

SAFETY

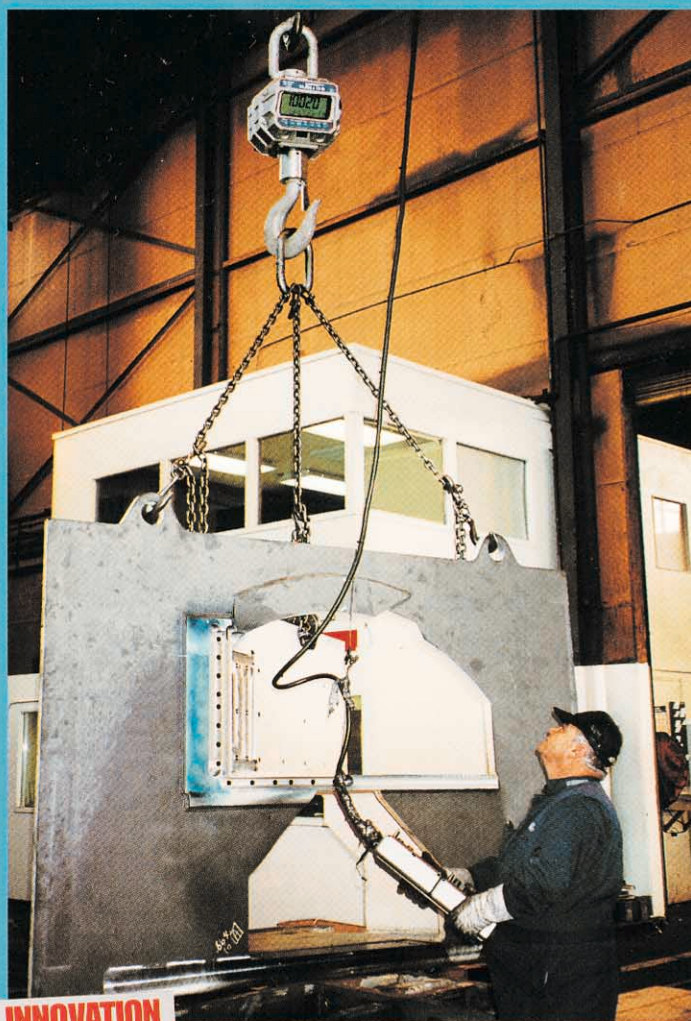
PERFORMANCE

QUALITY

ELECTRONIC CRANE SCALES

M S I • 4 3 0 0

PORTA-WEIGH PLUS



**INNOVATION
THRU
IMAGINATION**



Measurement Systems International

PORTA-WEIGH PLUS

To create its flagship crane scale, MSI integrated the industry's most advanced electronics, two decades of marine and industrial application experience, and a set of features never before offered on a crane scale. The result is the MSI-4300 Porta-Weigh Plus. With an award-winning design, it is recognized as the world's premier crane scale.

The Porta-Weigh Plus is renowned for safety and dependability in industrial applications. That's because its design implements rugged construction with state-of-the-art technology for complete protection against environmental threats. The scale's enclosure is composed of rugged cast aluminum. It is heat-treated to increase toughness, and alodined (chemically treated) to form an abrasion and corrosion-resistant surface. The rugged enclosure is complemented with dual O-ring seals for watertight integrity. The Porta-Weigh Plus exceeds NEMA IV/IP65 specifications for washdown and outdoor applications. Its recessed display window is made of a scratch-resistant polycarbonate. The scale's electronic components are also protected from shock, vibration and electromagnetic interference. They are surface-mounted to a PCB, shock-mounted inside the enclosure, then surrounded with an EMI shield.

Electronically, no other scale compares with the technology and versatility of the Porta-Weigh Plus. You receive unrivaled accuracy, resolution and stability from its advanced electronics: a 16-bit microcontroller and 16 bit A/D conversion. Additionally, digital calibration and self-diagnostic circuitry allow simple and cost-effective maintenance.



You can easily read the large 1.6 inch (40 mm) liquid crystal display from a distance. It features six-digit weight indication and electroluminescent backlighting to optimize visibility in any lighting conditions. A secondary alphanumeric display, directly beneath the weight reading, annunciates the weigh mode and guides you through calibration and setup procedures.

The Porta-Weigh Plus provides unrivaled battery life. You receive up to 2,000 hours of continuous use from eight standard "D" size disposable alkaline batteries. Battery replacement is simple and inexpensive, and you do not need tools.

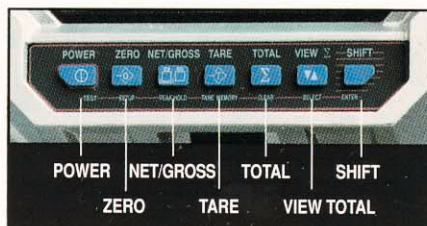
The Porta-Weigh Plus is offered standard in a 5 key configuration with the following functions ▼



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

- Unit select for weighing in pounds, kilograms, 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

Options include:

- Audible alarm warning system
- RS-232 data output and relay output to interface with computers, printers and process controllers
- Oversized and/or customized top and bottom fittings for unique applications and reduced headroom loss

MSI products are sold and serviced through a worldwide network of specially selected distributors. Your local distributor can give you a free product demonstration and provide answers for your specific weighing application. To locate the distributor nearest you, contact MSI at 206-433-0199 or browse the distributor list at "www.msiscales.com".

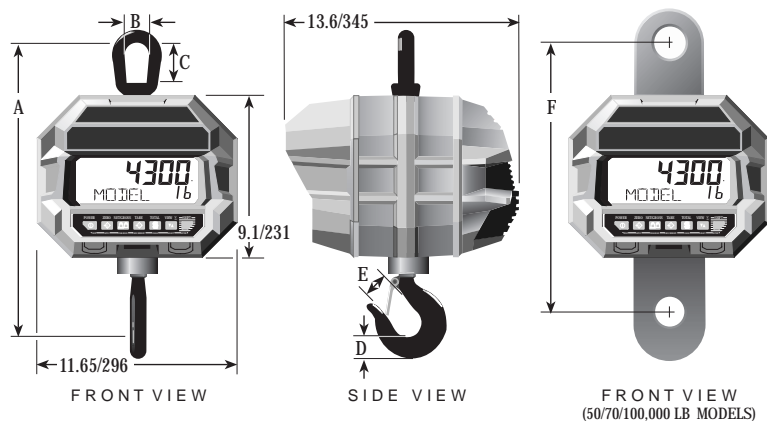
* This function is accessible only through the calibrate menus on the 5 key unit and is front panel accessible on the 7 Key scale.

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

CR= Crosby or equivalent.
 * These dimensions also apply to 50/70/100,000 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.



Note: 50/70/100,000 lb models come standard with top shackle & bottom swivel hook.

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	CR #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	CR #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	CR #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	CR #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	CR #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	CR #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	CR 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	43.2 in	5.00	6.00	4.56	3.75	15.0	35 ton	CR 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	52.1 in	5.75	6.65	5.06	4.25	16.25	CR 45 ton	CR 55 ton	420 lb
50,000 kg	10 kg	1324 mm	146	169	129	108	413	S1 Swivel*****	Shackle #2140	189 kg

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

STANDARD PRODUCT SPECIFICATIONS

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: 14° to +140° F (-10° to +60° C)
 Enclosure: NEMA IV, alodined cast aluminum
 Safe Overload: 200% of rated capacity
 Ultimate Overload: 500% of rated capacity (except as noted)
 Hook: Crosby thrust bearing swivel 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 weighments (automatically or manually)
 VIEW: Displays current total value
 SETUP: Menu of selectable operating parameters (includes Set Points)
 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 & IIIL)
- Substitute shackle for bottom swivel hook (possible headroom loss reduction)
- Oversized top lifting eye or shackle
- AC/DC input power 115/230 VAC and 12 - 250 VDC (Specify required voltage)
- RS232 data output
- Audible alarm
- IR Remote Controller

- The MSI-4300 Porta-Weigh Plus crane scale is an ideal unit for heavy-duty applications in severe environments.
- For heavy-duty applications requiring remote radio telemetry display and/or computer interface, MSI recommends model MSI-6260 Trans-Weigh.
- For high heat or hazardous area applications, MSI recommends model MSI-4260

"We Weigh Quality First"



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