. Press PRINT key, the LCD display will show the scale model e.g. **3 kg**.
2. Press MODE key once again, the LCD display will show **UON**, which means the scale enters into weighing unit setting mode. Press PRINT key to select unit, press TARE key to enable (ON) or disable (OFF) the weighing unit. If the display shows **ON kg**, it means the unit shown will be used; **OFF kg** ,means the unit shown will not be used. Press MODE key once again, the LCD display will show **Init** ,which means the scale enters into initial weighing unit setting mode; press TARE key to select initial unit setting.

3. If the LCD display shows **Init g**, it means "g" is the initial weighing unit when power on. Available units: kg, g, lb, lb-oz, jin, HK jin, Taiwan jin.

4. Press MODE key once again, the LCD display will show **Fil**, which means the scale enters into filter setting mode; press down TARE , the display will show **Fil 2**, press TARE key again to switch the filter degree as 1, 2, 3 or 4. Level 4: Reaction is slower, effect on filtering is higher.

5. Press MODE key once again, the LCD display will show **Auto** ,which means the scale enters into auto power off setting mode; press TARE key to select the time of auto power off. 5, 10, 30, or 60 minutes means the lasting time value when the scale is at the non-tare zero point. In such mode, the scale will be powered off automatically after elapse of the set time.

6. Press MODE key once again, the LCD display will show **Ligh**, which means the scale enters into backlight setting mode. Press TARE key to select setting, if the display shows **OFF**, it means the backlight is off; **ON** means the backlight is on; **Auto** means auto backlight is on.

7. Press MODE key once again, the LCD display will show **Lit**, press TARE key, **d1** will appear on the display, press TARE key again to select zero tracking range. 0, 1, 2, 3, 4 or 5 can be selected (the bigger the number is, the larger zero tracking range is).

8. Press MODE key once again, the LCD display will show **BAud**, which means the scale enters into baud rate setting mode; press TARE key to select the transmission rate of 2400, 4800, or 9600.

9. Press MODE key once again, the LCD display will show **RS232** ,which means the scale enters into printing mode setting mode, press TARE to select **Prt Co**, **Prt St**, or **Prt Pr** (Pr means data sent when key pressed; St means data sent automatically when stable symbol shown; Co means data sent continuously).

10. Press MODE key once again, the LCD display will show **Print**, which means the scale enters into printing mode setting mode, press TARE to select **PC**, **SH** ,or **EZ**.

11. Press MODE key once again, the LCD display will show **StAbl**, which means the scale enters into printing stability judgement setting mode, press TARE key to select setting, **YES** means the data can be printed out by pressing PRINT key only in the stable mode; **No** means the stable mode will not be detected. Press MODE key to reset each function. Press ZERO key anytime when a function setting is completed. This will make the scale return to normal weighing mode.

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VII. Operation (after normal power-on)

Counting: (simple counting function)

Press MODE key, the LCD display will show **0 PCS**, press TARE key, **CAL** will appear, put the samples on the weighing pan, press TARE key again to select the counting standard needed (25, 50, 100); wait until automatic sampling by the scale, and new number is shown on the display, it is ready for counting operation.

Percentage:

Press MODE key until the LCD display shows **0 %**, press TARE key, **CAL** will appear; put the samples on the weighing pan, press TARE key again to select the counting standard needed (25, 50, 100); wait until automatic sampling by the scale, and new number is shown on the display, it is ready for percentage counting operation.

VIII. WEIGHING UNIT CONVERSION

1 kg = 1000 g	1 = 500g
1 HK jin = 16 HK ounce	1 HK ounce = 37.799375g
1 Taiwan ounce = 37.49995g	1 Taiwan jin = 16 Taiwan ounce
1 lb = 453.59237g	1 oz = 28.3495231g

IX. FACTORY SETTING

A. LINEAR CALIBRATION

1. Power on while holding down TARE key, the display will show **Line**.
2. Press MODE key to enter into automatic factory calibration mode, the display will show **On0**, put weight of 1/3 full load on the weighing pan when **On1** appears, press TARE key until **On2** appears, put weight of 2/3 full load on the weighing pan, press TARE again, **On3** will appear on the display, press TARE after putting weight of full load on the weighing pan and wait until **PASS** appears.
3. Take off the weight, press ZERO key to return to weighing mode.

B. SINGLE-POINT CALIBRATION

1. Power on while holding down MODE key to enter into setting mode, the display shows **CAL**.
2. Press TARE key to enter into single-point calibration mode, the display will show **On0**, wait until **CAP** appears.
3. Press MODE key to select calibration weight, the display will show in turn **CAP 1**, **CAP2**, and **CAP3**; put corresponding weights of 1/3, 2/3 or full load on the weighing pan, then press TARE key to enter into single-point calibration mode, wait until the display shows **PASS**.
4. Take off the weights, press ZERO key to return to weighing mode.

C. *PRECISION SETTING- (Only applicable for version 2.0 and above)*

1. Power on while holding down PRINT key to enter into setting mode, the display will show **SEnC**.
2. Press TARE key to select **SEnC1** or **SEnC2**.
3. SEnC1 means precision 15000, SenC2 means precision 6000 (7500).
4. After setting is completed, press ZERO key to return to weighing mode.

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APPENDIX 1:
ERROR MESSAGE
1. Error message

Err. Msg.	Problem	
Err2	Initial zero point over ±10% (take 10% as the benchmark)	
Err3	Over or below A/D resolution range FFFFF	
Err4	EEPROM Chksum error	
Err5	Overload (max. capacity +9e)	
Err6	Wrong calibration weight	
Battery symbol	Low battery	

2. Troubleshooting

When	Err. Msg.	Troubleshooting
Power on	Err2	Check and remove any object from weighing pan or malfunction of LOAD CELL
Power on	Err3	Check if A/D or LOAD CELL malfunctions
Power on	Err4	Beep alert. Switch power off and power on again, or perform calibration
Power on	Battery symbol	Charge the battery with power on
Operating at normal weighing mode	Err5	Checking if the weighing object is over the max. capacity +9e
Calibrating	Err6	Change weight

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APPENDIX 2:

RS-232 OUTPUT FORMAT

Baud Rate 2400, 4800, 9600
Data Bit 8
Parity N (None)
Stop Bit 1
Code ASCII
Bit Format

	LSB							MSB		
	0	1	2	3	4	5	6	7	8	
	Start Bit								Parity	Stop Bit

Data Format

1. kg

G/N	.	W	.		+/-									k	g	CR	LF
								weight								

Example:
N.W. + 1.1375kg
T.W. + 0.0180kg
G.W. + 1.1555kg

2. g

G/N	.	W	.		+/-									g	CR	LF
								weight								

Example:
N.W. + 1137.5g
T.W. + 18.0g
G.W. +1155.5g

3. lb

G/N	.	W	.		+/-									l	b	CR	LF
								weight								

Example:
N.W. +2.508lb
T.W. + 0.040lb
G.W. +2.548lb

4. lb-oz

G/N	.	W	.		+/-							-		l	b							o	z	CR	LF
														weight lb								Weight oz			

Example:

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N.W. +2lb 8.12oz
T.W. + 0lb 0.64oz
G.W. +2lb 8.76oz

5. Jin

G/N	**.**	**W**	**.**		**+/-**								**C**	**-**	**J**	**i**	**n**	**g**	**CR**	**LF**

weight

Example:
N.W. +2.275jin
T.W. + 0.037jin
G.W. +2.312jin

6. HK jin

G/N	**.**	**W**	**.**		**+/-**						**–**							**G**	**-**	**t**	**l**	**.**	**H**	**CR**	**LF**

weight

Example:
N.W. +1-14.08G-tl.H
T.W. +0-0.48G-tl.H
G.W. +1-14.56G-tl.H

7. Taiwan jin

G/N	**.**	**W**	**.**		**+/**						**–**							**G**	**--**	**t**	**l**	**.**	**T**	**CR**	**LF**

weight

Example:
N.W. +1-14.32G-tl.T
T.W. +0-0.48G-tl.T
G.W. +1-14.80G-tl.T

8. pcs

T	**o**	**t**	**a**	**l**		**+/-**							**p**	**c**	**s**		**CR**	**LF**

pcs

Example:
Total + 0 pcs

9. %

+/-							**%**	**CR**	**LF**

Example:
+ 0 %

G = GROSS
N = NET
T = TARE

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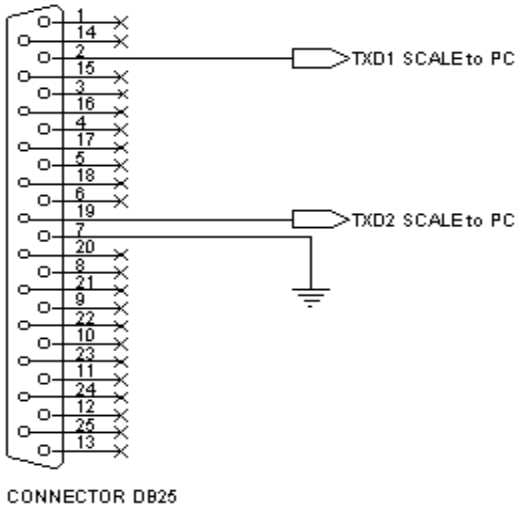
Printer and output format (example: kg)

SH-24	EZ2-S
N.W.:+1.6025 kg T.W.:+0.0000 kg G.W.:+1.6025 kg	N.W.:+ 1.1375 kg T.W.:+ 0.0180 kg G.W.:+ 1.1555 kg

RS-232 Connector/ Signal Output



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