

PS2000 USB Scales (5kg/10kg)

DATA SHEET



FEATURES AND FUNCTIONS

- Highly-accurate weighing scale
- 3-way power – USB power from PC, batteries (not supplied) , or adapter (optionally supplied)
- USB connection – plug and play (USB cable supplied)
- Can be used with online postage services such as Stamps.com, Endicia, USPS, and USA PC Postal Calculator to capture weight reading to PC
- Displays weight in: grams, kilograms, pounds, ounces, and pounds/ounces
- Counting function
- Sampling for counting other items
- Programmable sampling value for instant sampling of items
- Can memorize count values and/or add on the current counted value to stored counted value in memory
- Hold feature for weighing items that block the display – displays the weight of the item for even if it is already removed from the scale
- Custom key

SPECIFICATIONS

Description	5kg	10kg
Range	0 – 5kg With mechanical overload protection	0 – 10kg With mechanical overload protection
Accuracy	± 0.1 % of reading ± 1 digit	± 0.1 % of reading ± 1 digit
Resolution	0.1g	0.2g
Minimum Weight	0.5g	1g
Minimum Add On Weight	0.1g	0.2g
User Calibration	2kg	2kg
Power	USB power Batteries (6x AA alkaline batteries, not supplied) 9V AC Adapter	
Warm Up Time	5 seconds or less	
Display	2x16 characters dot matrix liquid crystal display with clear protective plastic bezel	
Temperature	Good performance within 30 degree to 100 degree Fahrenheit. The scale is designed to operate in normal room temperatures. If subjected to cold or warm temperatures, it should be allowed to reach room temperature before operating.	
Case and Platform	Fine texture ABS plastic	

Load Cell Technology	Four-element single strain gage OIML with temperature compensation
Load Cell Body	Material: 2024 – T4/T351 Aluminum Alloy
Interface	USB interface

PHYSICAL FEATURES

Dimensions : 26.5cm X 20cm X 8.3cm
Platform Size : 20cm x 15cm
Weight : 1.145kg

KEYBOARD LAYOUT



KEYS

Technology : Membrane
Quantity : 15

PACKAGING

Box Dimension : 41.2cm X 26.5cm X 9.7cm
Packaged Weight : 1775g
Master Carton Dimension : 55cmX50cmX43.5cm
 Quantity: 10 scales per Master carton
 Volume: 0.13 m³
 Gross Weight: 19kg
 IATA Dimensional Weight: 21.75kg

WARRANTY

1 year from date of sale to end-user against defect in manufacturing and materials

USB DATA FORMAT

Weighing or Hold Mode

Byte	Data	Byte Value in HEX	Description	Fixed Value?
Byte 1	Report ID	0x03	Report ID of data sent to PC	Yes
Byte 2	Weight Status	0x04 to 0x06	0x04 - Stable weight above or equal to 0	No
			0x05 - Stable weight below 0 (negative weight)	
			0x06 - Overload weight	
Byte 3	Weight Unit	0x02	Byte value representing gram unit	Yes
Byte 4	Weight Scaling	0xFF	Byte value representing weight scaling as base 10 exponent (resolution of 0.1)	Yes
Byte 5	Weight LSB	0x00 to 0xFF	Least significant byte of weight data	No
Byte 6	Weight MSB	0x00 to 0xFF	Most significant byte of weight data	No

Count Mode				
Byte	Data	Byte Value in HEX	Description	Fixed Value?
Byte 1	Report ID	0x03	Report ID of data sent to PC	Yes
Byte 2	Weight Status	0x04 to 0x06	0x04 - Stable weight above or equal to 0	No
			0x05 - Stable weight below 0 (negative weight)	
			0x06 - Overload weight	
Byte 3	Weight Unit	0x5D	Byte value for Count Mode ID	Yes
Byte 4	Weight Scaling	0x00	Byte value representing weight scaling as base 10 exponent	Yes
Byte 5	Weight LSB	0x00 to 0xFF	Least significant byte of count data	No
Byte 6	Weight MSB	0x00 to 0xFF	Most significant byte of count data	No

Count MR Mode				
Byte	Data	Byte Value in HEX	Description	Fixed Value?
Byte 1	Report ID	0x03	Report ID of data sent to PC	Yes
Byte 2	Weight Status	0x04 to 0x06	0x04 - Stable weight above or equal to 0	No
			0x05 - Stable weight below 0 (negative weight)	
			0x06 - Overload weight	
Byte 3	Weight Unit	0x5E	Byte value for Count Mode ID	Yes
Byte 4	Weight Scaling	0x00	Byte value representing weight scaling as base 10 exponent	Yes
Byte 5	Weight LSB	0x00 to 0xFF	Least significant byte of count data	No
Byte 6	Weight MSB	0x00 to 0xFF	Most significant byte of count data	No

Examples:

Sending Weight to PC (Scale Modes: Weighing or Hold Mode)		
Weight in Grams	HEX Value	USB Data Sent to PC
1459.8	00003906	0x03-0x04-0x02-0xFF-0x06-0x39
-371.6	00000E84	0x03-0x05-0x02-0xFF-0x84-0x0E
4030.2	00009D6E	0x03-0x04-0x02-0xFF-0x6E-0x9D
-11.8	00000076	0x03-0x05-0x02-0xFF-0x76-0x00
5129.5	0000C85F	0x03-0x06-0x02-0xFF-0x5F-0xC8

Sending Count Values to PC (Scale Mode: Counts)		
Count Displayed in Scale	HEX Value	USB Data Sent to PC
12354	00003042	0x03-0x04-0x5D0x00-0x42-0x30
5	00000005	0x03-0x04-0x5D0x00-0x05-0x00
8459	0000210B	0x03-0x04-0x5D0x00-0x0B-0x21
-589	0000024D	0x03-0x05-0x5D0x00-0x4D-0x02
0	00000000	0x03-0x06-0x5D0x00-0x00-0x00

Sending Count Value in Memory to PC (Scale Mode: Counts (MR))		
Count Displayed in Scale	HEX Value	USB Data Sent to PC
47892	0000BB14	0x03-0x04-0x5E0x00-0x14-0xBB
28	0000001C	0x03-0x04-0x5E0x00-0x1C-0x00
1648	00000670	0x03-0x04-0x5E0x00-0x70-0x06

USB Commands to Scale		
Description	USB Data to Send to Scale	Comments
Tare Weight	0x02-0x01	
Weighing Mode (g)	0x07-0x01-0x01-0x01-0x00-0x00	Shows scale weight in g
Weighing Mode (kg)	0x07-0x01-0x01-0x02-0x00-0x00	
Weighing Mode (lb)	0x07-0x01-0x01-0x03-0x00-0x00	
Weighing Mode (oz)	0x07-0x01-0x01-0x04-0x00-0x00	
Weighing Mode (lb oz)	0x07-0x01-0x01-0x05-0x00-0x00	
Count Mode	0x07-0x01-0x02-0x00-0x00-0x00	Scale goes to counting mode
Count MR Mode	0x07-0x01-0x03-0x00-0x00-0x00	Scale displays count in MR
Hold Mode	0x07-0x01-0x04-0x00-0x00-0x00	Enable or disable hold mode