

# PORTA-WEIGH PLUS . . . The

Originally designed and manufactured around the same engineering principles as its world renowned predecessor the Port-A-Weigh, the MSI-4300 Porta-Weigh Plus offers the same integrity and reliability *plus* much more. The many features and benefits of Porta-Weigh Plus ensure it will be the ultimate crane scale well into the next century.

Rugged construction throughout the scale ensures dependability in most every industrial application. Heavy duty corrosion resistant cast aluminum provides a robust external package. O-ring seals are maintained between castings for water-tight integrity in outdoor or wet installations. Sealed elastomeric function switches are also used to provide dependability in any environment and are rated for millions of cycles. The scale's large digital display is recessed within the front casting and protected by impact resistant ADC monomer. Inside, a single circuit board, common to all capacities, is shock mounted to withstand the typical abuse associated with industrial weighing and material handling applications. Overall, the Porta-Weigh Plus is one tough scale.

Electronically, no other scale compares with the technology and versatility of the Porta-Weigh Plus. With a 16 bit microcontroller and 16 bit A/D conversion, world class accuracy, resolution and stability is maintained. Additionally, digital calibration and self-diagnostic circuitry allow simple and cost-effective maintenance.

The scale features a primary six digit (1.6 inch / 40 mm) liquid crystal display for clear and precise readings from a distance. Display backlighting provides optimum brightness and contrast under all ambient light conditions from direct sunlight to total darkness. A secondary alphanumeric display provides user-friendly annunciation of weighing and programming modes. No other crane scale offers such valuable and innovative features.



*Large Dual Alphanumeric display. User friendly for ease of operator inputs with display visibility up to 60 ft. (18m).*

*Heavy Duty corrosion resistant package for indoor/outdoor use.*

*Elastomeric switches with water and dust tight integrity.*

*5 key or 7 key configuration for multiple functions and features.*

*8 alkaline batteries provide up to 2000 hours of operation.*

*Bearing swivel hook for safety, accuracy and repeatability.*

# Ultimate Crane Scale.

Designed for optimum power conservation, the scale will operate up to 2000 hours in typical duty cycles with eight ordinary "D" size alkaline batteries. After discharge, the batteries are easily and economically replaced without tools.

The Porta-Weigh Plus is offered standard in a 5 key configuration with the following functions ▼



In addition, the following programmable features are included with every Porta-Weigh Plus:

- Unit select for weighing in lbs, kgs, tons or metric tons \*
- Auto-off after period of non-use to maximize battery life \*
- Control of display contrast for optimum visibility \*
- Selectable filter settings for optimum display response and stability under continuous motion \*
- Selectable High and Low set points to warn operator of approaching load limits. May also be interfaced with an optional audible alarm \*

An optional 7 key configuration Porta-Weigh Plus is available with the following functions ▼



Additional programmable features with the 7 key configuration include:

- Total Register for accumulation of total weight and number of weighments throughout the job

- Tare Memory allows up to 10 tare values to be preset and stored
- Peak Hold will capture and hold last highest weight indication

Other options available include:

- An Infrared controller for both the 5 key and 7 key models, allowing remote full function operation including digital tare
- Oversized and/or customized top and bottom fittings for interfacing with existing crane hardware
- RS232 data output for interface with printers or computers
- Audible alarm for setpoint warning

We think you will agree there is no comparable crane scale to the Porta-Weigh Plus. Don't compromise Safety or Quality for something less when you can specify the best.

MSI products are sold and serviced through a worldwide network of factory authorized distributors.

Call or write today to learn the distributor nearest you and to arrange a free product demonstration.

\* This function is accessible only through the calibrate menus on the 5 Key unit and is front panel accessible on the 7 Key scale.

*The optional Infrared Remote Control provides full function operation up to 60 ft./18m (indoors).*

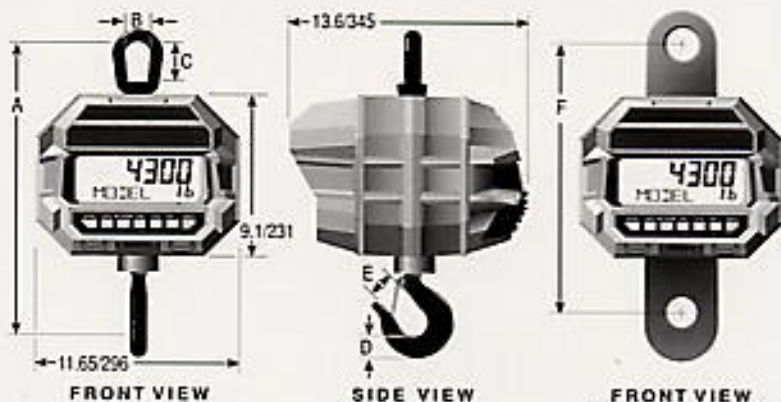


Every MSI Crane Scale is Designed to the Highest Safety Standards, Manufactured with Quality and Backed by MSI's Commitment to Customer Service and Satisfaction.



# MSI-4300 PORTA-WEIGH PLUS • SPECIFICATIONS

- C/L = Crosby Laughlin or equivalent. These dimensions also apply to 50/75/100,000 pound models with hook and shackles.
- Resolution subject to change for NTEP and OIML approved units.
  - Ultimate overload - 490% of kg capacity.
  - Ultimate overload - 475% of lb capacity/430% of kg capacity.
  - Ultimate overload - 450% of kg capacity.



## DIMENSIONS AND SPECIFICATIONS

CAPACITY	RESOLUTION**	A'	B'	C'	D'	E'	F	HOOK	EYE NUT OR SHACKLE	APPROX. SHIP WT.
500 lb	0.2 lb	18.3 in	2.25	3.06	1.44	1.34	-	3 ton	C/L #7	53 lb
250 kg	0.1 kg	465 mm	57.1	77.7	37.0	34.0	-	Swivel	Eye Nut	24 kg
2,000 lb	1 lb	18.3 in	2.25	3.06	1.44	1.34	-	3 ton	C/L #7	53 lb
1,000 kg	0.5 kg	465 mm	57.1	77.7	37.0	34.0	-	Swivel	Eye Nut	24 kg
5,000 lb	1 lb	20.5 in	2.50	3.50	1.81	1.69	-	5 ton	C/L #8	62 lb
2,500 kg	0.5 kg	521 mm	64.0	89.0	46.0	42.9	-	Swivel	Eye Nut	28 kg
10,000 lb	2 lb	20.5 in	2.50	3.50	1.81	1.69	-	5 ton	C/L #8	62 lb
5,000 kg	1 kg	521 mm	64.0	89.0	46.0	42.9	-	Swivel	Eye Nut	28 kg
20,000 lb	5 lb	28.5 in	4.00	6.25	2.59	2.25	-	10 ton	C/L #11	105 lb
10,000 kg	2 kg	724 mm	101.6	159	65.8	57.2	-	Swivel	Eye Nut	47 kg
30,000 lb	10 lb	30.0 in	4.00	6.25	3.00	3.00	-	15 ton	C/L #11	125 lb
15,000 kg	5 kg	762 mm	101.6	159	76.2	76.2	-	Swivel	Eye Nut	55 kg
50,000 lb	10 lb	41.0 in	5.00	6.00	3.66	3.63	15.0	25 ton	C/L 25 ton	235 lb
25,000 kg	5 kg	1041 mm	127	152	93.0	92.0	381	Swivel***	Shackle #2130	106 kg
70,000 lb	20 lb	45.2 in	5.00	6.00	4.56	3.75	15.0	35 ton	C/L 40 ton	270 lb
35,000 kg	10 kg	1097 mm	127	152	116	95.0	381	Swivel****	Shackle #2140	121 kg
100,000 lb	20 lb	51.6 in	5.75	6.65	5.06	4.25	15.75	C/L 45 ton	C/L 50 ton	420 lb
50,000 kg	10 kg	1311 mm	146	169	129	108	400	51 Swivel*****	Shackle #2140	189 kg

CONSULT FACTORY FOR HIGHER CAPACITIES. SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

## STANDARD PRODUCT SPECS

- Accuracy:** Plus or minus 0.1% of applied load
- Display:**
- 6 digit, 1.6 in./40 mm high numeric LCD (upper)
  - 8 digit, 0.8 in./20 mm high numeric LCD (lower)
  - Annunciators for measurement modes
  - Photocell activated electroluminescent backlighting
- Filtering:** Low, Medium or High selectable
- Display Contrast:** Adjustable
- Pounds-Kilograms-Tons/Metric Tons:** Switch selectable
- Power:** 8 disposable 'D' size alkaline cells
- Operating Time:**
- Maximum 2000 hours (no backlight)
  - Minimum 250 hours (operating time will vary with on/off duty cycle and with use of backlight)
- Operating Temperature Range:** -4° to +140° F (-20° to +60° C)
- Enclosure:** NEMA IV, anodized cast aluminum
- Safe Overload:** 200% of rated capacity
- Ultimate Overload:** 500% of rated capacity (except as noted)
- Hook:** Timken Swivel Bearing, Crosby-Laughlin hook or equivalent

## STANDARD FUNCTION SWITCHES

- POWER:** Turns unit ON or OFF
- ZERO:** Zeros applied load up to 100% of capacity (limited range with NTEP or OIML option)
- NET/GROSS:** Switches unit between NET and GROSS
- TARE:** Tares applied load and displays weight in Net mode
- TEST:** Provides on-demand functional test

## OPTIONAL 7 KEY CONFIGURATION (Includes all of the above, plus):

- TOTAL Σ:** Accumulates weighings (automatically or manually)
- VIEW:** Displays current total value
- SETUP:** Menu of selectable operating parameters
- CLEAR:** Dispose of previously entered values
- SELECT:** Controls menu of selectable parameters
- ENTER:** Entry of numeric values and selectable operating parameters
- PEAK HOLD:** Captures and holds maximum load
- TARE MEMORY:** Stores up to 10 tare values

## OPTIONS AND ACCESSORIES

- 7 Key configuration
- NTEP and OIML approved for use in commercial trade (Contact factory for U.S. and International specs Class III & IIII)
- Full function remote controller
- Substitute shackle for bottom swivel hook (possible head loss reduction)
- Oversized top lifting eye or shackle
- AC/DC input power 115/230 VAC and 12 - 250 VDC (Specify required voltage)
- R232 data output

- The MSI-4300 Porta-Weigh Plus crane scale is an ideal unit for heavy-duty applications.
- For heavy-duty applications requiring remote radio telemetry display and/or computer interface, MSI recommends specifying MSI-6260 Trans-Weigh.

USA "The Originals"

**MSI Measurement Systems INTERNATIONAL**  
 14240 INTERURBAN AVENUE SOUTH  
 SEATTLE, WASHINGTON 98158-8600 U.S.A.  
 206-433-0159 • FAX: 206-244-8470